

ESG SCORES AND FINANCIAL PERFORMANCE
OF SHARIAH-COMPLIANT FIRMS: EMPIRICAL
EVIDENCE ON INDONESIA AND MALAYSIA
ISLAMIC CAPITAL MARKET

BY

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A thesis submitted in fulfillment of the requirement for the
degree of Doctor of Philosophy

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JULY 2025

ABSTRACT

Environmental, social, and governance (ESG) performance presents a global challenge for companies, particularly concerning Corporate Financial Performance (CFP). While significant research has explored this impact, the ESG performance of Shariah-compliant companies remains under-investigated. This study utilizes a ten year database for bibliometric analysis to examine the global research landscape on ESG performance, meanwhile, twelve years database for analyzing the impact of ESG metrics on corporate performance. The primary aims are to propose future research directions on ESG performance and to evaluate the impact between ESG scores and CFP of Shariah-compliant firms in Indonesia and Malaysia. The study is grounded in Maqasid Shariah and Stakeholder Theory, providing a framework for assessing stakeholder salience through power, legitimacy, urgency, and Agency Theory. Independent variables considered include Environmental score, Social score, Governance score, and the overall ESG score for Shariah-compliant firms. Given the limited studies on ESG practices in Indonesia and Malaysia, this research offers additional empirical evidence on the impact of ESG scores on CFP (measured by ROA, ROE, and Tobin's Q) in these countries. Control variables at the firm, industry, and country levels (e.g., financial leverage, firm size, firm age, inflation, and GDP) are also considered. Findings indicate a significant positive impact between ESG scores and market performance of Shariah-compliant companies in these regions, although the impact on ROA and ROE are insignificant. Specifically, the regression analysis indicates that environmental and social scores generally show significant positive impacts with Tobin's Q, suggesting that firms with better social performance tend to have higher market valuations. However, the governance score and overall ESG score did not exhibit statistically significant impacts on Tobin's Q. Additionally, firm size and age showed a significant negative impact with market valuation, particularly in the post-pandemic period, indicating that larger and older firms tend to be valued lower in the market. Industry-level factors, such as dynamism, had a significant positive impact on market valuation before the pandemic, while higher inflation rates were positively impacted with Tobin's Q. Conversely, GDP showed varied results, with a significant positive impact post-pandemic, underscoring the complex interplay between ESG scores and firm characteristics. The study findings emphasize the importance of integrating ESG principles to attract ethical investments, improve long-term financial performance, and create sustainable value for all stakeholders. Recommendations include prioritizing transparency in ESG reporting, embedding ESG into strategic planning and operational processes, and aligning management incentives with ESG performance. Future research should address data consistency and expand geographical contexts to enhance the generalizability of findings. Longitudinal studies and qualitative approaches will offer deeper insights into ESG's impact on financial performance, guiding more effective policies and investment strategies.

Keywords: *ESG performance, Corporate Financial Performance, Shariah-compliant firms, Indonesia, Malaysia, bibliometric analysis, panel regression.*

ملخص البحث

تقديم الأداء البيئي والاجتماعي والحوكمة (ESG) يمثل تحديًا عالميًا للشركات، لا سيما فيما يتعلق بالأداء المالي للشركات (CFP). على الرغم من أن هناك العديد من الأبحاث التي تناولت هذه العلاقة، فإن الأداء البيئي والاجتماعي والحوكمة للشركات المتوافقة مع الشريعة لا يزال غير مدرّوس بشكل كافٍ. هذه الدراسة تستخدم تحليلًا بيبيومتريًا لمدة اثني عشر عامًا لفحص مشهد البحث العالمي حول أداء البيئي والاجتماعي والحوكمة، مع التركيز على العلاقة بين مقاييس البيئي والاجتماعي والحوكمة وأداء الشركات. الأهداف الرئيسية هي اقتراح توجهات بحثية مستقبلية حول أداء البيئي والاجتماعي والحوكمة وتقييم العلاقة بين درجات البيئي والاجتماعي والحوكمة والأداء المالي للشركات المتوافقة مع الشريعة في إندونيسيا وماليزيا. الدراسة مبنية على مقاصد الشريعة ونظرية أصحاب المصلحة، حيث تقدم إطارًا لتقييم أهمية أصحاب المصلحة من خلال القوة والشرعية والضرورة ونظرية الوكالة. المتغيرات المستقلة التي يتم النظر فيها تشمل درجة البيئي ودرجة الاجتماعي ودرجة الحوكمة والدرجة الإجمالية للبيئي والاجتماعي والحوكمة للشركات المتوافقة مع الشريعة. بالنظر إلى الدراسات المحدودة حول ممارسات البيئي والاجتماعي والحوكمة في إندونيسيا وماليزيا، تقدم هذه الأبحاث دليلًا تجريبيًا إضافيًا على الرابط بين درجات البيئي والاجتماعي والحوكمة والأداء المالي (المقاس بالعائد على الأصول (ROA)، والعائد على حقوق الملكية (ROE)، و (Tobin's Q) في هذه البلدان. كما يتم النظر في المتغيرات الضابطة على مستوى الشركة والصناعة والدولة مثل الرافعة المالية، وحجم الشركة، وعمر الشركة، والتضخم، والنتائج المحلي الإجمالي (تشير النتائج إلى وجود علاقة إيجابية كبيرة بين درجات البيئي والاجتماعي والحوكمة والأداء السوقي للشركات المتوافقة مع الشريعة في هذه المناطق، على الرغم من أن العلاقة مع العائد على الأصول (ROA) والعائد على حقوق الملكية (ROE) تبقى سلبية وغير ذات دلالة. تحديدًا، يشير التحليل الانحداري إلى أن درجات البيئي والاجتماعي

تُظهر عادةً علاقات إيجابية مع Tobin's Q ، مع اعتبار درجة الاجتماعي ذات دلالة عند 0.1 في بعض نماذج الانحدار، مما يشير إلى أن الشركات ذات الأداء الاجتماعي الأفضل تميل إلى أن تكون لها تقييمات سوقية أعلى. ومع ذلك، لم تظهر درجة الحوكمة والدرجة الإجمالية للبيئي والاجتماعي والحوكمة تأثيرات ذات دلالة إحصائية على Tobin's Q. بالإضافة إلى ذلك، أظهر حجم الشركة وعمرها علاقات سلبية ذات دلالة مع التقييم السوقي، خصوصًا في الفترة بعد الجائحة، مما يشير إلى أن الشركات الأكبر والأقدم تميل إلى أن تكون قيمتها أقل في السوق. العوامل على مستوى الصناعة، مثل الديناميكية، كان لها تأثير إيجابي كبير على التقييم السوقي قبل الجائحة، في حين كانت معدلات التضخم الأعلى مرتبطة إيجابيًا مع Tobin's Q. وعلى العكس، أظهر الناتج المحلي الإجمالي نتائج متباينة، مع وجود علاقة إيجابية كبيرة بعد الجائحة، مما يبرز التفاعل المعقد بين درجات البيئي والاجتماعي والحوكمة وخصائص الشركات. تشدد نتائج الدراسة على أهمية دمج مبادئ البيئي والاجتماعي والحوكمة لجذب الاستثمارات الأخلاقية، وتحسين الأداء المالي على المدى الطويل، وخلق قيمة مستدامة لجميع أصحاب المصلحة. تشمل التوصيات إعطاء الأولوية للشفافية في تقارير البيئي والاجتماعي والحوكمة، ودمج البيئي والاجتماعي والحوكمة في التخطيط الاستراتيجي والعمليات التشغيلية، ومواءمة الحوافز الإدارية مع أداء البيئي والاجتماعي والحوكمة. يجب أن تركز الأبحاث المستقبلية على معالجة تناقض البيانات وتوسيع السياقات الجغرافية لتعزيز إمكانية تعميم النتائج. ستوفر الدراسات الطولية والمناهج النوعية رؤى أعمق في تأثير البيئي والاجتماعي والحوكمة على الأداء المالي، مما يوجه استراتيجيات السياسة والاستثمار بشكل أكثر فعالية.

APPROVAL PAGE

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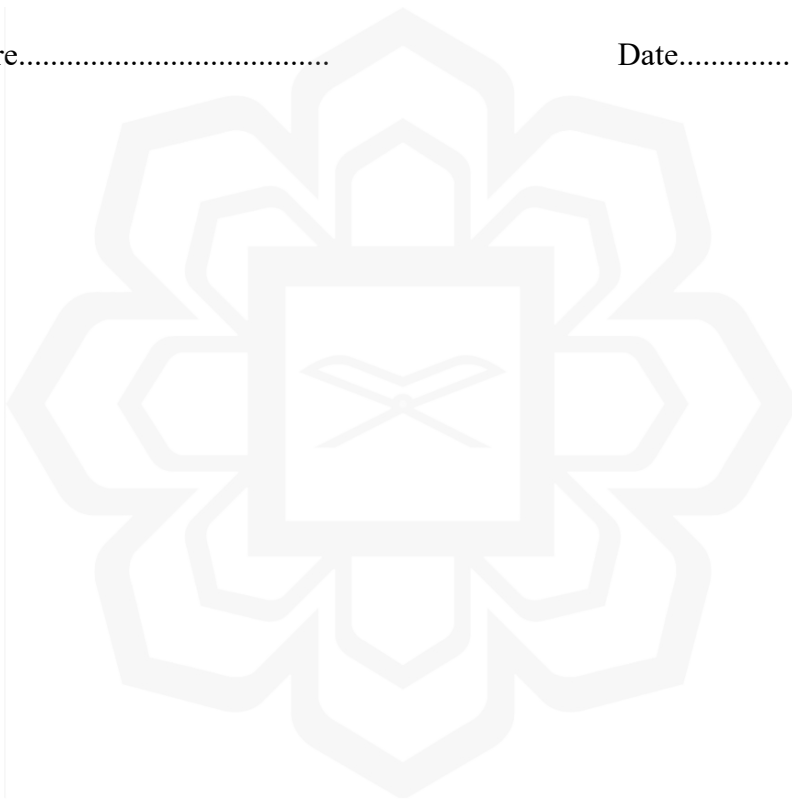
DECLARATION

I hereby declare that this thesis is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

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ACKNOWLEDGEMENTS

In the name of Allah, The Most Compassionate, The Most Merciful. Alhamdulillah, all praise be to Allah, the Most Gracious and the Most Merciful. May His peace and blessings be upon our beloved Prophet Muhammad Sallallaahua'laihiwasallam and upon his family and his companions. My utmost thanks to Allah for His blessings and for granting me the persistence and the endurance to complete this thesis successfully.

I certainly would like to acknowledge with the gratitude for my supervisors Prof. Dr. Razali Haron for his wonderful support, valuable guidance, intellectual stimulus, assistance, support and encouragement and all countless help throughout my PhD journey. I had indebted to him for all the wisdom and experience that he shared with me throughout my PhD journey. I appreciate all his contributions of time and ideas to make my PhD journey more productive.

I would like to thank my family for all their love and encouragement. For my parents, who always pray for my goodness and raised me with an endless love and patience. Also to my siblings, I would like to express my gratitude for their prayers and patience. It is my pleasure to dedicate my special thanks and appreciation to my sponsors, particularly International Islamic University Malaysia and everyone who has directly or indirectly contributed to the successful accomplishment of this thesis. Above all, I would like to extend my deepest gratitude to my mentor, Prof. Herri Mulyono, for his invaluable guidance, support, and inspiration throughout the course of this research.

Lastly, I also would like to express my gratitude to all my friends and colleagues at FEB UHAMKA, who are all important for me, for their support and prayers throughout my PhD journey. If I write their names surely the paper will not be sufficient for all.

May Allah always give His blessings to them in this world and the hereafter.
Ameen.

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CHAPTER ONE

THE STUDY BACKGROUND

1.1 INTRODUCTION

This chapter presents and discusses the background of the study, explaining why ESG integration is important to the financial performance of Shariah-based companies. Additionally, the statement of the problem was discussed, as this study aims to investigate the existence of ESG integration as it relates to corporate sustainability in Indonesia and Malaysia. Furthermore, the theoretical framework was outlined, highlighting the independent variables such as Environmental, Social, and Governance, and their respective relationship with the dependent variables of firm performance, measured through Return on Assets (ROA), Return on Equity (ROE), and Tobin's Q. Moreover, to gain a deeper understanding of the ESG importance, control variables considering the level of firm, industry, and country will also be included in this study. Furthermore, this chapter outlines the research questions, hypotheses, and objectives and discusses the significance of the study in terms of filling the gaps in the current research literature on ESG integration in corporate governance. Eventually, the limitations of the study are also presented and key terms in this study are explained comprehensively.

1.2 BACKGROUND OF THE PROBLEM

The evaluation of companies based on ESG performance by external organizations, including key rating agencies like MSCI, Refinitiv, and Bloomberg, has become a significant aspect of corporate scrutiny (Kiesel & Lücke, 2019; Sandberg et al., 2022). Investors now place growing importance on these ratings, considering them crucial in incorporating ESG factors into their investment decisions. The ESG score, utilized as an evaluative metric, comprehensively gauges a company's performance across its environmental, social, and governance dimensions. This evaluation is designed not only

to assess the overall quality and standards of a firm but also to measure its financially relevant ESG risks (MSCI, 2020).

In addition, sustainability has received heightened interest in the business world, driven by the realization among companies of the necessity to attain a sustainable competitive advantage, considering factors like limited resources, environmental degradation, and emerging responsibility challenges in a changing world. Historical corporate scandals underscore the crucial role of investor trust and a company's ability to cultivate positive relationships with society for its survival. Consequently, companies are urged to revamp their practices to be more environmentally friendly, and place increased emphasis on employee well-being and corporate governance. This paradigm shift towards sustainability is tangible in the financial sector, with individual retails and institutional investors increasingly embracing sustainable investing .

In recent years, there has been a distinct focus on the critical issue of financial sustainability, perceived as a tool to enhance companies' financial performance. This paper introduces the term "sustainable finance" or "sustainable impact finance" as the process of considering ESG factors when making investment decisions in the financial sector, leading to increased investments in sustainable economic activities and projects (World Bank, 2021). Within this context, financial reports play a critical role in determining the sustainability of a company's financial activities. By evaluating these reports, investors can distinguish the company's financial health and decide whether to invest. Consequently, companies are advised to incorporate sustainability initiatives that capture the interest of potential investors, including promoting green innovation, upholding corporate social responsibility (CSR), and maintaining sound corporate governance (Cheng et al., 2014; Khanchel et al., 2023; Khamisu et al., 2024)). On the other hand, companies should uphold the quality of their corporate activities that demonstrate a positive condition of environmental, social, and governance (ESG) elements.

The recent report from the World Bank (2021) has suggested companies pay attention to ESG as they have invested over USD 17.5 trillion to maintain the sustainability of their business activities. ESG in this perspective concerns about environmental, social and governance factors alongside financial aspects in the

investment decision-making process. Hussain et al., (2020) and Said and El Bannan (2024) suggest that ESG measurement is critically utilized to assess a firm's quality, standard, or performance on ESG issues and examine the firm's financial example, ESG measurement evaluate companies attempts to lower natural resource expenditure and emissions. With regard to company's social performance, the measurement examine the level of respects that the company have given to their employees such as how the company maintain the application of human right, being responsible to the product they make, and the bond the company has created with the surrounding community. Finally, to maintain a good ESG score, the company managers must reflect a high level of responsibility and rights concerning the business activities daily. This level of responsiveness and rights would indicate a good company's corporate governance profile.

Some scholars (i.e., Moody-Stuart, 2021; Yu et al., 2018; Ishak et al., 2024) , may vary in their perception of the need for effort for ESG integration in the country. According to Thomson Reuters (2015), the ESG score was developed for reasonable assessments of Corporate Social Responsibility (CSR) for both investments as well as for other agents who find the importance of ESG. However, they further explain that the goal of the ESG score is to increase transparency, consistency, and illegal discoveries among organizations. Even though ESG is important, one cannot escape the fact that the financial performance of a company is crucial for its survival. Furthermore, Thomson Reuters ESG research data scores provide the relative ESG performance, commitment and effectiveness of around 10,000 companies with time series going back to 2002. In other words, the ESG scores reported by companies depend on their performance relative to that of their industry (environment and social dimensions) and to that of their country of origin (governance dimension). There were over 500 company-level ESG measures, including a subset of 186 of the most comparable and relevant by sector. These measures are grouped into 10 categories (resource use, emissions, innovation, workforce, human rights, community, product responsibility, stewardship, shareholders, and CSR strategy) under the three ESG pillars.

Regarding a company's financial performance, its economic and non-financial measures are examined, including indicators such as assets, cash flows, and net income. Nevertheless, it has been argued that ESG is of equal importance in ensuring financial

sustainability for the long term (Yu et al., 2018; Chininga et al., 2023). The increasing corporate social responsibility reinforces this focus across the globe, leading to increased financial performance with a high ESG score. As such, a company with strong financial performance will likely be better equipped to achieve economic sustainability. Moreover, companies that proactively address ESG concerns often gain a competitive edge by anticipating regulatory changes and shifting consumer preferences toward sustainability. In the long run, integrating ESG into corporate strategy not only enhances resilience but also strengthens a company's reputation, making it more attractive to investors, customers, and talent (Läger et al. 2022).

Many previous studies have focused on ESG in European companies and they have found these companies to be leaders compared to those in other geographical areas (Atif & Ali, 2021; Chandrakant & Rajesh, 2022; Dell'Erba & Ferrarini, 2024). However, there is a dearth of studies that have focused on emerging markets, due to the immense difficulties that impede their economic development, such as the prevalence of corruption, and its resultant negative effect on the functioning of securities markets in these countries (Lee et al., 2022; Hassani & Bahini, 2022). Additionally, there is only a paucity of research focusing on ESG in Shariah-compliant firms, primarily in the Islamic emerging markets of Indonesia and Malaysia. Therefore, this study sought to explore their potential.

In Malaysian context, the government has established plans to achieve the status of a developed nation centered around good governance and sustainability. To identify potential opportunities in developing its New Economic Model (NEM), Malaysian government also has employed ESG perspectives for assessing financial performance. The Securities Commission of Malaysia (SC) has formulated a Shariah Advisory Council (SAC) to develop a methodology in order to help investors identify Shariah-compliant securities. While in the Indonesian context, the current system requires deregulation and reform that officials have been made aware of through recent announcements. According to OECD data (2020), the country's real growth rate stands at 5.5% annually between 2016 and 2020, higher than the average 5.2% real growth rate for the Association of Southeast Asian Nations (ASEAN). Due to Indonesia's ample forests, biodiversity, and mining and agricultural industries, it is well-positioned to become a global carbon trading leader.

In addition, there has been a recent increase in the importance of ESG issues in the Malaysian business sector since April 2023. This shift reflects global trends and local developments, with the positively impact financial performance and enhance company value (Lee et al., 2023). The growing focus on ESG integration is supported by regulatory initiatives by organizations such as Bursa Malaysia and the Securities Commission Malaysia, which have introduced guidelines for sustainability reporting and responsible investment. Malaysian companies, particularly those in the energy, agriculture, and manufacturing sectors, face mounting pressure to address climate change and environmental risks, which is evident in initiatives like the National Energy Transition Roadmap (NETR) (Kamaludin et al. 2022). In addition to environmental concerns, there is a heightened emphasis on social responsibility and governance, with attention placed on labor rights, community engagement, and corporate ethics. There is an increasing understanding that robust ESG practices can enhance financial performance, leading to greater investor interest in ESG as an indicator of management quality and long-term sustainability. Simultaneously, Malaysia's financial sector is experiencing a surge in sustainable finance products, bolstered by regulatory encouragement and a rising demand from investors for socially responsible investment opportunities (PWC, 2024).

On the other side, recent regulatory efforts in Indonesia also have placed increased scrutiny on ESG issues. For example, the Indonesia Stock Exchange is pushing sustainability reporting and is responsible for investing in their listed companies following more significant trends globally (Rahmaniati; Ekawati, 2024). Shariah-compliant Indonesian companies on the exchange are encouraged to stick to ESG ideals, showing how businesses are moving toward more ethical, sustainable practices. With all the attention on climate change worldwide, Indonesian energy agriculture and manufacturing companies are facing increasing pressure to tackle environmental problems and carbon emissions (Sunarsih et al., 2024). Companies must show commitment to ethical conduct, employee welfare, and helping out their communities to address the bigger focus on supporting society in general and recognizing the connection between ESG and long-term success. Indonesian investors are considering these factors more when deciding where to invest. They see ESG issues as signs of good management and ability to thrive in the future (Sugiarto et al., 2023). The increase in demand for sustainable financial products and services from Indonesian

financial institutions is attributed to the growing recognition of the financial advantages of adopting ESG principles (Ismail et al., 2022). However, this trend mirrors the developments observed in Malaysia, where the adoption of green bonds and sustainable lending is driven by regulatory mandates and investors seeking opportunities that align with their sustainability objectives .

This study investigates the relationship between ESG performance and corporate financial performance and will be conducted within two research stages. The first stage involves the identification of trends and research gaps in previous studies examining ESG performance. To this end, bibliometric analysis is to be conducted to provide insight into the current state of the research. A bibliometric analysis was performed to identify potential gaps in the literature surrounding ESG performance, determine the current state of research on this topic, and analyze which research topics, authors, citations, and publishers are most common. This analysis also considers the existing literature about ESG performance in Shariah-compliant companies and relevant countries. As part of the bibliometric analysis, the prevalent topics, authors, citations, and publishers related to ESG performance will also be identified to analyze the correlation between compliance with Shariah and ESG performance. Following this, a range of quantitative analyses regarding ESG and financial performance will be conducted, using data collected from Shariah-compliant companies listed in the Indonesia Stock Exchange (IDX) and Bursa Malaysia from 2010 to 2022 using the Refinitiv Eikon and World Bank databases. After a general correlation analysis of ESG and financial performance is conducted, a control analysis from the industry and country level will be performed, and the findings of these analyses will be discussed.

1.3 STATEMENT OF THE PROBLEM

The relationship between ESG practices and corporate financial performance has garnered significant attention globally (Shaikh, 2022). ESG practices are increasingly viewed as vital components of sustainable business operations (Cerciello et al., 2023). However, there remains a substantial gap in understanding this relationship within the context of Shariah-compliant companies, particularly in Indonesia and Malaysia. These

companies, adhering to Islamic principles, are expected to operate ethically and responsibly, which aligns closely with the principles of ESG. Despite this alignment, previous studies (i.e., Anwer et al., 2021; Hambali, 2022) shows the extent to which ESG practices influence the financial performance of Shariah-compliant companies remains unclear and warrants thorough investigation.

Shariah-compliant companies play a crucial role in the economy in Indonesia and Malaysia, where Islamic finance has a significant presence (Haron & Adeyemi, 2016). These companies are bound by Islamic laws emphasizing ethical behavior, social justice, and environmental stewardship (Aslam & Haron, 2020). However, the unique nature of Shariah compliance raises questions about whether these principles alone are sufficient to drive financial performance or if there is an added value from explicit ESG practices. Examining this dynamic is essential for understanding the full impact of ESG integration in such contexts.

One key challenge is to determine whether adherence to ESG principles results in better financial performance for Shariah-compliant companies than for conventional companies. This question is particularly applicable in markets such as Indonesia and Malaysia, where sustainable and responsible investments are becoming increasingly important (Lee & Isa, 2022b; Tamara & Budiman, 2022). Investors and stakeholders are increasingly looking for companies that not only promise financial returns but also contribute positively to society and the environment (Vuong, 2022). It is therefore important to consider whether Shariah-compliant companies with solid ESG practices will perform better financially.

Since the increasing number of important ESG criteria by firms and investors, various studies related to this issue have emerged. Many previous studies have discussed the impact of ESG criteria on a company's financial performance, and have shown that environmental, social, and governance have profitable effects. Velte (2017) investigated ESG performance and financial performance of companies listed on the German Prime Standard from 2010 to 2014; the results showed that ESG performance had a significant impact on Return on Assets (ROA) but no impact on Tobin's Q. His findings also showed that governance performance had the strongest impact on financial performance in comparison to environmental and social performance. In line with this

study, Peng and Isa (2020) examined the effect of ESG on financial performance in Malaysia; the study found that ESG aggregate and individual dimensions were positively related to firm performance.

On the other hand, Saygili et al. (2021) conducted similar research wherein they examined the relationship between ESG practices and corporate financial performance on Turkish listed companies. The study revealed that there existed a negative relationship between ESG and corporate financial performance. However, the board of directors purportedly had a positive impact on financial performance in the governance dimension. Moreover, a study, which examined the impact of high ESG values with good financial performance on multinational companies, showed that whilst insignificant in the short term, this was significant in the long term as it increased the value of their intangible resources by attracting a larger number of investors (David et al., 2021).

Moreover, in developed countries, shareholders, policymakers, and even corporate agencies have understood that ESG integration factors have a significant influence on the investment process and decision-making. Consequently, many companies have implemented ESG measurement in order to improve their efficiency, customer loyalty, corporate reputation, access to capital, cost savings, and also innovation capacity (Arrive et al., 2019; Taliento et al., 2019; Umar et al., 2020; Ali, 2020;). Therefore, this development promises not only to benefit shareholders, but also to optimize the firm by enhancing its reputation and sustainability.

However, the relationship between ESG integration and the financial performance of the firms, particularly those entities compliant with Shariah-based principles, is still debated and requires further investigation. The integration of ESG factors into investment decisions in Shariah-compliant companies presents unique challenges, given the need to align with Islamic ethical principles. This requires a critical examination of how ESG criteria are interpreted and applied within the context of Islamic finance, considering factors such as *riba* (interest), *gharar* (uncertainty), and *maysir* (gambling), which are prohibited in Shariah law. Additionally, the lack of standardized ESG metrics tailored to Islamic finance poses challenges for assessing the true impact of ESG integration on financial performance in Shariah-compliant firms.

Therefore, while the potential benefits of ESG integration are widely acknowledged, further research is needed to better understand its implications for the financial performance of firms operating within Shariah-based principles.

1.4 RESEARCH OBJECTIVES AND RESEARCH QUESTIONS

The objectives of this study are twofold: First, the study aims to investigate the future trend of ESG performance by reviewing the current research paper with the keywords on ESG and performance. To this end, parameters for article search will be established, such as scope and year limits and inclusion and exclusion criteria for the relevant literature.

Second, the current study aims to investigate the impact of ESG factors on the performance of Shariah-compliant companies in Indonesia and Malaysia. Specifically, the current study will assess the relationship between ESG scores and Shariah-compliant companies' corporate financial performance (CFP) in Indonesia and Malaysia. By focusing on Shariah-compliant companies in Indonesia and Malaysia, the study sought to understand the role of ESG on firm value and performance, the value of the associated impact on shareholder value, and the formulation of corporate ESG strategies.

In recent decades, ESG responsibilities have been broken into three main arms, leading to harmonious external and internal relations. Consequently, firms must develop comprehensive ESG strategies to meet the strict expectations of responsible investors. For this purpose, the dataset from the MSCI World Islamic Index was used. Additionally, this study seeks to examine whether ESG score engagement demonstrates an agency theory and ultimately supports the implementation of Maqasid Shariah. There are numerous reasons for the selection of the MSCI World Islamic Index, including the fact that previous studies (i.e., Tijani & Ahmadi, 2022; Weston & Nnadi, 2021; Gubareva et al., 2023; Long & Feng, 2024) have focused on the impacts of ESG on corporate financial performance in both emerging and developed countries and that the number of companies listed in the MSCI index has been steadily increasing with the integration of ESG practices into their business operations via a screening process for

Shariah-compliant investments. As such, this study provides pertinent evidence of how Shariah-compliant companies can enhance their business through ESG-related activities

From the above objectives, the research questions are developed in collaboration with the Maqasid Shariah, Stakeholder, Legitimacy, and Agency theory to examine the impact of ESG score on the firm's financial performance of shariah-compliant companies. Therefore, this study will answer questions as follows:

1. What are the directions of future research on ESG performance?
2. Does the E score have a positive effect on the corporate financial performance?
3. Does The S score have a positive effect on the corporate financial performance?
4. Does The G score have a positive effect on corporate financial performance?
5. Does The ESG score have positively affect corporate financial performance?
6. Does the Sensitive industry have a positive effect on corporate financial performance?

1.5 LIMITATIONS OF THE STUDY

The current study titled "ESG Scores and Financial Performance of Shariah Compliant Firms: Empirical Evidence from the Islamic Capital Markets of Indonesia and Malaysia" has three main limitations that must be acknowledged. Firstly, the study focuses exclusively on Shariah-compliant companies in Indonesia and Malaysia, meaning that the findings may only apply to similar companies operating within these two countries and may not be generalizable to companies in other regions. This limitation arises because the regulatory environments, economic conditions, cultural norms, market structures, industry specifics, and corporate governance practices differ across regions (Habib et al. 2023). Therefore, caution should be exercised when

extrapolating the study's findings to different geographical regions or companies operating under different regulatory frameworks or cultural contexts.

Additionally, the study relies on data from the Refinitiv database, which may have limitations regarding its coverage or accuracy. The study only considers twelve years from 2010 to 2022 which may not capture long-term trends or changes in ESG practices and their impact on financial performance. This suggests that the Refinitiv database might not cover all Shariah-compliant companies in Indonesia and Malaysia. As a result, there could be a bias if the companies included in the database have systematic differences from those that are not included. Furthermore, there is a concern about the accuracy of the data itself. Although Refinitiv strives to provide reliable and up-to-date information, errors or inconsistencies in the data entries could potentially affect the validity of the study's findings. Some studies have been done by using Refinitiv database such as (Shakil et al., 2019; Aras, 2022; Pinheiro et al., 2023) have the different result of the study.

Finally, the study's reliance on quantitative methods to analyze the relationship between ESG scores and corporate financial performance may overlook qualitative aspects or contextual factors that could influence the results. Quantitative methods typically involve statistical analysis of numerical data to identify patterns or relationships. However, such an approach may fail to adequately consider qualitative factors such as company culture, leadership practices, or specific industry dynamics, which may significantly influence how ESG initiatives impact financial performance. Consequently, relying solely on quantitative methods could limit the depth of understanding and overlook essential nuances in the relationship between ESG and financial performance. Therefore, it is crucial to consider these qualitative aspects and contextual factors to comprehend the study's findings thoroughly.

1.6 SIGNIFICANCE OF THE STUDY

The relationship between ESG practices and corporate financial performance is a critical area of inquiry, especially for Shariah-compliant companies in Indonesia and Malaysia (Lee, 2023; Ariff et al., 2023). This study holds significant implications for

the academic community and policymakers, as it aims to bridge gaps in knowledge and inform decision-making processes that promote sustainable and ethical business practices.

Academically, this field of study offers a rich context to explore the intersection of Islamic finance and sustainability (Sarker et al., 2020; Brescia et al., 2021; Cerciello et al., 2023). Scholars can contribute to the theoretical understanding of whether and how the ethical underpinnings of Shariah compliance influence a firm's commitment to ESG principles. Additionally, they can investigate whether such commitment translates into better financial performance, thus providing empirical evidence to support or challenge existing theories. However, the financial implications of ESG adoption for Shariah-compliant companies are also of practical importance. If evidence suggests a positive relationship between ESG and financial performance, it could lead to reevaluating investment strategies and risk assessment models. Companies that excel in ESG practices may benefit from lower capital costs and better financial returns, providing a strong incentive for other firms to follow suit.

For the policymakers, the study (Molina et al., 2021; Lee, 2020a; Zheng et al., 2022a) provides essential insights into how Shariah-compliant companies incorporate ESG principles within their operational frameworks. By understanding these integration processes, policymakers can develop and implement regulations that effectively support and enhance ESG practices (Zaccone & Pedrini, 2020). This can lead to the creation of a more robust regulatory environment that not only encourages sustainable business practices but also ensures that these practices are aligned with the ethical and social values upheld by Shariah principles. Particularly, the findings of this study are crucial for informing policy decisions that aim to balance economic growth with social and environmental sustainability (Hassani & Bahini, 2022; Mohd Daud et al., 2024). In countries like Indonesia and Malaysia, where Islamic finance plays a significant role in the economy (Gani & Bahari, 2020; Supriani et al., 2021), tailored policies that address the unique needs and challenges of Shariah-compliant companies can drive better alignment between financial performance and ESG goals (Miskam, 2021). This alignment is vital for achieving long-term economic resilience and sustainable development (Liu et al., 2024).

Therefore, the relationship between ESG factors and corporate financial performance of Shariah-compliant companies in Indonesia and Malaysia has far-reaching implications. Policymakers can use study findings to guide economic strategy, while academics can deepen the discourse around Islamic finance and sustainability. Corporate governance structures may evolve, financial strategies may be refined, and the positive societal and environmental repercussions could resonate well beyond the corporate sphere. The study of this relationship is therefore not only of theoretical interest but has practical and ethical significance as well.



CHAPTER TWO

THEORETICAL FRAMEWORK

2.1 INTRODUCTION

The relationship between ESG integration and corporate financial performance can be understood using various theories that provide different perspectives. This current study focuses on Stakeholder Theory, Agency Theory, and Maqasid Shariah Theory. Stakeholder Theory postulates that businesses should prioritize the interests of their shareholders over other stakeholders (Lee & Isa, 2022; Chen et al., 2023a). It suggests that incorporating elements related to different stakeholders in decision-making can hamper shareholder value creation. Presenting an opposite view, Agency Theory holds that considering stakeholders' interests, such as employees, debtholders, suppliers, the local community, and the public, can reduce potential agency costs (Kaakeh & Gokmenoglu, 2022). To that end, a stakeholder perspective recognizes that corporate decisions and actions can have broad ramifications beyond those for shareholders (Mooneeapen et al., 2022). Maqasid Shariah Theory, grounded in Islamic principles, stresses aligning business practices with ethical standards and societal welfare (Lee & Isa, 2022a). This inquiry's examination of the relationship between ESG integration and financial performance through such theoretical lenses elucidates how the inclusion of stakeholder interests can affect corporate outcomes, illustrating the need for companies to balance stakeholders' expectations and fiscally sustainable performance carefully.

2.2 MAQASID SHARIAH THEORY

Maqasid al-Shariah is a legal philosophy rooted in the Islamic faith and values. The term "maqasid" in Arabic expresses the concepts of "straightness of road," "equity and balance," and "directive goal," highlighting the idea of a path leading to wellbeing (Al-Ghazali, n.d). According to Imam al-Ghazali, Maqasid al-Shariah seeks to promote the well-being and welfare of all individuals, protecting their religion (deen), self (nafs), intellect (aql), posterity (nasl), and wealth (mal). Imam al-Shatibi further categorized

Maqasid al-Shariah into three primary areas: essentials (daruriyyat), necessities (hajjiyyat), and complements (tahsiniyyat). Sulong (2015) states that Shariah's primary goal is to foster collective well-being and morality, maintain social order, and enable positive progress. Furthermore, virtues encompass sound intellect, virtuous behavior, and the well-being of material possessions and circumstances.

From a theoretical standpoint, Islamic finance, as an alternative financial system, seeks to achieve the ultimate objective of Maqasid al-Sharīah. This objective emphasizes socio-economic justice, poverty alleviation, income distribution, and economic productivity (Erragragui & Revelli, 2016), in accord with the Islamic belief that the welfare of individuals should be safeguarded in terms of their faith, life, intellect, prosperity, and wealth (Sunarya & Rusydiana, 2024). With the integration of ESG factors into the screening process of Islamic investment, it is anticipated that discipline over Maqasid al-Sharīah can be strengthened, thereby contributing to society's welfare and well-being.

Maqasid Shariah Theory provides a framework for understanding the importance of ESG factors in Islamic finance. Shariah-compliant firms that adhere to Maqasid Shariah principles are likely to adopt strong ESG practices, contributing to their long-term financial success. ESG factors align with the principles of Maqasid Shariah Theory in several ways, explain here with examples.

Table 2.1 Associating Al Ghazali Dimensions to Ibn Ashur’s Elements

Al Ghazali Maqasid Dimensions	Ibnu Ashur’s Elements
Preservation of religion	Freedom of faith
Preservation of life	Preservation of human dignity
	Preservation of human right
Preservation of intellect	Propagation of scientific thinking
	Avoidance of brain drain
Preservation of progeny	Care of family or care of stakeholder
Preservation of wealth	Wellbeing of society
	Minimizing income and wealth disparity

Sources: Shahrul et al. (2021)

As shown in the above Table 2. 1, the "Preservation of life" principle resonates with ESG initiatives that aim to promote human health and well-being, ensure safe working conditions, and promote sustainable environmental practices. Similarly, the principle of "Preservation of human dignity" aligns with social responsibility efforts that focus on upholding labor rights, fair wages, and equitable treatment within organizations. Ibnu Ashur's elements, such as "Preservation of religion" and "Freedom of faith," emphasize inclusivity and respect for diverse perspectives. These principles can inform ESG strategies that promote diversity, equity, and inclusion within firms (Tazul Islam, 2018; Marwan et al., 2020). Additionally, the "Preservation of wealth" principle aligns with governance practices that promote financial transparency, accountability, and responsible wealth management. These practices are crucial for maintaining stakeholder trust and societal well-being. By integrating ESG factors with Maqasid Shariah principles, Shariah-compliant firms uphold ethical standards while fostering sustainable growth and societal welfare. This integration exemplifies the synergy between Islamic finance principles and contemporary ESG principles.

In the current study, the Maqasid Shariah Theory is a comprehensive framework within Islamic finance. This theory provides guiding principles essential for promoting sustainable and ethical business practices. As mentioned earlier, Islamic finance is centered around *maslahah* (welfare), which is focused on promoting public interest and social welfare through religion-based ethics (Karimullah, 2023). In order to enhance ethical screening, the use of ESG and Shariah screenings are complementary and provide a more extensive range of ethical evaluation. The principles of Islamic finance strongly align with the core values of ESG factors, which have been increasingly recognized as crucial for long-term financial success and societal well-being . By adhering to the principles of Maqasid Shariah, firms that comply with Shariah standards prioritize ESG considerations in their decision-making processes (Wahab, 2022; Rahmaningsih, 2022). This ensures that their actions align with ethical standards rooted in Islamic teachings.

2.3 STAKEHOLDER THEORY

Corporate Social Responsibility (CSR) and financial performance are mutually influential. Companies with solid financial performance have more resources to enhance their ESG ratings. Simultaneously, a higher ESG rating often improves financial performance by reducing agency costs and developing better stakeholder relations. This study examines how financial performance, including ROA, ROE, and Tobin's Q, can be enhanced through a higher ESG rating. According to Donaldson and Preston (2016), there are three lines of stakeholder research: the first is Instrumental Stakeholder Theory, which assumes that managerial decisions should aim to maximize the company's objectives while considering the interests of stakeholders; the second involves Descriptive Research, examining practical interactions between managers, firms, and stakeholders; and the third is Normative Stakeholder Theory, outlining how managers should behave towards stakeholders. This study combines elements from the first and third lines of stakeholder research, seeking a comprehensive understanding of the topic.

Stakeholders encompass a wide range of individuals and groups who can both impact and be impacted by an organization. This diverse array of stakeholders includes suppliers, customers, shareholders, employees, communities, political groups, governments, media, and many others. Stakeholder theory posits that managers have certain responsibilities towards specific groups of stakeholders. It was introduced by Freeman (1984) as a response to shareholder theory, emphasizing that managers have a fiduciary duty to act in the best interests of stockholders. The term "stakeholder" encompasses all those who have a vested interest in the company, without defining the extent of that stake. Consequently, the number of stakeholders can be virtually limitless. While some critics argue that it is impractical for managers to balance an infinite number of stakeholder interests, in most cases, the firm's stakeholders typically include employees, debtholders, suppliers, customers, and the local community. Their interests must be taken into consideration regarding the impact of the firm's activities.

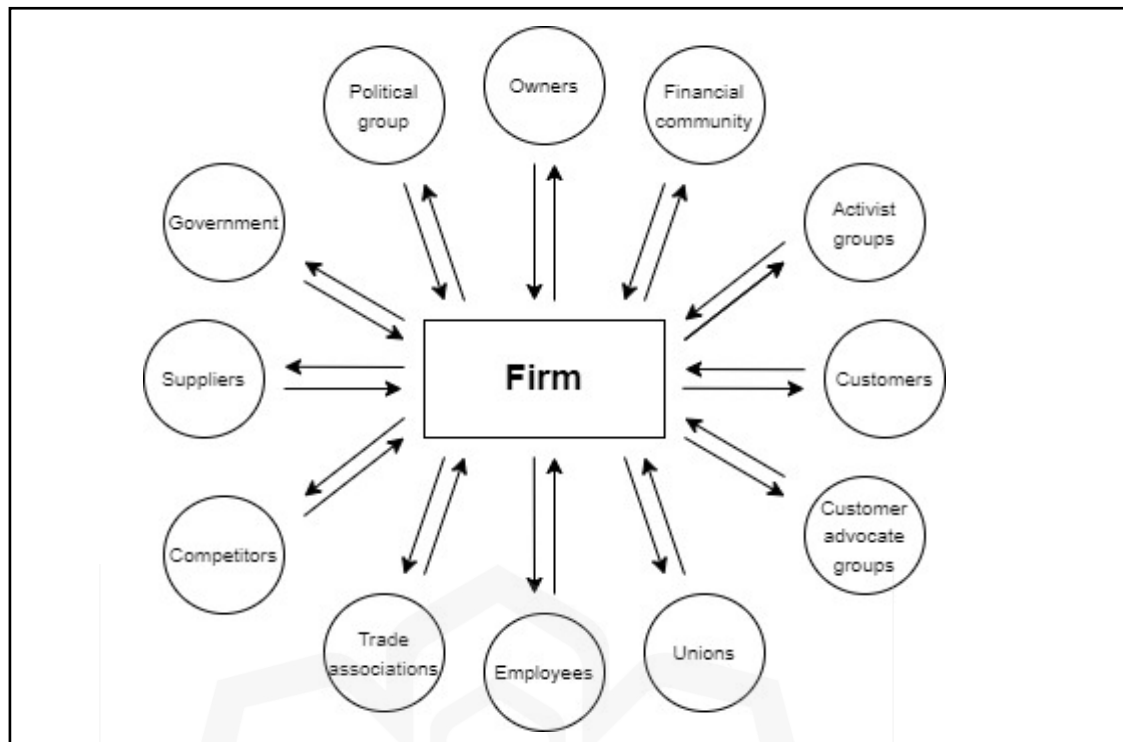


Figure 2.1 Contrasting Models Corporation: The Stakeholder Theory

As shown in the above Figure 2.1, Stakeholder Theory suggests that a company's relationship with its stakeholders and ability to create sustainable wealth are interrelated (Garcia et al., 2017). To ensure this, businesses should be honest and transparent when disclosing corporate data. Such honesty can reduce information asymmetry and increase investor confidence. The ESG framework refers to complex CG, sustainability, and CSR activities. However, research into the relationship between ESG practices and financial performance has seen varied results. Stakeholder theory provides a means of synthesizing and understanding the various results concerning a company's relationship and its effect on financial performance.

ESG practices aim to improve environmental, social, and governance issues that are likely to impact various stakeholders significantly. Much literature has suggested that ESG influences may be both direct and indirect. For example, achieving high ESG performance can increase a company's brand value and enhance the reputation of its products among customers. Additionally, exceptional ESG performance signals superior management skills and enhances a company's standing as an employer, attracting and retaining high-quality employees. Furthermore, strong ESG performance facilitates more stable government and financial community relationships. Conversely,

poor ESG performance increases the likelihood of legal action and financial penalties. From this perspective, the ESG score serves as an indicator of effective stakeholder communication (Yoon et al., 2018; Rau & Yu, 2023; Chung et al. 2023; Arayssi & Jizi, 2023).

The stakeholder theory asserts that a company's ability to generate sustainable wealth is influenced by its interactions with its stakeholders (Peng & Isa, 2020b). Many research findings have provided empirical evidence that effective stakeholder management contributes to improved company performance (Nurrahman & Mita, 2022). More importantly, the stakeholder theory provides a means of connecting ESG factors to firm value (Zhang et al. 2022). Within the context of the stakeholder theory, a company needs to disclose both financial and non-financial information in order to meet the expectations of its stakeholders. In this context, the stakeholder theory suggest the critical role of transparency for any companyer (Garcia et al. (2017) suggest that increased transparency reduces information asymmetry with the general public, fosters trust among stakeholders, and mitigatesperceived risk for investors. However, it is important to consider the diverse needs of stakeholders, as different stakeholders may evaluate ESG information based on varying criteria. For instance, while consumers might be interested in sourcing and labor policies, investors may be more concerned with residual risk (Ademi & Klungseth, 2022).

In brief, the stakeholder theory highlights the importance of sustainability and being accountable to all members of society. Unlike shareholder theory, which primarily focuses on shareholders' interests, stakeholder theory considers the needs of various participants such as employees and investors. The objective of stakeholder theory is to cultivate and maintain strong relationships among all stakeholders, thereby leading to increased returns for all stakeholders and resulting in greater overall wealth and equitable distribution. In this regard, stakeholder theory aligns more closely with the goals of ESG initiatives than shareholder theory.

2.4 LEGITIMACY THEORY

To understand the financial implications of ESG practices, it is important to examine each cultural dimension individually and its impact on society's stakeholders. Their response, ranging from appreciation to indifference or even suspicion, impacts the overall financial outcomes related to ESG initiatives. To explore this mechanism further, we utilize Suchman's legitimacy theory (1995) as well as Matten & Moon's national business system framework (2008). The legitimacy theory provides a valuable framework for understanding the reasons behind companies' adoption of ESG practices. According to Suchman (1995), legitimacy is defined as the board's perception or assumption that an organization's actions align with socially established norms, values, beliefs, and definitions.

In accordance with risk management theory and social capital, organizations strive to function within the norms and boundaries stipulated by society. The legitimacy theory supports this perspective, stating that a social contract exists between organizations and society, where the organization is responsible for upholding the terms of said contract. Failure to meet community expectations could lead to various repercussions such as reduced consumer demand for their products or diminished financial backing from investors. However, it is worth noting that these norms defining the contract are not fixed and can evolve over time. To ensure prolonged existence, organizations must continually prove their legitimacy by providing services and products actively sought after by society while gaining approval from influential beneficiaries (Giannopoulos et al. 2022; Nurrahman & Mita, 2022).

According to legitimacy theory, a social contract exists between organizations and society, whereby organizations are expected to uphold the terms of this contract or face possible penalties. Cuganesan et al. (2007) assert that organizations must demonstrate an ongoing commitment to fulfilling the community's expectations by providing services and products that are beneficial or necessary and ensuring that rewards reflect this societal approval. Regarding ESG activities, legitimacy theory encourages organizations to work towards moral legitimacy as a counterpart to this social contract, with evidence suggesting that legitimate companies exhibit a combination of economic and social progress and improved financial performance. This

involves incorporating ESG principles and practices into the core operations and strategy of the company, taking concrete steps to sincerely meet society's expectations. Although this may require significant investments of resources, it significantly contributes to achieving positive ESG outcomes. By showcasing tangible results through genuine commitment to sustainability initiatives, firms not only attain long-term business development but also gain legitimacy for their actions while fulfilling their responsibilities outlined in their social contract (Talan & Sharma, 2020; Yin & Wang, 2017).

Likewise, when companies engage in superficial ESG activities solely to enhance their reputation or corporate image, often referred to as "greenwashing" or "window dressing," they fail to allocate necessary resources to genuinely implement ESG within the organization. This lack of sincere commitment leads to a failure in delivering on promises and contradicts societal expectations. Such discrepancies between an organization's actions and societal expectations create a legitimacy gap, which can negatively affect financial performance and potentially threaten the long-term existence of the entire organization (Minutolo et al. 2019).

Thus, creating an evolved and updated organizational vision is important where an equation of measurable financial resources is equally valued as intangible legitimacy resources. However, according to Archel et al. (2009), the management of a business discovers a legitimacy gap, they try to enact different strategies such as:

1. To rectify their organization's behavior and match it with society's desire.
2. To change the perception of society to accept their behavior without changing that behavior.
3. To change the existing societal image of their behavior by manipulating, deceiving, or distracting their attention.
4. To indoctrinate society to change its desires and accommodate them to the end of the organization.

To sum up, legitimacy theory promotes the voluntary disclosure of non-financial activities by business entities; this theory also examines various forms of legitimacy and how perceptions of legitimacy can vary depending on time, location, and circumstances. The theory also explores the motives behind management's decision to disclose non-financial information, which holds significant importance. Considering these factors, we found it necessary to include the legitimacy theory in our theoretical framework. Doing so will enhance our comprehension of whether there is a correlation between ESG scores and corporate financial performance.

2.5 AGENCY THEORY

During the 1960s and early 1970s, the problem of risk-sharing arises when cooperating parties have different attitudes toward risk. Agency theory broadened risk-sharing literature to include the so-called agency problem that occurs when cooperating parties have different goals and division of labor (Jensen & Meckling, 1976). This theory focuses on the common agency relationship, where one party (known as the principal) delegates tasks to another party (known as the agent), who then carries out those tasks. The purpose of agency theory is to explain this relationship by using the concept of a contract used as a metaphor help illustrate the relationship and dynamics between different parties involved.

Agency theory aims to address two issues that can arise in agency relationships. The first issue is known as the agency problem, which occurs when there is a conflict of interests between the principal and agent, and it becomes challenging or costly for the principal to monitor and verify the agent's actions. In this situation, it becomes difficult for the principal to ensure that the agent has acted accordingly. The second issue is related to risk sharing between the principal and agent, where they may have different attitudes towards assuming risks. This divergence in risk preferences can lead them towards preferring different courses of action. Therefore, agency theory seeks solutions for these problems encountered within agency relationships.

However, Jensen and Meckling (1976) proposed that agency costs have a substantial impact on firms' financing decisions due to the potential conflict between

shareholders and debt holders. Agency Theory is a response to this problem aimed at resolving the internal tensions due to decision-making power within organizations. Thus, the purpose of Agency theory is to address and mitigate the conflicts and issues that arise from decision-making authority within organizations. Donaldson and Preston (2016) examined the relationship between principal-agent pairs, reinforcing the notion of Agency Theory sufficiently managing the conflicts of interest between the organization's involved parties. Since agency costs are a source of share value loss for shareholders (Jensen & Meckling, 1976), minimization of fees to offset these costs may strengthen a surviving enterprise's overall monetary position. Through effective management of agency costs by drawing on Agency Theory, corporations are able to maximize their performance reflected in share prices accordingly (Jensen & Meckling, 1976). Consequently, the purpose of Agency Theory is to resolve the tension between conflicting interests within a company and recruit any potential agency costs by establishing effective governance structures. Such structures would require managers to act on behalf of those with ownership in the principal entity.

In the current study, Agency Theory is viewed as a fundamental concept in corporate finance and governance, examines the relationship between principals (shareholders) and agents (managers), focusing on the potential conflicts of interest that arise when managers act on behalf of shareholders. In the context of studying Environmental, Social, and Governance (ESG) scores and financial performance of Shariah-compliant firms, Agency Theory provides valuable insights into how managers may prioritize ESG initiatives and financial outcomes and the potential conflicts that may arise between short-term gains and long-term sustainability objectives. Within Shariah-compliant firms, where adherence to Islamic principles is paramount, managers may face additional pressures to balance ESG considerations with financial performance while upholding religious values and principles. The Agency Theory lens helps researchers understand how managers' decisions impact firm performance and how governance structures can mitigate agency problems.

Furthermore, Agency Theory sheds light on the role of governance structures and mechanisms in aligning managerial behavior with shareholder interests and societal expectations. Effective governance practices, such as transparent reporting, board oversight, and stakeholder engagement, can mitigate agency problems by ensuring that

managers act in shareholders' best interests while addressing broader societal concerns. By examining the relationship between ESG scores and financial performance through the lens of Agency Theory, researchers can identify how ESG integration affects firm value and sustainability, providing valuable insights for scholars and practitioners in the Islamic finance domain.

2.6 CONCLUSION

The integration of ESG factors and their relationship with corporate financial performance can be comprehensively understood through Stakeholder Theory, Maqasid Shariah Theory, and Agency Theory. These theories collectively highlight the importance of balancing stakeholder interests, ethical governance, and financial sustainability. Stakeholder Theory emphasizes the need for firms to be accountable to a wide range of stakeholders, not just shareholders, fostering transparency and sustainable wealth creation. Maqasid Shariah Theory, grounded in Islamic principles, aligns with ESG practices by promoting socio-economic justice and ethical business conduct. Agency Theory, meanwhile, addresses the potential conflicts of interest between shareholders and managers, underscoring the role of effective governance in mitigating these tensions. Taken together, these theoretical perspectives offer a multidimensional understanding of how ESG integration can enhance both ethical standards and long-term financial performance in Shariah-compliant and other firms.

CHAPTER THREE

LITERATURE REVIEW

3.1 INTRODUCTION

The purpose of this literature review is to explore the issue related to the impact of ESG score on the financial performance of Shariah-compliant firms in Indonesia and Malaysia. This chapter also will provide the theoretical framework which is useful to study about the correlation between variables as proposed in the current study. In the review of existing literature, limited studies can be found the impact of ESG on financial performance of Shariah-compliant firms, therefore, this literature review provides information and previous studies about this issue. Finally, this chapter analyses the research gaps regarding the issue and theoretical usage for this current study.

3.2 ENVIRONMENT, SOCIAL AND GOVERNANCE

Environmental, social, and governance (ESG) evaluation is a method that assigns scores to companies based on their environmental, social, and governance efforts. It is commonly associated with ethical or socially responsible investment (Landi & Sciarelli, 2018; Jiang et al., 2023; Said , 2024), and is an important indicator of management competency, risk management, and non-financial management. ESG encompasses environmental factors such as climate change, energy and water usage, and carbon emissions; social principles such as fair trade, human rights, product safety, gender equality, and health and safety (Işık et al. 2024); and corporate governance such as board independence, corruption prevention and bribery, reporting and disclosures, and shareholder protection (Wang & Sun, 2022). Over the past decades, ESG reporting (KPMG, 2021) has significantly increased; KPMG International found in a survey on corporate responsibility that significant companies are engaging extensively in ESG-related reporting.

3.2.1 Environment

Once deemed peripheral to economic calculations, environmental factors such as climate risk, water shortages, extreme temperatures, and carbon emissions can now impede economic advancement (Long & Feng, 2024). These issues significantly contribute to a company's competitive status. Accordingly, handling environmental factors has become an essential part of ESG management for business. The 'E' in ESG measures signals a company's overall sustainability connected to its influence on the environment. Explicitly, this consists of how a business uses natural resources, sound waste disposal practices, and transparent reporting of environmental performance.

The first environmental element of ESG – known as the Environmental pillar, reflects aspects of social responsibility that acknowledge individual, corporate, and national visibility of sustainable and "green" product and service choices. These pillars fundamentally concern corporate strategic decisions to keep their product as green as possible (see Table 3.1, which describes the company's environmental concerns). To this end, companies are encouraged to develop strategies to implement environmentally considerate decisions, with some forms of action being more effective than others, depending on the specific company, market sensitivity, or region. In this case, business leaders can play a crucial role and responsibility in environmental decision-making, particularly in response to increasingly significant pressures from a globalizing society. As a result, it can be argued that the environmental pillars of ESG have been affected by the corporation's attempts to develop and maintain a sustainable corporation amidst a long-term and global commitment to accountability.

According to Porter et al. (2019), effective environmental regulation can reduce pollution caused by companies' activities and allow them to achieve cost savings through innovative measures. Regarding the industry context, there are discrepancies between developed and developing countries. Mature economic countries permit companies to compete under steady and transparent regulations. In contrast, the fast-growing industries of developing countries are subject to an unsteady context, creating an ambiguous environment for competition. Most businesses in developing countries are ensconced in traditional industries, which may lead to mature stages and munificence comparatively different from economic powers in developed countries.

Furthermore, the unmistakable institutional frameworks and informal context of developing countries can create barriers owing to different levels of complexity. As a result, the industry context can create a defining influence while motivating companies in developing countries to dedicate themselves to sustainability.

Table 3.1 Environmental factor of ESG

Environmental			
Climate change	Natural resources	Pollution & Waste	Environmental opportunities
Carbon emissions	Water stress	Toxic emissions and waste	Opportunities in cleantech
Product carbon footprint	Biodiversity and land use	Electronic waste	Opportunities in green building
Financing environmental impact	Raw material sourcing	Packaging material and waste	Opportunities in renewable energy
Climate change vulnerability			

Sources: Refinitiv (2021)

Table 3.1 above presents various environmental factors and considerations relevant to businesses and organizations. It covers various topics, including climate change, natural resource management, pollution and waste management, carbon emissions, and the impact on biodiversity and land use. These factors represent both challenges and opportunities for businesses in terms of managing environmental risks and promoting sustainable growth. For example, businesses need to address their carbon footprint, manage water scarcity, and ensure responsible sourcing of raw materials to minimize their environmental impact. Additionally, there are opportunities for businesses to invest in clean technology, green building, and renewable energy to meet the increasing demand for sustainable solutions and make positive contributions to the environment. Overall, this list emphasizes the complex nature of environmental considerations that businesses need to navigate in order to achieve environmental

sustainability and long-term success (Jyoti & Khanna, 2021; Kaakeh & Gokmenoglu, 2022; Naseer et al. 2024).

3.2.2 Social

The second social pillar related to a corporation's contribution to both the local community and the broader society has been described by Macassa et al. (2022) as corporate social responsibility (CSR). Noti et al. (2020) argue that CSR involves actively participating in society regardless of disadvantages or background. The social pillar of ESG incorporates the company's relationship with its society at large, involving external agents such as the government, suppliers, and the public, as well as its internal contacts such as consumers and employees. The company's values, safety/health promotion within the organization, employee working conditions, and its mission to its local community are all aspects this pillar embodies. Table 3.2 below presents the elements of the social pillar of ESG that embed human capital, product liability, social opportunities, and stakeholder opposition.

Table 3.2 Social Factor of ESG

Social			
Human capital	Product liability	Social opportunities	Stakeholder opposition
Labor management	Product safety and quality	Access to communications	Controversial sourcing
Human capital development	Chemical safety	Access to finance	
Health and safety	Financial product safety	Access to healthcare	
Supply chain labor standards	Privacy and data security	Opportunities in health and nutrition	

Sources: Refinitiv (2021)

The social aspect within ESG, as mentioned in Table 3.2, validates the nature of a company's relationship with the community at large, including individual people and institutions. Current relations recurring in today's business world are complex networks

pointing to immense possible factors. The United Nations Principle of Sustainable Investment clarifies relevance of social related issues under sustainability practices like human rights exploitation; child labor criminal system; industrial slavery exitance, quality adherence working environment conditions; effective liaison department for employees where international law set labor institution’s safety and assurance account too topmost when parameters considered ‘S’. Eventually assures protected latitude widespread departments’ core human behavior, diligence in ethics lionfish toward labor principles (Jin & Kim, 2022).

3.2.3 Governance

In addition to the environment and social pillar, the third governance pillar of ESG relates to the managerial responsibilities of the corporation (Paolone, 2021). Within this, the protection of shareholder rights, managerial compensation structure, and information disclosure quality are crucial governance issues (Nekhili, 2021). Achieving good corporate governance is a continuous process that involves implementing and evaluating regulations and policies, the aim of which is to diminish the effect of these matters (Abdallah & Ismail, 2017). Lack of transparency at the top of the corporation can create problems for shareholders as they try to attain information about the firms they have invested in (Nekhili, 2021). Furthermore, this lack of transparency can lead to decreased trust by both investors and shareholders, consequently lowering the value of the firm (Abdallah & Ismail, 2017). Table 3.3 below explains the corporate behaviour and governance aspects that companies should be concerned.

Table 3.3 Governance factor of ESG

Governance	
Corporate behaviour	Corporate governance
Business ethics	Board diversity
Anti-competitive practices	Executive pay
Tax transparency	Ownership and control
Corruption and instability	Accounting
Financial system instability	

Sources: Refinitiv (2021)

3.2.4 Sensitive Industry on ESG

Sensitive industries in the context of ESG are sectors that face heightened scrutiny due to their potential for significant negative impacts on the environment, society, or both. These industries typically include oil and gas, mining, chemicals, tobacco, and arms manufacturing, among others (Khaled et al. 2021; Khoury et al. 2021). The sensitivity arises from the inherent risks associated with their operations, which can include environmental degradation, health and safety issues for both employees and the surrounding communities, and ethical concerns.

The ESG assessments for companies within sensitive industries are particularly rigorous. Environmental factors are a major focus, as these industries can be involved in pollution, deforestation, and other activities that have a profound impact on ecosystems and biodiversity (Qureshi, 2020). Social factors are equally critical, given the potential for these industries to affect human rights, labor relations, and community relations. Governance aspects, such as compliance with environmental laws, ethical dealings, and transparent reporting, are scrutinized to ensure that companies manage the broader implications of their operations responsibly.

Investors and regulators often use ESG scores to evaluate the performance of companies within sensitive industries, looking for signs of sustainable practices and risk management (Naeem et al., 2022). Companies that demonstrate a commitment to reducing their environmental impact, improving social conditions, and adhering to high governance standards are often viewed more favorably. This is because they are perceived as being better equipped to manage the long-term risks associated with their operations, which can lead to more sustainable returns for investors and a lower likelihood of regulatory or reputational issues (Kumari et al., 2022).

However, operating in a sensitive industry also comes with challenges related to ESG reporting and performance. Companies must navigate complex regulations and often face intense public and stakeholder scrutiny. They are expected to invest significantly in technology and processes that mitigate adverse impacts. Moreover, these companies must be transparent in their reporting and proactive in their engagement with stakeholders to maintain trust and secure their social license to

operate. This level of scrutiny and the need for advanced management practices reflect the unique position of sensitive industries within the broader landscape of ESG considerations.

3.2.5 Refinitiv ESG Score Methodology

The Refinitiv ESG scoring methodology is a comprehensive approach designed to transparently and objectively measure the relative ESG performance of a company. Refinitiv collects data from various public sources, including annual reports, company websites, and NGO websites, to build these scores. The methodology involves over 450 ESG metrics, which are grouped into 10 main categories such as emissions, resource use, innovation, workforce, and human rights. Each company is evaluated based on these metrics, which are relevant to its industry, ensuring that the assessments are both fair and comparable across different sectors.

Each ESG metric employed by Refinitiv has a specific weight that reflects its importance relative to the industry in which a company operates. The weighting of the metrics is determined based on their materiality, which is assessed through a process that includes industry, academic, and corporate feedback. This ensures that the scores emphasize the most impactful aspects of a company's ESG performance. The data is then normalized to account for differences in company size and operational scope, allowing for a more equitable comparison among companies of different scales and geographical locations.

The scoring process also includes a robust verification mechanism to ensure the accuracy and reliability of the data. Refinitiv analysts perform regular updates and checks on the data sourced from public disclosures. Additionally, companies are given the opportunity to review and provide feedback on their scores, which helps maintain transparency and allows companies to understand how their ESG performance is being evaluated. This feedback loop is crucial for maintaining the integrity and accuracy of the scoring methodology.

Score range	Grade	Description
0.0 <= score <= 0.083333	D -	"D" score indicates poor relative ESG performance and insufficient degree of transparency in reporting material ESG data publicly.
0.083333 < score <= 0.166666	D	
0.166666 < score <= 0.250000	D +	
0.250000 < score <= 0.333333	C -	"C" score indicates satisfactory relative ESG performance and moderate degree of transparency in reporting material ESG data publicly.
0.333333 < score <= 0.416666	C	
0.416666 < score <= 0.500000	C +	
0.500000 < score <= 0.583333	B -	"B" score indicates good relative ESG performance and above-average degree of transparency in reporting material ESG data publicly.
0.583333 < score <= 0.666666	B	
0.666666 < score <= 0.750000	B +	
0.750000 < score <= 0.833333	A -	"A" score indicates excellent relative ESG performance and high degree of transparency in reporting material ESG data publicly.
0.833333 < score <= 0.916666	A	
0.916666 < score <= 1	A +	

Figure 3.1 The Methodology for Converting a Percentile Score to a Letter Grade Score (Refinitiv, 2021)

Moreover, the Refinitiv ESG scores are updated annually, providing a dynamic and current assessment of a company's ESG performance. The scores are used by investors, policymakers, and other stakeholders to make informed decisions regarding the sustainability and ethical impact of their investments or policies. The methodology not only highlights areas where a company excels but also where it may need to improve, offering a comprehensive view that supports the broader goal of promoting sustainable and responsible business practices globally.

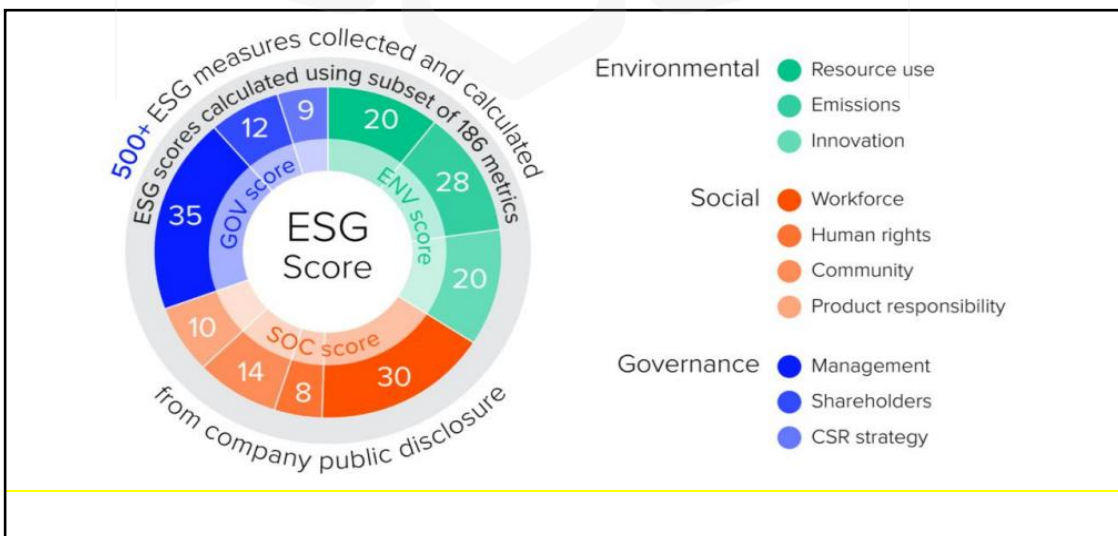


Figure 3.2 The Ten Categories of ESG (Refinitiv, 2021)

The ten categories are divided on the three pillars E, S, and G, and the overall ESG score is calculated as the relative sum of the category weights. For the environmental and social categories, the weights vary according to industry, while for the governance categories the weights remain the same for all industries. To calculate the ten category weights a percentile rank scoring methodology is used which is based on three factors:

1. The number of companies that are worse than the current one.
2. The number of companies that have the same value
3. The number of companies that have a value at all.

The following equation is used for the calculation:

$$\text{score} = \frac{\text{no. of companies with a worse value} + \frac{\text{no. of companies with the same value included in the current one}}{2}}{\text{no. of companies with a value}}$$

Equation 3.1 Category Weight Formula (Refinitiv, 2021)

3.3 ESG AND ISLAMIC FINANCE

The growing prominence of ESG considerations in the financial industry has led to an intriguing intersection with the principles and practices of Islamic finance. While ESG has gained traction in the conventional finance sphere, the Islamic finance landscape has long been grounded in principles that align with the core tenets of sustainable development. Islamic finance places great emphasis on the moral, environmental, and social dimensions, which are inherently compatible with the underlying goals of ESG and socially responsible investment (SRI) (Mustafida & Fauziah, 2021).

Islamic finance, which is embedded in Islamic principles, covers the concepts of Socially Responsible Investment (SRI) and ESG integration. Both concepts focus on social development, environmental impact, and ethical considerations in financial practices (Ahmad et al., 2021). The integration of Islamic principles into financial

transactions is proposed to address several issues in the society and environment, including corruption, usury (Riba), uncertainty (Gharar), and gambling (Maysir) (Qoyum et al. 2022). The Islamic principles to finance offers similar concepts that are aligned with activities relating to ESG-based investing, such as stewardship (Khalifah), trust (Amanah), equilibrium or balance (mizan), and ihsan (Elamin, 2023). For example, stewardship emphasizes responsible management and custodianship of resources, aligning with environmental sustainability efforts. Trust underscores the importance of integrity and transparency in financial dealings, which are also key aspects of governance within ESG frameworks. Equilibrium or balance highlights the need for moderation and fairness in all transactions, reflecting the social responsibility aspect of ESG investing. Finally, the principle of practicing good and refraining from wrong (al-amr bi al-ma'ruf wa an-nahy an al munkar) emphasizes ethical conduct and social justice, fundamental principles underpinning ESG considerations (Liang et al. 2022). Thus, the integration of Islamic principles into finance not only addresses ethical and moral concerns but also aligns with the objectives of ESG investing by promoting responsible and sustainable business practices.

Hoepner et al. (2022) mentioned in their study that the principle of the Islamic investment system is employed in daily financial transactions to adhere to the principles of the Islamic faith, avoiding involvement in industries such as alcohol, tobacco, pornography, and other prohibited sectors. Islamic and ethical concepts are utilized to screen and select investments that align with Islamic beliefs and ethical values. It is crucial to note that ethical and Islamic investment portfolios impose more stringent screening criteria compared to conventional investment portfolios. Consequently, their investment universe is relatively smaller, and there may be a higher residual risk associated with these portfolio.

While there is an overlap between ESG, responsible investment, and Islamic investment in terms of excluding industries such as tobacco, alcohol, pornography, weapons, and gambling, it is important to differentiate them. Socially responsible investment excludes criteria based on the ethical norms of society, which might change over time due to evolving practices. In contrast, Islamic investment criteria are based on unchanged religious values, even if societal norms shift (Läger et al. 2022).

Table 3.4 Comparison between ESG and Shariah Investments

	Shariah	ESG
ESG Integration	Medium	Low level
Screening	High level based on specific client/fund specific screening policies	Based implementation Shariah
Company involvement in environmental and social issues	High	Low level
Voting	High level	Low
Dividend	No restrictions	100% of dividends are subject to a “purification” process
Interest/usury earned	No restrictions	No usury allowed
Security lending	High rates with reputable practitioners implementing rules that ensure they can vote	No security lending allowed, assets must have, and usury prohibited
Short sell	Low rate	No short sell allowed, and asset must be owned
Limit on leverage high	No prohibition	100% implementation to avoid earning usury directly and indirectly through exposure to high-income companies

Sources: UN PRI (2016) and CFA Institute (2020)

The convergence of Islamic finance and ESG considerations is seen as a solution to address environmental, social, and economic challenges in the digital age (Elamin, 2023). Islamic finance has also been noted for its resilience during crises, such as pandemic, highlighting the importance of quality human capital development and technological adaptation for Islamic financial institutions (Ramadhanty et al. 2022). Additionally, Islamic finance has been identified as a potential approach for economic sustainability in various regions, including China and Indonesia, with the capacity to support sustainable socioeconomic development (Sarker & Amin, 2020).

There was a lack of clear, specific criteria for determining what constitutes an acceptable investment according to Islamic finance. Although Islamic sources (such as Quran and Hadith) provide general guidance on ethical and permissible behavior, these guidelines had not been sufficiently developed into detailed, concrete criteria that could be used for investment screening. In other words, the broad principles from Islamic teachings had not been effectively translated into practical rules for evaluating and selecting investments that comply with Islamic law (Al-Fawwaz et al. 2015). Consequently, an ethical investment screening process that considers environmental and social issues society faces is needed. In contrast to Islamic principles, present ethical finance exclusion criteria tend to be more tolerant of specific attributes during the screening process. In other words, there is a requirement for an investment screening process that considers the environmental and social issues that impact society. This suggests that the exclusion criteria for ethical finance may not completely align with Islamic principles, as they are more lenient towards certain attributes during the screening process (Kalia & Aggarwal, 2022). However, according to MSCI (2021), criteria that denote low tolerance (e.g., alcohol, adult entertainment, conventional weapons, gambling, and nuclear power) allow for firms to generate revenue from such products so long as that income does not exceed 15% of their total revenue for those ESG criteria. Islamic institutions, by contrast, have set their tolerance levels at a maximum of 5% of total revenue.

The existing Islamic investment screening criteria lack specific guidelines due to a limited translation of general references from Islamic sources. As a result, there is a need for an ethical investment screening process that incorporates environmental and social considerations relevant to society. However, compared to Islamic principles, prevailing ethical finance exclusion criteria tend to be more permissive towards certain attributes during the screening process. According to MSCI (2021), the criteria used in ethical finance screenings may permit firms to generate revenue from products or activities such as alcohol, adult entertainment, conventional weapons, gambling, and nuclear power as long as the income from these sources does not exceed 15% of their total revenue for the respective environmental, social, and governance (ESG) criteria. In contrast, Islamic institutions have established stricter tolerance levels, allowing a maximum of 5% of total revenue from such sources.

Table 3.5 Environmental, Social and Governance Elements of Shariah Values

ESG pillars	ESG themes	Shariah basis
Environment	Climate change	Islam considers climate change as a sort of damage, alteration and mischief caused by human beings.
	Natural resources	It is duty of the current generation to preserve the ecosystem for the next generation without polluting its resources and potentials.
	Pollution and waste	The protection of water, air and earth from pollutants is an individual religious duty of every Muslim.
	Environmental opportunities	The development of a society is depending on their consciousness.
Social	Human capital	Islam encourages Muslims to develop their selves, and it is known in Islam that a stronger believer is better than the weaker.
	Product liability	Shariah promotes Ihsan in every act, the concept of Ihsan denotes doing something in the best possible to achieve the excellence and perfection.
	Stakeholder opposition	One of the most important principles in Islamic management is trustworthiness.
	Social opportunities	The Shariah has taken an extra mile in emphasizing on caring healthy and safety work environment for employees.
Governance	Corporate governance	A set of institutional and organizational arrangements through which Islamic Financial Institutions (IFIs) ensure that there is an effective independent oversight of Shariah compliance over the issuance of relevant Shariah pronouncements, dissemination of information and an internal Shariah compliant review.
	Corporate behaviour	Business ethics and transparency

Source: MSCI ESG research key issue hierarchy (November 2021)

In addition, to obtain the Shariah objectives, various social elements play an important part (various social elements are essential in achieving Shariah objectives), including the concepts of perfection of actions and continuous improvement, togetherness and cooperation, honesty and sincerity, altruism and sacrifice, justice, moderation, balance (Mizan), stewardship and trust (Khilafa and Amana), political authority (Amarah), and education (Tarbiyyah) (Jouti, 2019). While the social themes

of environmental, social, and governance (ESG) adhere with the principles of Shariah, the approaches taken to achieve these objectives may differ. Ethical financing places its roots in the values and beliefs of specific communities, which can vary across different societies. On the other hand, the Islamic investment criteria are critically developed from the principles and the values of Islam.

The alignment between ESG and Islamic principles is evident, particularly in the real of governance. However, there are distinct differences between the two categories. The ethical values associated with governance, such as transparency and consistency, are explained by Shariah as religious guidelines from a general perspective rather than being defined through specific practices as outlined in ESG initiatives (Lee & Isa, 2022b). Moreover, while ESG incorporates specific metrics to measure the corporate governance structure, focusing on aspects such as boards, executive compensation, ownership, and accounting, Shariah criteria for governance primarily encompass the fundamental characteristics and structural elements of governance rather than prescribing practical scoring methodologies (Anwer et al. 2021).

3.4 ESG AND ISLAMIC FINANCIAL PERFORMANCE

Integrating Environmental, Social, and Governance considerations into investment decisions has gained significant traction in recent years as investors increasingly recognize the importance of sustainable and responsible investing. This trend has also permeated the realm of Islamic finance, where the principles of ESG align closely with core values of Islamic finance, such as social welfare, environmental consciousness, and ethical governance. Recent studies have explored the relationship between Environmental, Social, and Governance (ESG) practices and Islamic financial performance. The research indicates that ESG engagement positively impacts financial performance in Shariah-compliant firms, aligning with stakeholder theory rather than agency theory (Lee & Isa, 2020).

Research suggests that firms labeled as “Islamic” in emerging markets like Indonesia and Malaysia tend to exhibit better environmental and social performance compared to their non-Islamic counterparts, though the evidence on governance is more

mixed (Qoyum et al. 2022). This may be attributed to the lower debt levels and stricter ethical standards typically associated with Islamic firms. Moreover, the ownership structure of firms can also influence their ESG performance, with research indicating a positive relationship between ESG and firm performance, with research indicating a positive relationship between ESG and firm performance in the ASEAN region (Kurniawan & Rokhim, 2023). This underscores the importance of effective corporate governance and stakeholder management in driving sustainable business practices.

The Guidelines for Multinational Enterprises, established by the Organisation for Economic Co-operation and Development (OECD), an organization founded in 1961, are recognized as the sole comprehensive instrument for formal negotiation and government endorsement of Corporate Social Responsibility (CSR) practices (OECD, 2017). The definition of ESG adopted from Morgan Stanley Capital International (MSCI), considers environmental, social, and governance factors in conjunction with financial factors during investment decision-making. This ESG definition can be further categorized into three dimensions: i) The environment dimension encompasses sustainability practices related to environmental awareness, including climate change, natural resources, pollution, and environmental opportunities; ii) The social dimension focuses on practices concerning human capital, product liability, stakeholder engagement, and social opportunities; and iii) The governance dimension addresses the responsibilities of company management and their relationship with stakeholders, encompassing corporate governance and corporate behavior issues as identified by MSCI.

ESG factors and corporate financial performance have experienced substantial growth since the 1970s. However, the findings regarding the association between ESG scores and financial performance have been inconsistent across studies. Notably, studies such as those conducted by Gibson et al. (2021), Kuo et al. (2021), and Torre et al. (2020) have presented divergent results. The outperformance is explained by growing investor preferences for sustainable investing over time and institutions' resulting price pressure on stocks with good environmental scores. In addition, ESG implementation, in the long run, will increase the Return on Assets. In contrast, based on the agency and signaling theory, there is a positive relationship between ESG and financial performance (Pulino et al. 2022).

A substantial body of research has demonstrated a positive relationship between ESG activities and Corporate Financial Performance (CFP). Huang (2019), for instance, delved into the motivations behind the utilization of ESG practices and highlighted their potential to contribute to firm profitability. Moreover, a study by Qoyum et al. (2021), focusing on Shariah-compliant firms in Indonesia and Malaysia, revealed that these firms exhibited superior performance in terms of environmental and social considerations. These findings indicate a significant positive impact of ESG on firm financial performance. Nevertheless, it is important to note that there are also empirical studies that have identified a negative relationship between ESG integration and financial performance. Kim and Li (2021) suggested in their research that ESG practices sometimes fail to effectively maximize the benefits of resources allocated to social projects, thus compromising overall returns.

Previous research such as Lee et al. (2022) and Zhang et al. (2022) has emphasized the significance of considering environmental, social, and governance factors in aiding firms to enhance their stock returns and mitigate financial risk. However, the exact nature of this relationship remains a subject of ongoing investigation and debate (see Table 3.6). Consequently, there remains a gap in the literature concerning the relationship between ESG and CFP that necessitates further investigation.

Table 3.6 The History and Evolution of ESG Investing

1920s	1930s	1990s	2000s
Socially Responsible Investing (SRI)	Responsible Investing (RI)	Sustainable Investing (SI)	ESG Investing
Rooted in religious values. First SRI fund launched in 1928 (Pioneer fund) focused on exclusionary screens based on social issues (i.e.,	Differing views of what to deem socially responsible resulted in some investors dropping the “S” from SRI.	The ecological word ‘sustainability’ was introduced in the 1990s.	UK Pensions Act is amended in 2000 to require the consideration of ESG issues during the investment process.

1920s	1930s	1990s	2000s
tobacco, alcohol and gambling).			
Strong demand for SRI products resulted in the launch of many other values-based funds.	The Great Depression and a number of corporate scandals and controversies lead to more focus on governance issues.	Increased awareness about climate change.	In 2006, the United Nations launched its Principles of Responsible Investing, which require the incorporation of ESG issues into the investment process.

Sources: Dayaramani & Rocha (2016)

Nevertheless, it is essential to note that empirical studies have identified a negative relationship between ESG scores and financial performance. Kim and Li (2021) suggested in their research that ESG practices sometimes fail to effectively maximize the benefits of resources allocated to social projects, thus compromising overall returns. Consequently, there remains a gap in the literature concerning the relationship between ESG and CFP litigation. ESG negatively impacted the market performance in the transportation industry compared to no impact in the capital goods industry (Naimy et al. 2021).

Indeed, the disclosure of ESG practices is important because the investors recognize it as a measurement of companies' opportunities and risks (Maiti, 2020). The disclosure of ESG practices is included in the voluntary information provided by the companies (Cucari et al. 2017). Furthermore, every firm is recommended to disclose its ESG activities to stakeholders in order to foster its accountability and reputation, which in turn creates the firm's value (Ferrero et al. 2016). As a result, ESG has become a key indicator of companies non-financial performance. Examples of ESG factors can be seen as follows:

Table 3.7 Underlying Factors of ESG Scores

Environmental	Social	Governance
Climate change	Human capital	Bribery and corruption
Gas emissions	Labor standards	Political lobbying and donations
Waste and pollution	Privacy and data security	Tax strategy
Renewable energy	Stakeholder opposition	Board diversity and structure
Green building	Employee relations	Wages
Water stress	Employee diversity	Business ethics and fraud
Natural capital	Health and safety conditions	Management
Deforestation	Human rights	Shareholders
		CSR strategy

Sources: (Refinitiv, 2021a)

ESG performance is assessed using various currencies such as Refinitiv Eikon and converted into an ESG score. As shown in the above Table 3.7, the underlying factors of the E in ESG are all factors related to the impact of a company's operations on the environment. Recent studies have explored the relationship between Environmental, Social, and Governance (ESG) factors and company performance. ESG scores, provided by Thomson Reuters and Refinitiv Eikon, serve as an indicator of sustainability performance (Rajesh, 2020a). Research suggests that companies investing more in R&D tend to achieve higher ESG performance, which in turn positively influences economic and financial outcomes (Pinheiro et al. 2023). The impact of ESG reporting on company performance has been examined using multiple analytical methods, revealing strong to medium effects across different dimensions (Lin et al. 2022). In addition, Zheng et al. (2022) shows that green environmental performance, social responsibility, and corporate governance (ESG) scores are increasingly becoming the consensus of multinational green financial institutions, investors, and government.

3.5 SHARIAH-COMPLIANT INVESTMENT SCREENING AND ESG SCREENING PROCESS

A study conducted by Refinitiv in 2022 investigated the relationship between Shariah compliance and ESG performance. The findings revealed a significant correlation between Shariah compliance and improved ESG performance. On average, Shariah-compliant companies exhibited ESG scores that were 6% higher compared to those excluded from the Shariah screening process. Notably, non-financial companies demonstrated an even greater disparity, with ESG scores that were 10% higher. Further examination of the data highlighted specific areas of differentiation in ESG scores for Shariah-compliant companies. These companies displayed ESG scores of 3% higher for governance, 7.3% for environmental issues, and 7% for social issues. These results indicate that adhering to Shariah compliance screening can significantly improve ESG performance across various dimensions.

The above study by Refinitiv provides valuable insights into the relationship between Shariah compliance and ESG performance. The data underscore the potential of Shariah compliance screening to positively influence ESG outcomes, with Shariah-compliant companies exhibiting higher ESG scores compared to their counterparts. This highlights the relevance of considering Shariah and ESG factors in investment decision-making and underscores the potential benefits of integrating Shariah compliance within ESG frameworks.

In the Islamic finance, the interest in studying Shariah-compliant companies through the lens of ESG has grown significantly. A quantitative criterion model, which consists of two primary steps, is often employed to assess the compliance of these companies. The first step involves filtering and excluding companies whose primary business activities are deemed non-permissible according to Shariah law. Non-permissible activities include those associated with conventional banking, interest income from conventional insurance, gambling, liquor and liquor-related activities, and non-halal food and beverages. A five percent limit is typically applied to these non-permissible activities (Refinitiv, 2022; Keshminder et al. 2021).

Other activities, such as hotel and resort operations, share trading, stockbroking, rental income from Shariah-non-compliant activities, and other identified non-compliant activities, are subject to a 20 percent limit. The second step of the screening process examines the company's financial ratios, including interest-bearing debt over total assets and cash plus cash equivalents over total assets. To pass the Shariah screening process, these financial ratios should be below 33 percent. By employing these screening steps, researchers and practitioners aim to identify and analyze Shariah-compliant companies that adhere to Islamic principles while incorporating ESG considerations. This approach provides a framework for evaluating companies' financial ratios and ensuring alignment with Shariah requirements.

Some criteria employed in ESG products screening policy (Refinitiv, 2021a), they are:

1. Apply absolute rules (i.e., exclude tobacco, cluster munitions, alcohol, pornography, weapons, gambling).
2. Apply relative rules (i.e., exclude companies that produce 10% or more of their revenues from tobacco).
3. Prohibit companies/issuers that violate international norms, such as the UN Guiding Principles on Business and Human Rights.
4. Exclude companies/issuers with poor ESG performance.

The first Shariah-compliant firms, namely Dow Jones Islamic Market Indexes was introduced in 1999. Currently, the listed indexes are more than 70 stock components. another important index is FTSE Global Islamic Index Series. However, based on Dow Jones Islamic Index, the following criteria related the Shariah compliant stock:

1. The unethical business revenues of the firm should be less than 5%.
2. The value of market equity to debt (on average of 24 months should be less than 33%).

3. The value of market equity to account receivables (on average of 24 months should not be greater than 49%).
4. The value of equity to cash (on average of 24 months must not be greater than 33%).

Table 3.8 Shariah-Compliant vs Non-Shariah-Compliant Equities' ESG Scores

No. of companies	Type	Global	Environment	Social	Governance
6,554	Full sample	50.5	50.6	50.6	50.2
2,387	Shariah-compliant	52.3	52.8	52.8	51.2
4,167	Non-shariah compliant	49.4	49.3	49.4	49.7
ESG score gap (compliant vs non-compliant)		5.9%	7.3%	7.0%	3.0%

Sources: (Refinitiv, 2021a)

It is important to note that the ESG and Shariah screenings serve distinct objectives. Shariah screening is a norms-based exclusionary process that identifies and excludes companies that contradict Islamic law. It is rooted in *maslahah*, which promotes public interest and social welfare through religion-based ethics. Conversely, the ESG screening process evaluates a company's involvement in ethical initiatives that align with environmental, social, and governance considerations. Ayedh et al. (2020) put forth interesting suggestions to enhance the usefulness of the Shariah screening process for stakeholders. These suggestions include the purification of non-permissible income, the implementation of more systematic Shariah reporting, fostering an Islamic corporate culture, and adhering to Islamic legal, moral, and ethical management practices (Amosh et al. 2022). These recommendations aim to strengthen the Shariah screening process and enhance its alignment with Islamic principles. It is intriguing to observe that ESG and Shariah screenings can complement each other, offering a broader range of ethical screening criteria. While ESG screening focuses on broader environmental, social, and governance factors, Shariah screening provides a specific

lens guided by Islamic principles. These screenings enable a more comprehensive evaluation of companies' ethical practices and their impact on society, fostering a holistic approach to responsible and sustainable investing.

Some prohibition of investments in certain industries on Islamic finance such as tobacco, alcohol, pork, pornography, weapons, gambling, human trafficking, and other product and activities deemed unlawful (haram). In order to avoid these industries, Shariah-compliant products are screened and this practice closely parallels ESG investing. In line with shariah compliant products, investors using ESG investing strategies avoid certain activities and product so their portfolios align with the values of the client, fit to the goal of developing a sustainable and fair society, and do no harm to people or damage to the environment (Trisnowati et al. 2022).

ESG investing strategies often assess the financial value of environmental, social, and governance factors and integrate that value into the investment analysis, decision, and process (see Table 3.9). Active ownership activities such as company engagement and voting, may also be a part of ESG strategies, to mitigate risks, enhance returns, and improve ESG performance and disclosure of companies/issuers. However, ESG integration and active ownership practices complement Islamic finance practices, and environmental issues are consistent with the fundamental principle of Shariah.

Table 3.9 Comparison Of Application Of ESG, Islamic, And Conventional Investment

Practice	ESG Investing	Islamic Finance	Conventional Investment
Systematic ESG integration	Medium levels	Low levels	Low levels
Screening	High levels based on client-specific/fund-specific screening policies	100% application based on Shariah	Low levels
Company engagement on environmental and social issues	High levels	Low levels	Low levels
Voting	High levels	Low levels	Medium levels

Practice	ESG Investing	Islamic Finance	Conventional Investment
Dividends	No restrictions	100% of dividends are subject to a “purification” process	No restrictions
Interest/riba earned	No restrictions	No riba permitted	No restrictions
Security lending	High levels with leading practitioners applying rules that ensure they can vote	No security lending permitted, assets must be owned, and riba is prohibited	High levels
Shorting	Low levels	No shorting permitted and assets must be owned	Low levels
Restriction on high leverage	No restrictions	100% application to avoid earning riba directly and indirectly through exposure to high-interest earning companies	No restrictions

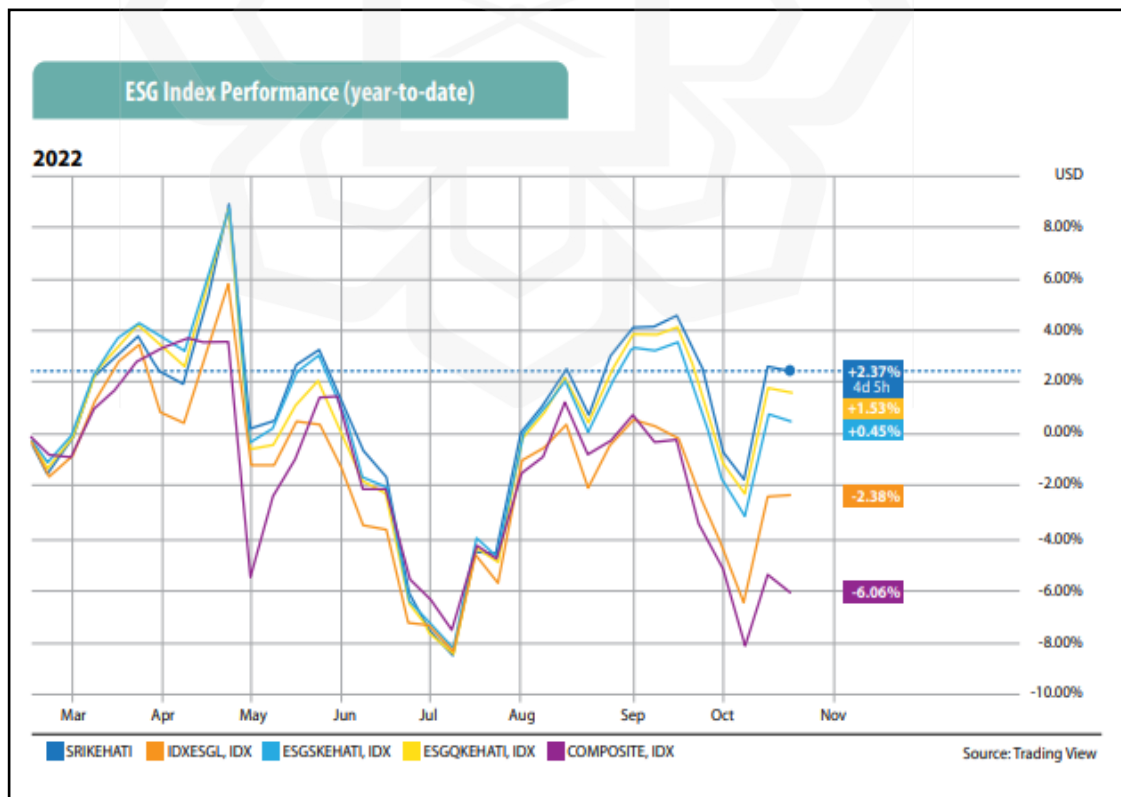
Note: Riba refers to interest-based transactions, which are prohibited within Islamic finance. CFA Institute (2019).

3.6 ESG IN EMERGING MARKETS

ESG first gained attention in 2006 when the United Nations released the Principles for Responsible Investment Report (<https://unglobalcompact.org/>). In the report, UN provide guidelines and recommendations on incorporating environmental, social, and corporate governance issues into various financial services, including asset management, securities brokerage, investment banking, and related research functions. In other words, the report has marked an important step towards promoting responsible and sustainable practices in the financial industry worldwide.

3.6.1 ESG in Indonesia

After the adoption of the Sustainable Development Goals (SDGs) in 2015, Indonesia committed to decrease its Greenhouse Gas (GHG) emissions via the Enhanced Nationally Determined Contribution (ENDC). This set ambitious goals, aiming at a 31.89% decrease unconditionally and a 43.2% decrement conditionally. Given the rising acknowledgement of climate change and biodiversity loss, there has been a shift in the investment perspectives of capital owners. Sustainable investments now have priority, with Environmental, Social, and Governance (ESG) factors being significantly taken into consideration. The Ministry of Finance of Indonesia, taking a leading role in this, initiated the implementation of ESG principles in governmental supports and infrastructure financing. Further supporting these efforts with the help of the United Nations Development Programme (UNDP), the creation of an ESG Policy Brief was additional. The Figure 3.6.1 below presents the most recent ESG performance in Indonesia.



Source: IFDI (2019)

Figure 3.3 ESG Index Performance

The latest ESG development in Indonesia, in order to avoid greenwashing and misplacing investment signal, there are ongoing efforts to achieve a global consensus on consistency, comparability, and utilization of ESG metrics. In addition, in June 2021, the G7 Finance Minister and Central Bank Governors made a firm commitment to tackling ESG issues. Then, the significance of these initiatives to established a distinct ESG reporting baseline was further emphasized in the G20 communique in July 2021.

A structured comparison of various ESG frameworks, standards, ratings, and indices, are essential tools for assessing and managing a company's sustainability performance as shown in Figure 3.4. Frameworks are broad principles-driven guidelines that outline what information should be included and how it should be prepared and disclosed. They offer general guidance for all organizations aiming to foster a sustainable future, providing baseline metrics to track and showcase current ESG progress. Entities associated with frameworks include the Global Reporting Initiative (GRI), Science Based Targets, and the Greenhouse Gas Protocol, among others. There are more specific standards, setting out detailed rules for what should be reported. These standards are issued by recognized standard-setting bodies and ensure the disclosure of information related to ESG materiality, helping organizations monitor their internal performance and maintain transparency with stakeholders. Examples of such entities include the Sustainability Accounting Standards Board (SASB), the International Organization for Standardization (ISO), and the Climate Disclosure Standards Board (CDSB).

	Definition	Scope	Use	Entity
FRAMEWORKS	A broad set of principles-driven guidance contain list of information or materials should be covered, how it should be prepared and disclosed.	Guidance for all organizations in order to create sustainable future.	Provides the baseline metrics to track and showcase current ESG progress.	
STANDARDS	Set list of specific rules for what should be reported issued by a standard-setting body, making the framework can be implemented.	Disclosure of information related to ESG materiality.	Provides internal monitoring and transparency to all stakeholders.	
RATINGS	Assessment of a company's material ESG performance or risk management measured using quantitative indicators.	Absolute ESG score measured based on company's ESG performance or risk.	Provides ESG score to monitor specific entity and construct ESG indices.	
INDICES	An index which measures and ranks the performance of a group of companies in sustainability using a variety of metrics and methodologies.	ESG performance relatives to peers and overall standards.	Provides information to investors on the relative performance of the companies in the index.	

Source: PWC, OECD

Figure 3.4 Framework, Standards, Indexes, and Ratings are Created to Address Differences Issues Across The Sustainability Landscape.

Ratings are involves the assessment of a company’s material ESG performance or risk management, using quantitative indicators to measure the absolute ESG score. These scores help monitor specific entities and construct ESG indices, facilitating a comparative analysis of ESG performance. Notable entities providing these ratings include MSCI, Bloomberg, RepRisk, and Sustainalytics. Meanwhile, the indices rank and measure the performance of groups of companies based on their sustainability metrics and methodologies. These indices compare ESG performance relative to peers and overall standards, offering valuable information to investors about the relative performance of companies within the index. Entities like the Dow Jones Sustainability Indexes, the Indonesia Stock Exchange (IDX), the World Federation of Exchanges (WFE), and FTSE Russell are prominent in this category.

3.6.1.1 Mapping of ESG Standards Against SDGs

Table 3.10 describes the mapping of the ESG standards with the 17 SDGs. The table outlines the alignment of various ESG (Environmental, Social, and Governance) dimensions and standards with the United Nations Sustainable Development Goals (SDGs). In the environmental dimension, standards focus on pollution control, preservation, and waste management, which are linked to several SDGs such as Goal 3 (Good Health and Well-being), Goal 6 (Clean Water and Sanitation), Goal 11 (Sustainable Cities and Communities), Goal 13 (Climate Action), and Goal 14 (Life Below Water). Efforts to preserve biodiversity align with Goal 14 and Goal 15 (Life on Land), while natural resource management and energy efficiency touch upon multiple goals including Goal 7 (Affordable and Clean Energy), Goal 9 (Industry, Innovation, and Infrastructure), and Goal 12 (Responsible Consumption and Production). Additionally, climate change mitigation and disaster risk management are connected to Goals 7, 9, and 13.

In the Social dimension, standards related to employment and work environment contribute to Goal 3 (Good Health and Well-being), Goal 4 (Quality Education), Goal 8 (Decent Work and Economic Growth), and Goal 16 (Peace, Justice, and Strong Institutions). Issues of diversity, equality, and inclusivity are addressed through Goal 5 (Gender Equality), Goal 10 (Reduced Inequality), Goal 11 (Sustainable Cities and Communities), and Goal 16. Furthermore, social interests such as poverty reduction, hunger elimination, health, education, and gender equality are encapsulated in Goals 1 (No Poverty), 2 (Zero Hunger), 3, 4, and 5. Cultural heritage preservation aligns with Goal 10 and Goal 11.

The Governance dimension focuses on leadership and governance practices that are crucial for achieving Goal 9, Goal 16, and Goal 17 (Partnership for the Goals). These goals emphasize the importance of robust institutional frameworks, innovation, infrastructure development, and international cooperation to achieve sustainable development. Effective leadership and governance structures ensure the alignment of organizational practices with broader sustainability objectives, thereby contributing to these SDGs.

Table 3.10 The integration of ESG and SDGs in Indonesia

Dimension	Standard	SDG
Environment	Pollution, Preservation and Waste Management	Goal 3: Good health and well-being
		Goal 6: Clean water and sanitation
		Goal 11: Sustainable cities and communities
		Goal 13: Climate action
		Goal 14: Life below water
	Biodiversity preservation	Goal 14: Life below water
		Goal 15: Life on land
	Natural resource management and energy efficiency	Goal 6: Clean water and sanitation
		Goal 7: Affordable and Clean Energy
		Goal 9: Industry, innovation and infrastructure
		Goal 12: Responsible consumption and production
		Goal 13: Climate action
		Goal 15: Life on hand
	Climate change mitigation and adaptation, and disaster risk	Goal 7: Affordable and Clean Energy
		Goal 9: Industry, innovation and infrastructure
Goal 13: Climate action		
Social	Employment and Work Environment	Goal 3: Good health and well-being
		Goal 4: Quality education
		Goal 8: Decent work and economic growth
		Goal 16: Peace, justice and strong institutions
	Diversity, equality, inclusivity and access	Goal 5: Gender equality
		Goal 10: Reduced inequality
		Goal 11: Sustainable cities and communities
		Goal 16: Peace, justice and strong institutions
	Social interest	Goal 1: No poverty
		Goal 2: Zero hunger
		Goal 3: Good health and well-being
		Goal 4: Quality education
		Goal 5: Gender equality
	Cultural Heritage	Goal 10: Reduced inequality
		Goal 11: Sustainable cities and communities

Dimension	Standard	SDG
Governance	Leadership and governance	Goal 9: Industry, innovation and infrastructure
		Goal 16: Peace, justice and strong institutions
		Goal 17: Partnership for the goals
	Risk and control	Goal 12: Responsible consumption and production
		Goal 13: Climate action
		Goal 16: Peace, justice and strong institutions

Sources: United Nations (2004)

Lastly, the governance dimension also covers risk and control mechanisms, which align with Goal 12, Goal 13, and Goal 16. These standards emphasize responsible consumption and production, proactive climate action, and maintaining peace, justice, and strong institutions. By implementing rigorous risk management and control measures, organizations can mitigate negative impacts, enhance transparency, and ensure compliance with sustainability standards, ultimately supporting the achievement of these interconnected SDGs. This comprehensive alignment illustrates how ESG practices can drive progress toward a more sustainable and equitable world.

In Indonesia, there have been significant advancements in environmental, social, and governance (ESG) investing aimed at preventing greenwashing, which is the practice of misleadingly portraying investments as more environmentally friendly than they are and promoting the accurate signaling of investments (Gunawan, 2020). There is ongoing work to agree globally on consistent, comparable, and useful ESG metrics to enhance transparency and reliability when reporting ESG practices. The importance of these initiatives has been highlighted by G7 Finance Ministers and Central Bank Governors, who made a dedication to address ESG issues in June 2021. The G20 communique of July 2021 similarly stressed the need for a standard baseline for ESG reporting, signifying the current attempts to standardize and align ESG processes.

3.6.2 ESG in Malaysia

Malaysia has been a critical example of ESG research since Malaysian companies started implementing the first Corporate Social Responsibility (CSR) framework in 2006. Meanwhile, Malaysia's first report on sustainable development was introduced in 1987. The research by Teoh (1984) shown that Malaysian companies lack community engagement and seem to prioritize their employees and the profitability of their products over the impact they have on the environment and society. Lee and Isa (2022d) focused on the impact of ESG practices on the financial performance of Shariah-compliant companies in Malaysia. However, research has shown that ESG compliance and disclosure among Malaysian firms are still in the early stages, with a growing emphasis on the importance of embracing ESG practices, especially after the COVID-19 pandemic (Amosh & Khatib, 2023).

The challenges faced by Malaysian Micro, Small and Medium Enterprises (MSMEs) in implementing ESG standards have been highlighted, highlighting the need for companies to integrate ESG practices in light of the country's economic and social challenges (Puteh Salin et al, 2023). Despite the potential benefits of ESG implementation, Malaysia faces obstacles such as a lack of clear definitions, standards, transparency, and accountability in the ESG framework (Tang, 2023). However, the role of ESG practices in enhancing the performance of Malaysian public-listed companies has been under scrutiny, with recommendations for government support through initiatives like tax exemptions to encourage ESG strategies and sustainable development (Lee et al., 2023).

In recent years, Malaysian companies across various industries have demonstrated their dedication to improving responsible business practices and ameliorating ESG risks. In 2018, the Malaysian government revealed their intention to develop a National Action Plan (NAP) on Business and Human Rights and mitigate any human rights risks emanating from business activities across Malaysia. Additionally, the Malaysian Securities Commission has made significant advances in revising its Sustainable and Responsible Investment Roadmap, whilst Bursa Malaysia has also promulgated sustainability reporting directives and a corporate governance guide.

However, it is noteworthy that in Malaysia most ESG disclosures have focused on governance aspects. Material human rights matters, particularly in sectors such as construction and plantations, are not adequately reported voluntarily (Rastogi et al., 2023). In addition, the availability of third-party ESG data providers that independently verify disclosure accuracy through sustainability audits and research is inadequate. While efforts have been made to encourage responsible business activities and ESG awareness, there is still room for advancement. To enhance transparency and accountability across industries, the encouragement of strengthened voluntary disclosure on material human rights issues and an expansion of independent ESG data verification availability is necessary (Ademi & Klungseth, 2022). Furthermore, the 12th Malaysia Plan outlines the nation's commitment to sustainable development and the formation of a green economy. It highlights various priorities that will drive sustainability efforts, such as increasing the access to green financing and providing incentives for environmentally sustainable undertakings. These endeavours will continue to reinforce Malaysia's dedication to promoting responsible and sustainable business practices (Figure 3.5).

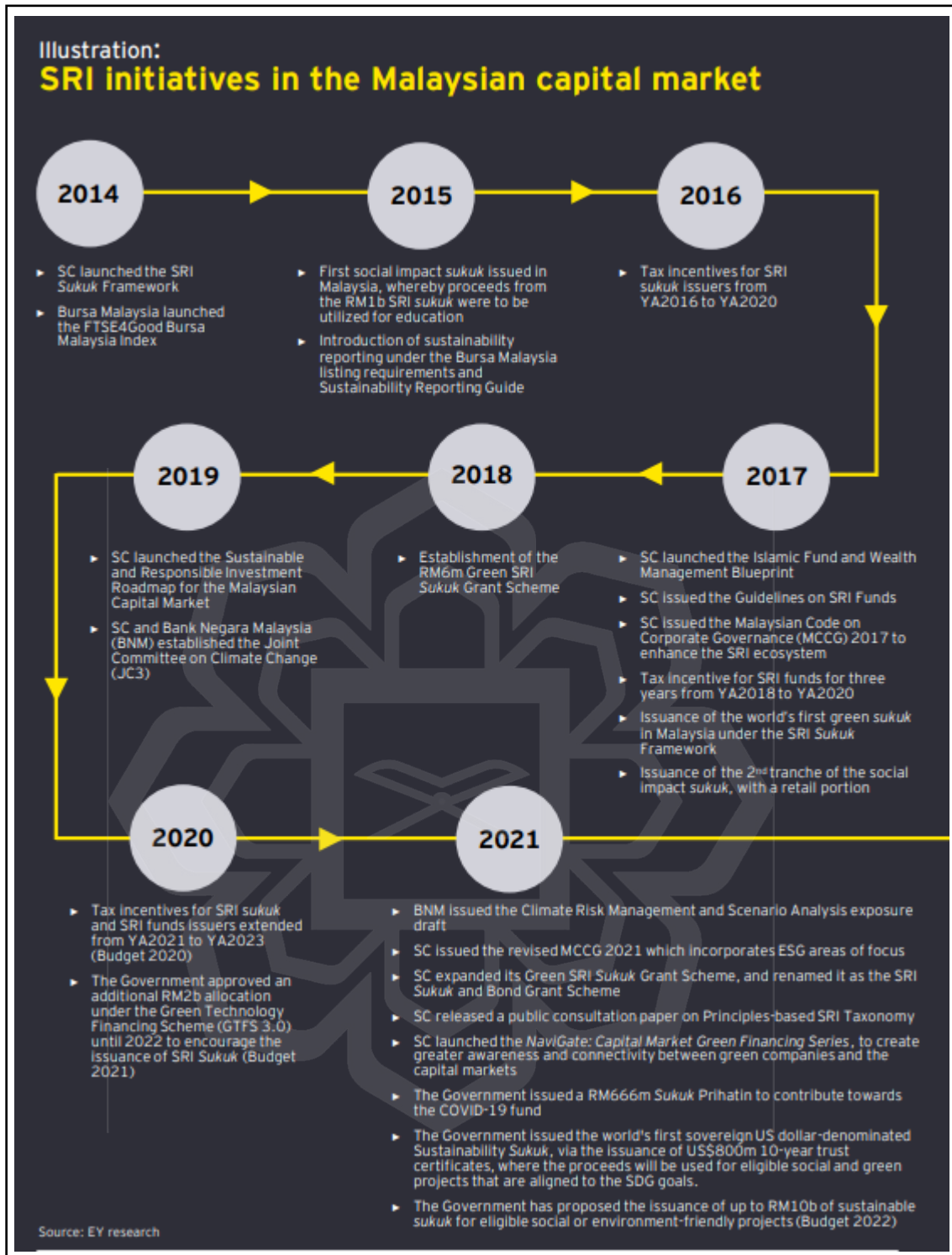


Figure 3.5 SRI Initiatives in Malaysia Capital Market (Ernst & Young, 2022) available at <https://assets.ey.com/>

Figure 3.5 explains the carbon neutrality in Malaysia in 2050. According to the 12th Malaysia market, as illustrated by Earns & Young research, highlights Malaysia's significant steps from 2014 to 2022 to integrate ESG principles into its financial system. Key milestones include the launch of the SRI Sukuk Framework and FTSE4Good Bursa Malaysia Index in 2014, followed by the issuing of the first social impact sukuk in 2015 to fund education. Subsequent years saw the introduction of tax incentives for SRI sukuk issuers, the Green SRI Sukuk Grant Scheme, and various guidelines and frameworks to promote Islamic finance and sustainable investment. By 2020 and 2021, further initiatives such as the Green Technology Financing Scheme (GTFS 3.0), revised corporate governance codes incorporating ESG areas, and the issuance of the world's first sovereign US dollar-denominated Sustainability Sukuk underscored Malaysia's commitment to fostering a robust SRI ecosystem. These efforts aim to encourage sustainable practices, enhance transparency, and position Malaysia globally as a sustainable finance leader.

The illustration outlines Malaysia's comprehensive strategy to achieve carbon neutrality by 2050 as mentioned in Figure 3.6, focusing in several areas:

1. Green economy, Initiatives include introducing an economic model based on the green economy, implementing the Low Carbon Mobility Blueprint action plan, and mandatory adoption of National Green Standards. Existing green incentive schemes like the Green Technology Financing Scheme (GTFS) and Green Investment Tax Incentives (GITA) are to be enhanced. Additionally, the Green Transport Index will be introduced to promote cleaner transport systems, and the recycling rates of household and scheduled waste are targeted to increase significantly.
2. Waste and Water Management, Strategies encompass managing waste through separation at source, bolstering the "reduce, reuse, and recycle" (3R) initiatives, and minimizing single-use plastics. Integrated waste management facilities will be established to handle various types of waste, and a circular economy blueprint for managing solid waste, plastics, and agri-commodities will be developed. The Water Sector Transformation 2040 agenda will be

implemented, promoting resource recovery from water and wastewater treatment.

3. Carbon emissions, Plans include developing a national adaptation strategy to reduce greenhouse gas emissions, creating a roadmap for meeting Paris Agreement commitments, and reducing hydrochlorofluorocarbon (HCFC) consumption by 67% by 2025.
4. Renewable energy, efforts will be made to promote the Renewable Energy Certificate to enable procurement and trading of RE. A strategic long-term National Energy Policy will be introduced, aligned with the goal of carbon neutrality. An Act on energy efficiency and conservation will also enacted to regulate energy consumption among high-intensity users.
5. Sustainable cities, the plan targets achieving sustainable city status for 120 cities, adopting green and resilient city concepts in urban developments, and expanding the use of green certification tools during construction and operational phases, including government buildings and infrastructure projects.

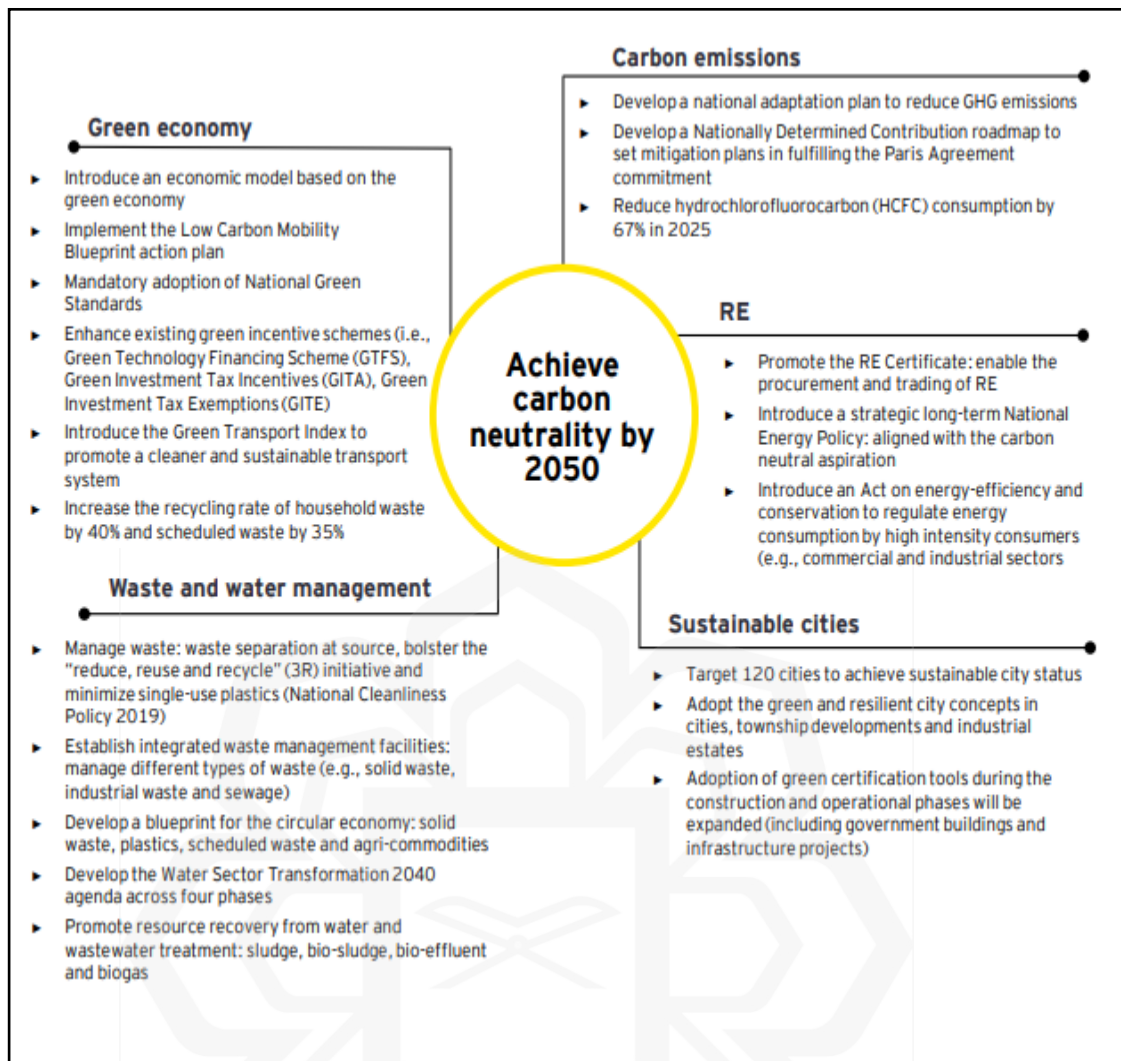


Figure 3.6 Malaysia Plan In Advance Sustainability (EY, 2022) Available at <https://assets.ey.com/>

3.7 THE LITERATURE GAP

The relationship between ESG factors and corporate financial performance has attracted considerable attention in academic research. Literature have suggested diverse results that range from positive to negative or even mixed outcomes, highlighting critical gaps for conducting the current study. Understanding this relationship is complex, as it involves multiple factors that influence the impact of ESG on financial performance. This subsection section examines various perspectives on this relationship, focusing on studies that highlight both positive and negative impacts of ESG initiatives on financial metrics such as ROA, ROE, and Tobin's Q.

3.7.1 Positive Relationship

Numerous studies (i.e., Al Amosh et al., 2022; Alareeni, 2020a) have yielded diverse results regarding the relationship between ESG and financial performance, with results ranging from positive to negative or even mixed outcomes. It is important to note that this relationship is more complicated than a simple cause-and-effect scenario, as multiple factors can come into play when analyzing the impact of one variable on another. For example, Janah (2021) carried out a quantitative study that showed that while some studies done in developed countries point to a positive relationship between ESG and financial performance, the evidence in the context of developing countries is uncertain. As such, the literature review underlines the need for additional research in developing countries to gain more insights into the topic. Shakil et al. (2019) explored the association between ESG and corporate financial performance in emerging markets and found that environmental and social performance have a positive effect on financial performance, although they observed no significant impact of governance performance on financial performance.

Similarly, Velte and Velte (2017) discovered a positive impact on return on assets. However, they observed no notable effect on Tobin's Q in relation to ESG and financial performance among listed companies in Germany. Therefore, the different measures of financial performance may respond differently to ESG practices. In the context of Velte and Velte (2017) findings, while ESG practices were positively correlated with ROA, indicating that companies with better ESG practices tended to have higher profitability, these practices did not have a notable impact on Tobin's Q, a measure of market valuation. This indicates that ESG practices might improve internal financial metrics like profitability but might not be as influential in affecting market perceptions or valuations. In essence, it underscores that the impact of ESG on financial performance is multifaceted and can vary depending on the specific financial metrics being examined.

3.7.2 Negative Relationship

It is important to acknowledge that ESG factors can also have a negative influence on corporate financial performance. A study on a sample of 57 European listed companies found a negative relationship between their market values and the ESG disclosure practices related to governance (Conca et al., 2020; Bătae et al. 2021) explored the relationship between ESG and the financial performance of banks. Contradicting the predictions derived from stakeholder theory, the study failed to support the notion of a positive correlation between corporate social responsibility and financial performance, and noted that the quality of corporate governance had a negative effect on accounting performance and market value. These findings highlight the complex nature of the relationship between ESG factors and financial performance. It is clear that ESG practices can have a positive or negative influence on profitability, depending on the dimension being examined, such as governance or corporate social responsibility, emphasizing the importance of examining multiple levels and aspects when evaluating the relationship between ESG and financial performance.

Furthermore, Rao et al. (2023) mentioned that environmental and governance practices have a consistently negative impact on ROE across nearly all quantiles, with high statistical significance. In contrast, the social practices generally show an insignificant relationship with ROE, except for a mildly significant negative impact at the lower end of the ROE distribution. These findings highlight the differential effects of ESG components on financial profitability and underscore the importance of considering these variations for investors, corporate executives, and policymakers when making decisions related to ESG practices

In general, ESG practices have a negative impact on return on assets and an insignificant effect on Tobin's Q. However, this negative impact of ESG on profitability is less pronounced in companies with better information environments and high asset turnover ratios. Additionally, among the ESG components, governance has a less negative effect on profitability. These findings suggest that a well-managed information environment can mitigate the adverse financial effects of ESG practices, highlighting the importance of effective information dissemination in enhancing the positive outcomes of ESG policies (Bahadır & Akarsu, 2024).

3.7.3 Conceptual Framework

This current study seeks to examine the relationship between ESG factors and the corporate financial performance of Shariah-compliant firms in Indonesia and Malaysia. Therefore, this exploratory analysis aims to assess the assumed causal and positive correlation between corporations' financial performance and their ESG scores. To this end, two theoretical bodies—the ESG impact hypothesis and corporate governance theory (shareholder and stakeholder theories)—are employed, which thereby allows for a unique appraisal of Shariah-compliant organizations.

Figure 3.7 illustrates the conceptual framework depicted in the image outlines the relationship between ESG scores and corporate financial performance, considering various control variables at the firm, industry, and country levels. The framework categorizes the independent variable as the ESG score, which includes individual scores for environmental, social, and governance practices. These scores are hypothesized to influence the dependent variables, which are financial performance metrics divided into accounting measurements (ROA and ROE) and market value measurements (Tobin's Q). The inclusion of these specific financial metrics allows for a comprehensive analysis of both internal performance and market perception.

The framework also incorporates control variables at three levels to account for potential confounding factors. At the firm level, size, leverage, and age are considered, as these can directly impact financial performance. At the industry level, munificence (resource availability) and dynamism (market stability) are included, acknowledging that industry conditions can affect firm performance. At the country level, macroeconomic factors such as inflation and GDP are accounted for, recognizing that economic conditions can influence overall corporate performance. By integrating these control variables, the framework aims to isolate the effect of ESG scores on financial performance, providing a clearer understanding of how sustainable practices impact Shariah-compliant companies in Indonesia and Malaysia.

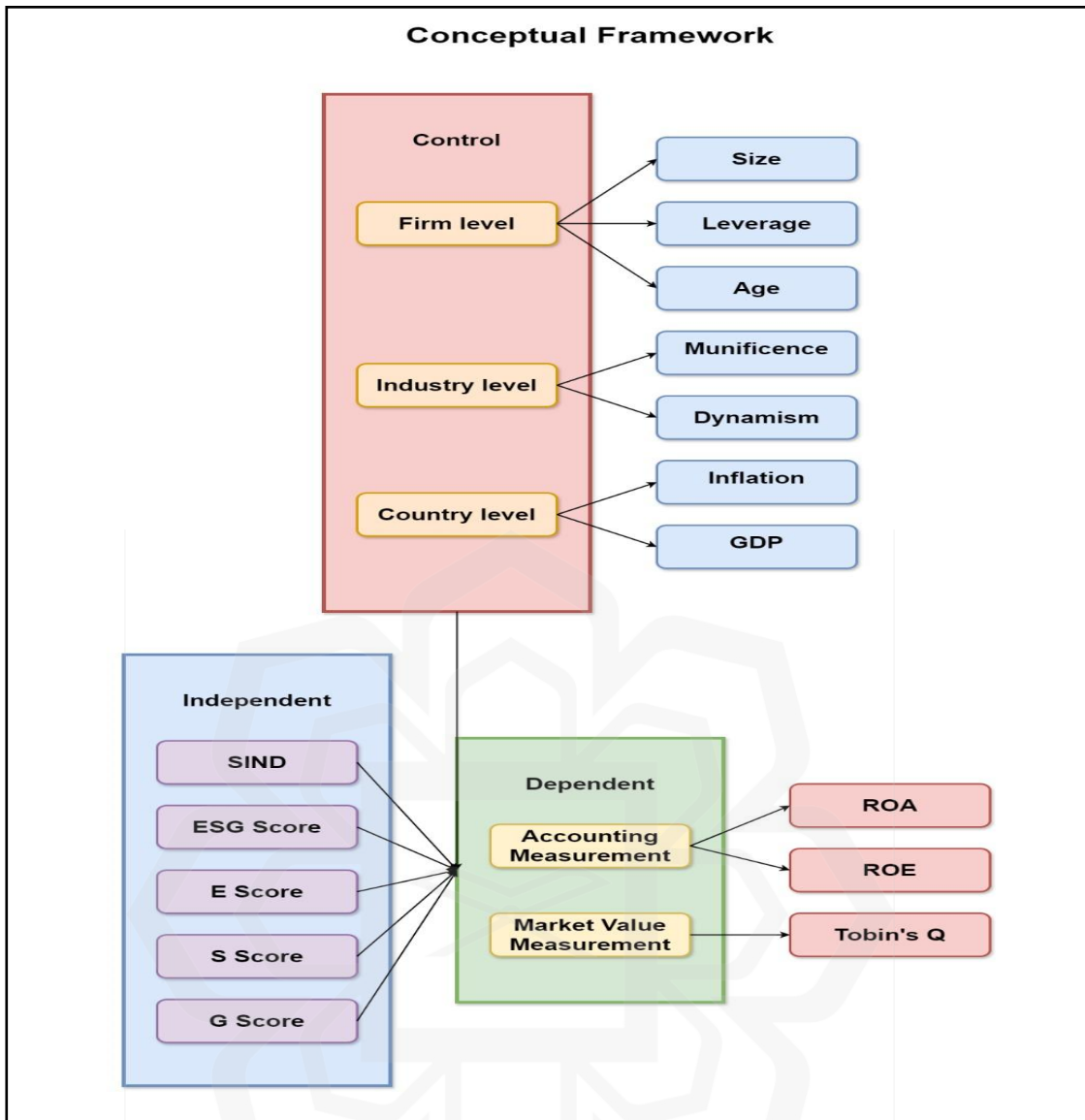


Figure 3.7 Conceptual Framework

The above proposed conceptual framework model is based upon Stakeholder Theory as proposed by Freeman (1984). The theory argues that it is essential for an organisation to generate positive relationships with its stakeholders in order to achieve success. In accordance with Freeman, stakeholders are any entities or groups which may influence or be impacted by an organisation's performance. Such Theory has two key implications for business management and ethical practice; not only do managers have a responsibility to interact with their stakeholders in decisive settings, but they must also take all concerned stakeholders into account (Freeman et al., 2004). Furthermore,

with developments in the corporate world driving organisations to embrace their duty in a variety of public matters, CSR has become increasingly prominent.

The proposed model is also based on Stakeholder Theory, which states that business success is contingent upon a company's relationship with its stakeholders (Freeman, 1984). This theory defines a 'stakeholder' as any individual or group that has the potential to be influenced by, or to influence, the business's performance (Freeman et al., 2004). Consequently, managers need to consider the needs of all stakeholders before making important decisions. Recently, CSR has become a popular concept in light of the increased societal pressure on businesses to recognize their responsibilities beyond their shareholders and to create solutions to pertinent socio-economic challenges.

Furthermore, the proposed model reflects the Shareholder theory suggesting a principal-agent relationship between shareholders and directors. According to Boatright (1994), while shareholder theory may fulfill contractual obligations, stakeholder theory has the potential to generate greater satisfaction. Typically, the normative justification for shareholder theory is seen from an efficiency standpoint, as its main objective is to maximize shareholder value. This perspective is based on the notion that shareholders, as residual claimants, benefit from maximizing equity in order to maximize profits for the firm. However, it is important to highlight that environmental, social, and governance factors can still have an impact on individuals both within and outside the business, even if some stakeholders are constrained by their contractual arrangements (Friedman, 1970). Freeman (1984) suggest that firms should broaden their perspective to consider the interests of their stakeholders. However, sustainable investments are not commonly considered within shareholder theory, despite the potential value creation associated with such investments according to stakeholder theory.

Within the framework of legitimacy theory, ESG activities can be perceived as corporations striving for moral legitimacy in accordance to the social contract. Numerous studies have demonstrated that improved financial results may be attained through the promotion of legitimacy. Yin and Wang (2017) point out that developing legitimacy necessitates considerable investments and resources, yet it could generate feasible benefits such as stable organizational performance, legitimization of

proceedings, and the fulfillment of terms outlined by the social agreement. Consequently, corporate social responsibility is coercive with legitimacy theory. On the other hand, adverse evidence has been argued by several research agendas, using agency theory to present a dissenting view that proposes a negative association between ESG and corporate performance. Duque-Grisales and Aguilera-Caracuel (2021) reflect this by showing that ESG tend to detrimentally influences profitability, as well as the transmission of resources.

The table 3.11 presents a detailed summary of various studies that explore the relationship between ESG practices and corporate financial performance across different countries and contexts. For instance, Brogi and Lagasio (2019) studied companies in the USA from 2000 to 2016 and found that higher ESG scores positively impacted ROA, while Behl et al. (2022) noted a short-term negative but long-term positive impact on Tobin's Q in India, suggesting that the initial costs of implementing ESG practices may be offset by long-term benefits. Similarly, Zhang et al. (2022) observed a negative significant impact of ESG on Tobin's Q in China, indicating that market valuations might not immediately reflect the benefits of ESG practices.

In Malaysia, Lee and Isa (2022) reported a positive correlation between ESG practices and both ROA and ROE, suggesting that ESG practices can enhance firm value in a Shariah-compliant context. This is supported by Nguyen et al. (2022) who found a positive correlation between ESG scores and financial performance (ROA, ROE, Tobin's Q) in the USA, indicating that companies with better ESG scores tend to perform better financially. Conversely, Giannopoulos et al. (2022) found mixed results in Norway, with a negative correlation for ROA but a positive one for Tobin's Q, highlighting the differing impacts of ESG on accounting versus market value measures.

Other studies such as those by Gholami et al. (2022) in Australia and Buallay (2018) in Europe further support the positive relationship between ESG practices and financial performance, indicating that sustainable practices contribute to better financial health. However, the relationship is complex and varies depending on the region, measurement metrics, and the time periods analyzed. These findings underscore the need for a nuanced understanding of how ESG practices influence financial

performance, considering the specific context and performance metrics used in the analysis.

3.8 CONCLUSION

This literature review examines the impact of ESG (Environmental, Social, and Governance) scores on the financial performance of Shariah-compliant firms in Indonesia and Malaysia. The chapter begins by explaining the theoretical framework needed to understand the link between ESG and financial performance, and it highlights the lack of research focused on Shariah-compliant firms in this area. Section 3.2 explains what ESG evaluation is, detailing how companies are scored based on their environmental, social, and governance efforts. ESG factors cover a wide range of issues from climate change and pollution to human rights and corporate governance. The section emphasizes the growing importance and attention these factors are getting in investment decisions. Section 3.3 discusses the overlap between ESG practices and Islamic finance, highlighting how Islamic principles like stewardship and trust align with ESG goals. Despite some similarities, there are unique criteria specific to Islamic investments, especially regarding ethical finance.

In addition, Section 3.4 explores the empirical relationship between ESG practices and financial performance, noting mixed results—both positive and negative—across different contexts. Studies generally show a positive correlation between ESG engagement and the financial performance of Shariah-compliant firms in emerging markets like Indonesia and Malaysia. Finally, the chapter points out gaps in the literature, calling for more research on the detailed relationship between ESG factors and the financial performance of Shariah-compliant firms. This chapter sets the theoretical and contextual foundation for the empirical analysis in the thesis.

Table 3.11 The Previous Studies ESG and Corporate Financial Performance

Author & year	Sample size	Context	Time period	Performance test	Database	Analysis		Conclusion
Brogi & Lagasio (2019)	17358	USA	2000-2016	ESG-ROA E-ROA S-ROA G-ROA	OSIRIS database	Multiple regression analysis		Positive significant Not very significant Positive significant Positive significant
Behl et al. (2022)	62	India	2016-2019	ESG-Tobin's Q	Bloomberg	A cross-lagged panel path analysis		Short-run: negatively significant Long-run: positively significant
Zhang et al. (2022)	22593	China	2019-2021	ESG-Tobin's Q	Wind database	Difference-in-differences (causal relationship)		Negative significant
Lee & Isa (2022)	50	Malaysia	2010-2017	ESG-ROA, ROE	Refinitiv	Panel regression models		Positive correlation

Author & year	Sample size	Context	Time period	Performance test	Database	Analysis		Conclusion
Nguyen et al. (2022)	171 obs (57 companies)	USA	2018-2020	ESG-ROA, ROE, Tobin's Q	MSCI	Two-Stage Least Square (2LS)		Positive correlation
Giannopoulos et al. (2022)	267	Norwegia	2010-2019	ESG-ROA, Tobin's Q	Thomson Reuters Eikon ESG	Panel regression model	data	Negative correlation Positive correlation
Gholami et al. (2022)	3115	Australia	2007-2017	ENV, SOC, GOV-ROA, LNTA, PPE	Bloomberg	Panel regression analysis		Positive correlation
Buallay (2018)	2350 obs (235 banks)	Europe	2007-2016	ESG-ROA, ROE, TQ	Bloomberg	Linear regression model		Positive impact
Bătae et al. (2020)	108 banks	Europe	2018	ESG-ROA, ROE	Refinitiv	Linear regression model		Positive correlation
Peng & Isa, (2020)	461 shariah-compliant firms	20 countries included in MSCI World Islamic Index	2010-2017	ESG-ROA, Econ	Refinitiv	Panel analysis	data	Positive correlation

Author & year	Sample size	Context	Time period	Performance test	Database	Analysis		Conclusion
De Lucia et al. (2020)	1038 companies	Europe	2018-2019	ESG-ROA, ROE	Eikon database	Logistic regression model		Positive correlation
Alareeni (2020)	4869 obs (505 companies)	US	2009-2018	ESG-ROA, ROE	Bloomberg	Panel regression analysis		Positive correlation
López-Toro et al. (2021)	833 obs	US	2017	ESG-ROA, ROE, TQ	Thomson Reuters	Parametric & non-parametric statistical test		Direct and positive correlation
Khoury et al. (2021)	46 banks	Meant Region (Middle east, North Africa and Turkey)	2007-2019	ESG-ROA, ROE (accounting based), Tobin's Q, Stock Return (market indicators)	Thomson Reuters and World Bank statistics	Panel regression analysis		Positive correlation
Singh et al. (2022)	112 companies	India	2016-2020	ESG-ROA, Tobin's Q, control variables (age, leverage, wacc, size, own, ind)	Bloomberg	Partial least square structure equation modelling (PLS-SEM)		Negative relationship

Author & year	Sample size	Context	Time period	Performance test	Database	Analysis		Conclusion
Chen et al. (2023)	3332 companies (24076 dataset)	USA	2018-2022	ESG-ROA, ROE, operating profit margin, Tobin's Q	Thomson Reuters ESG database	Multiple regression and categorized regression		Positive correlation
Al-hiyari et al. (2023)	252 companies (1353 obs)	Brazil, Chile, India, Malaysia, Mexico, South Africa, Turkey	2011-2019	ESG-INVEFF	Refinitiv	Fixed effect panel regression		Positive correlation
Ahmad et al. (2023)	351 companies	UK	2007-2010	ESG-Firm Performance	Data stream	Random effect model (panel data regression)		Positive correlation
Shin et al. (2023)	37481 obs (4978 firms)	48 countries	2002-2018	ESG-ROA	Thomson Reuters	Multilevel regression		Negative correlation
Gholami & Sands (2022)	127000 obs	Australia	2007-2017	ESG-ROA	Bloomberg	Panel regression model		Positive correlation

Author & year	Sample size	Context	Time period	Performance test	Database	Analysis		Conclusion
Al-issa et al. (2022)	386 firms	US	2007-2021	ESG, CSR-Tobin's Q (firm value)	Refinitiv Eikon	Panel regression model		Negative correlation



CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 INTRODUCTION

This study aims to investigate the future trend of ESG performance research by using bibliometrics. In addition, the current study aimed to examine the relationship between the ESG scores of Indonesia and Malaysia's Shariah-compliant companies and their corporate financial performance, and to evaluate the impact of ESG score on the corporate financial performance. A positivist approach has been adopted to address these objectives, focusing on confirmatory verification of diverse experiences through a quantitative exploratory study design. Additionally, a descriptive analysis is conducted to assess the impact of Shariah-compliant firms in Indonesia and Malaysia on their financial performance based on the ESG score between the years 2010 and 2022. The selection of the dataset from Indonesia and Malaysia as representative samples of Shariah-compliant firms was motivated by two main drivers: 1) the substantial Muslim population in these countries, allowing for an assessment of the results of hypothesis testing within the framework of parallels in Shariah-compliant capital market processes, and 2) the similarities of the investor categories in the respective capital markets between the two countries (Lee & Isa, 2023; Qoyum et al., 2022). Two analysis approaches were adopted for the current study, including bibliometric analysis using R software and regression using STATA software.

This chapter is divided into three main sections. The first section describes the two study designs that are employed to address the study objectives such as future research agenda and the correlation between ESG and corporate finance, as well as outlines the details of the panel data that is used in the study. It explains the pooled sample data model and evaluates the observed variables' fixed and random effects. The second section explains the data collection procedure by detailing the planned procedure for obtaining data from the sample of two different countries. The final section will discuss the classification of the collected data and it details the variables being extracted from the sample population.

4.2 RESEARCH DESIGN

The literature review approach through bibliometric analysis will be carried out to explore the potential future trend of ESG performance research. To this end, parameters for article search will be established, such as scope and year limits, and inclusion and exclusion criteria for the relevant literature. A list of search keywords and terms will also be created and stored in the R software platform to guide the search. Additionally, the Scopus database will be utilised for data collection. Utilising R software, a variety of bibliometric indicators can be generated to create visual representations of the collected articles.

In addition to the literature review approach, the quantitative research design using regression analyses will be conducted to investigate the relationship between ESG scores and the CFP of Shariah-compliant companies in Indonesia and Malaysia. Multi-variable regression analysis in a panel data setting will be employed in order to examine the influence of ESG on CFP between 2010 and 2022. Specifically, three models will be proposed: a Fixed Effect Model, a Random Effect Model, and a Pooled OLS. The STATA statistical analysis software will be utilised to recreate the panel under random effect (to obtain better p-values). Prior to the analysis, assumptions underlying the multi-variable regression model will be evaluated according to the guidelines offered by Black and Babin (2019) , including the evaluation of linearity, homoscedasticity, normal distribution of the error term, and the presence of multicollinearity.

4.2.1 Bibliometric Analysis

Scholars frequently utilize bibliometric analysis based on paper publication metadata to investigate the global relationship between ESG components and company financial performance (Galletta et al. 2022; Goyal & Kumar, 2021; Hassan & Roychowdhury, 2019). Scopus and Web of Science are often their preferred databases for these analyses. In the context of Indonesia, various researchers (e.g. Anwar et al. 2022; Damayanti et al. 2023; Rusydiana et al. 2021) have conducted numerous review studies. They have investigated different research topics while using databases relevant to their study scope. As for Malaysia, systematic literature review analyses have been conducted

using Vosviewer, an instance being the work by Abd. Wahab et al. (2023). Meanwhile, Liu et al. (2022) have conducted an analysis based on ESG content.

4.2.2 Bibliometric Data Collection

In this current study, the Scopus database was used to collect data, due to the greater variety of its database relative to Web of Science (WOS) and Google Scholar (Alsalamah & Callinan, 2021; Hassan et al. 2023). The study suggests several drivers for favoring this research planning method, such as having the largest multidisciplinary social science database, the highest total database size over WoS, and better quality publications compared to other complimentary databases. In the first stages of the research the terms "ESG" and "performance" were applied in the search, generating 530 documents (see Figure 4.1). In the end, 225 articles were chosen for further consideration. For analysis of the eventual data, RStudio, Vosviewer and Excel were employed.

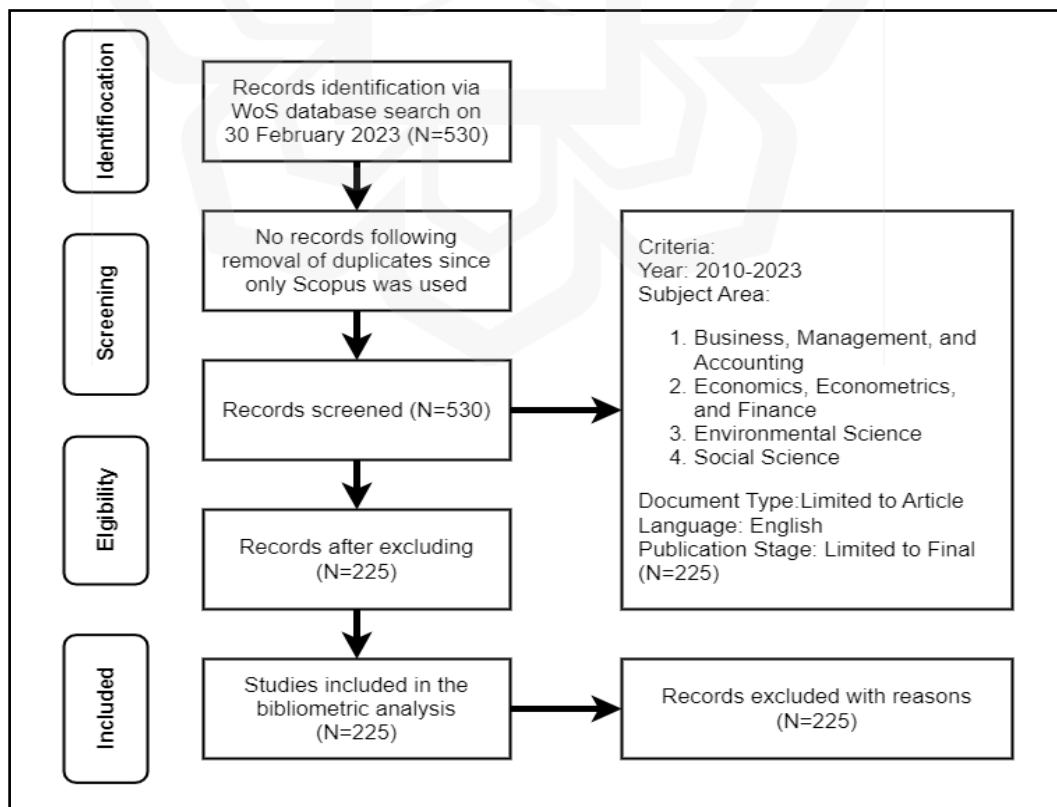


Figure 4.1 Bibliometric Analysis Diagram

4.2.3 Panel Data

In this study, a panel dataset is established throughout the ESG score and the corporate financial performance observation of Indonesia and Malaysia's Shariah-compliant companies between 2010 and 2022. Stock and Watson (2020) suggest that the utilisation of a panel dataset will afford the researcher with the ability to control unobservable variables across countries and firms (across both time and space). Accordingly, such a controlling ability will help the researcher to produce an accurate model of such variables. Some scholars such as Żygadło et al. (2021), Barth et al. (2022), (Pinheiro et al., 2023) and (Candio, 2024). Particularly, the dataset for the current study will be collected from the Refinitiv ESG scores data that have been verified and publicly available. The use of the Refinitiv ESG scores dataset will benefit in distinguishing between companies that actually implement and execute ESG-orientated policies and those that merely proclaim to do so.

The Refinitiv ESG scores data consist of over 450 company-level ESG indicators that are grouped into ten (10) categories. Within the data, the companies listed are assigned scores based on their relative performance compared to other companies in ten categories. The scores within the Environmental and Social pillars are benchmarked against the industry each company belongs to, while for the governance categories, the scores are compared to the performance of companies within their respective countries. The rationale for the different benchmarks is that environmental and social categories are likely to be more consistent within industries, while governance practices are more consistent within countries. The categories are weighted according to the number of indicators they hypothetically contain; namely, categories with more indicators receive higher weights than categories with fewer indicators. The category scores range from 0 to 100, with 100 being the highest possible score. The scores of all three pillars are then calculated using a weighted average that take into consideration the total scores and weights of each pillar (Borovkova & Wu, 2020).

4.2.3.1 Winsorizing

Winsorizing is a statistical technique used to limit extreme values in a dataset to reduce the effect of possible outliers on the analysis (Nyitrai, 2019; Zubedi et al., 2022). By adjusting the extreme values to a certain percentile, it manages to maintain the integrity of the dataset while reducing the influence of anomalous data points (Dash et al. 2023). Typically, the user selects percentiles at both ends of the dataset, such as the 5th and 95th percentiles, and all data points beyond these thresholds are replaced with the nearest values at these percentiles (Sharma & Chatterjee, 2021). This approach differs from trimming, where outliers are completely removed, as Winsorizing merely adjusts them to reduce their impact (Dash et al. 2023).

The process of Winsorizing begins by determining the specific percentiles to act as cutoff points for the upper and lower bounds of the data (Wiley, 2019). For example, if Winsorizing at the 10th and 90th percentiles, all values below the 10th percentile value are set to that 10th percentile value. Similarly, values above the 90th percentile are set to the 90th percentile. This method effectively reduces the range of the data, which can help in stabilizing variance and making statistical measures like the mean more representative of the central tendency of the data (Davidov et al. 2018).

Winsorizing is particularly useful in fields where extreme values are known to be distortions or errors, such as finance or environmental science (Shete et al., 2004). It enhances the robustness of statistical results by mitigating the influence of outliers without losing data points, which is crucial for maintaining statistical power in analyses. However, the choice of percentiles for Winsorizing should be carefully considered, as overly aggressive Winsorizing might lead to oversimplified interpretations of data, potentially masking meaningful variability or trends within the dataset (Mirtagioglu et al. 2021).

4.2.3.2 Pooled Model

This study adopts the pooled ordinary least squares (pooled OLS) model in estimating the panel dataset. In this model, the data for the independent variables is pooled by combining both cross-sectional and time-series data observations. It is essential to emphasize that the pooled OLS implicitly assumes that all data points are part of one large dataset, regardless of whether they are from different cross-sectional units or different time-periods. Using a simple OLS model, the relationship between the dependent and independent variables remains constant across all cross-sectional units and over time (Brooks, 2019). This implies that the coefficients estimated from this analysis will be identical across all cross-sectional units and time periods. However, this assumption may not always be valid, and alternative panel data analysis techniques, such as fixed effects and random effects models, can be applied to account for unit-specific or time-specific effects (see Brooks, 2019; Griffiths & Lim, 2017; Stock & Watson, 2020).

4.2.3.3 Fixed Effects

The fixed effect model is a panel data analysis technique that helps account for unobserved heterogeneity, specifically factors that vary across entities (cross-sectional units) but remain constant over time. Stock and Watson (2020) suggest that the fixed effect model includes particular omitted variables in the panel data that differ between entities but not within entities over time. In the current study, the F-test for fixed effects will be employed to examine whether the fixed effect model is appropriate for a panel dataset. To this test, a null of hypothesis is developed to assume that individual effects does not exist, reflecting the absence of unobserved heterogeneity. In contrary, the alternative hypothesis suggests that individual effects are present.

In the event that the null of hypothesis is rejected, the result of F-test analysis can indicate the presence of individual effects, suggesting an inappropriate use of the OLS model. In such a case, the fixed effect model is preferred because it accounts for the unobserved heterogeneity that varies across entities but not over time. Kansil (2021) proposes that it is important to conduct random effect checks prior to deciding on using

a fixed effect model. This is because the evaluation of random effects can uncover whether there is correlation between the unobserved heterogeneity and the independent variables. When the evaluation of random effects suggest no correlation between the unobserved heterogeneity with the independent variables, the fixed effect model cannot account for the alternative and otherwise.

4.2.3.4 Random Effects Model

The random effects model is proposed as a panel data analysis technique that incorporates individual effects by assuming that each entity (cross-sectional unit) has its own unique intercept (W_{ij}) (Griffiths & Lim, 2017). The model assumes that a common intercept, representing a global average, is constant over time, while each entity also has a random effect (U_i) that captures the individual deviation from the global intercept (Brooks, 2019). Although the sample in the current study was not selected randomly, the Random Effects of the data will be evaluated. To this end, the Breusch-Pagan Lagrange Multiplier Test will be carried out to confirm the suitability of the Random Effects Model for the current study data analysis. In such a test, the null hypothesis is developed to indicate whether or not the individual-specific or time-specific error variance remains zero. In the case that the time-specific error variance is calculated zero, the Pooled OLS Model is viewed to be appropriate than the Random Effects Model (Verbek, 2021).

It is important to indicate the possibility of both random and mixed effects being present in the data. In the case that both random and mixed effects are identified in the data, the current study will conduct a Hausman test to address such an issue. The result of Hausman test is expected to suggest the level of each effect and offer a particular model to select. In the test, the correlation between the individual effects with other regressors in the model is examined. If a correlation is found, this means that the Gauss-Markov assumption has been violated and therefore the Best Linear Unbiased Estimate (BLUE) cannot be accurately determined. This is because the individual effects are part of the error term in a random effect model (Baum, 2006). When the null hypothesis is rejected, it is likely that a fixed-effect model is favoured.

4.3 RESEARCH HYPOTHESES

Based on the stakeholder theory, the integration of environmental, social, and governance (ESG) as part of corporate governance can contribute to improved financial performance of firms. Five main hypotheses and subsequent details are proposed as presented below:

H1: There is a positive relationship between E score and corporate financial performance

H1a: There is a positive relationship between E score and corporate financial performance of Shariah and Non-Shariah compliant companies before and after pandemics

H1b: There is a positive relationship between E score and corporate financial performance of Shariah-compliant companies

H1c: There is a positive relationship between E score and corporate financial performance of Non-Shariah-compliant companies

H1d: There is a positive relationship between E score and corporate financial performance of Shariah and Non-Shariah compliant companies before pandemics

H1e: There is a positive relationship between E score and corporate financial performance of Shariah and Non-Shariah compliant companies after pandemics

H2: There is a positive relationship between S score and corporate financial performance

H2a: There is a positive relationship between S score and corporate financial performance of Shariah and Non-Shariah compliant companies before and after pandemics

H2b: There is a positive relationship between S score and corporate financial performance of Shariah-compliant companies

H2c: There is a positive relationship between S score and corporate financial performance of Non-Shariah compliant companies

H2d: There is a positive relationship between S score and corporate financial performance of Shariah and Non-Shariah compliant companies before pandemics

H2e: There is a positive relationship between S score and corporate financial performance of Shariah and Non-Shariah compliant companies before pandemics

H3: There is a positive relationship between G score and corporate financial performance

H3a: There is a positive relationship between G score and corporate financial performance of Shariah and Non-Shariah compliant companies before and after pandemics

H3b: There is a positive relationship between G score and corporate financial performance of Shariah-compliant companies

H3c: There is a positive relationship between G score and corporate financial performance of Non-Shariah-compliant companies

H3d: There is a positive relationship between G score and corporate financial performance of Shariah and Non-Shariah compliant companies before pandemics

H3e: There is a positive relationship between G score and corporate financial performance of Shariah and Non-Shariah compliant companies after pandemics

H4: There is a positive relationship between ESG score and corporate financial performance

H4a: There is a positive relationship between ESG score and corporate financial performance of Shariah and Non-Shariah compliant companies before and after pandemics

H4b: There is a positive relationship between ESG score and corporate financial performance of Shariah-compliant companies

H4c: There is a positive relationship between ESG score and corporate financial performance of Non-Shariah-compliant companies

H4d: There is a positive relationship between ESG score and corporate financial performance of Shariah and Non-Shariah compliant companies before pandemics

H4e: There is a positive relationship between ESG score and corporate financial performance of Shariah and Non-Shariah compliant companies after pandemics

H5: There is a positive impact of Sensitive industry and Corporate Financial Performance

H5a: There is a positive impact of Sensitive industry and Corporate Financial Performance of Shariah and Non-Shariah compliant companies before and after pandemics

H5b: There is a positive impact of Sensitive industry and Corporate Financial Performance of Shariah-compliant companies

H5c: There is a positive impact of Sensitive industry and Corporate Financial Performance of Non-Shariah-compliant companies

H5d: There is a positive impact of Sensitive industry and Corporate Financial Performance of Shariah and Non-Shariah compliant companies before pandemics

H5e: There is a positive impact of Sensitive industry and Corporate Financial Performance of Shariah and Non-Shariah compliant companies after pandemics

Based on above explanation for the data analysis, the research models are shown as follows:

$$(i) ROA_{i,t} = \theta_0 + \theta_1 ESG_{i,t} + \theta_2 Size_{i,t} + \theta_3 Lev_{i,t} + \theta_4 Age_{i,t} + \theta_5 MUN_{i,t} + \theta_6 DYN_{i,t} + \theta_7 INFL_{i,t} + \theta_8 GDP_{i,t} + \varepsilon_{i,t}$$

$$(ii) ROE_{i,t} = \theta_0 + \theta_1 ESG_{i,t} + \theta_2 Size_{i,t} + \theta_3 Lev_{i,t} + \theta_4 Age_{i,t} + \theta_5 MUN_{i,t} + \theta_6 DYN_{i,t} + \theta_7 INFL_{i,t} + \theta_8 GDP_{i,t} + \varepsilon_{i,t}$$

$$(iii) \text{Tobin's } Q_{i,t} = \theta_0 + \theta_1 ESG_{i,t} + \theta_2 Size_{i,t} + \theta_3 Lev_{i,t} + \theta_4 Age_{i,t} + \theta_5 MUN_{i,t} + \theta_6 DYN_{i,t} + \theta_7 INFL_{i,t} + \theta_8 GDP_{i,t} + \varepsilon_{i,t}$$

$$(iv) ROA_{i,t} = \theta_0 + \theta_1 EScore_{i,t} + \theta_2 SScore_{i,t} + \theta_3 GScore_{i,t} + \theta_4 Size_{i,t} + \theta_5 Lev_{i,t} + \theta_6 Age_{i,t} + \theta_7 MUN_{i,t} + \theta_8 DYN_{i,t} + \theta_9 INFL_{i,t} + \theta_{10} GDP_{i,t} + \varepsilon_{i,t}$$

$$(vi) ROE_{i,t} = \theta_0 + \theta_1 EScore_{i,t} + \theta_2 SScore_{i,t} + \theta_3 GScore_{i,t} + \theta_4 Size_{i,t} + \theta_5 Lev_{i,t} + \theta_6 Age_{i,t} + \theta_7 MUN_{i,t} + \theta_8 DYN_{i,t} + \theta_9 INFL_{i,t} + \theta_{10} GDP_{i,t} + \varepsilon_{i,t}$$

$$(vii) \text{Tobin's } Q_{i,t} = \beta_0 + \beta_1 EScore_{i,t} + \beta_2 SScore_{i,t} + \beta_3 GScore_{i,t} + \beta_4 Size_{i,t} + \beta_5 Lev_{i,t} + \beta_6 Age_{i,t} + \beta_7 MUN_{i,t} + \beta_8 DYN_{i,t} + \beta_9 INFL_{i,t} + \beta_{10} GDP_{i,t} + \varepsilon_{i,t}$$

4.4 DATA COLLECTION PROCEDURE

The objective of this study is to investigate the integration of ESG factors and their impact on the financial performance of Shariah-compliant companies in Indonesia and Malaysia. The current study utilizes the list of Shariah-compliant companies from the

Dow Jones Islamic Index for both countries as the sample. Data for this study is collected from the Asset4 database of Refinitiv, previously known as Thomson Reuters. Asset4 is a widely recognized and comprehensive source of ESG data worldwide. Refinitiv's ESG Score is selected due to its objective, reliable, and transparent nature, achieved by evaluating only publicly available data and updating its scores regularly if necessary. The ESG scores for the selected companies are obtained from the Asset4 database, covering the period from 2010 to 2022. The database provides information based on 61 environmental, 51 social, and 54 governance indicators.

Previous studies, such as Shakil (2019) using the 93 emerging market banks from 2015 to 2018 from the Refinitiv database. Ersoy et al. (2022) also using the Refinitiv database for the US commercial banks' data from year 2016 to 2020 and using linear and non-linear panel regression models. European listed companies have been studied by Pozzoli et al. (2022) which is attracted the ESG data from Refinitiv for the period on 2018 to 2020. However, Pinheiro, et al. (2023) using the Refinitiv database in order to gather the data of innovation on environmental, social, and governance (ESG) performance and, consequently, its influence on the economic and financial performance. Moreover, a panel data set which all the listed companies in STOXX Europe 600, covering the period 2012-2022 was attracted from Refinitiv Eikon platform (Candio, 2024).

In order to ensure comparability and consistency, this current study includes banks and insurance companies from the analysis due to differences in accounting standards. Doni et al. (2019) have previously highlighted the need to separate financial companies from industrial ones to allow for accurate comparison of financial statements. Banks and insurance companies often follow distinct rules when preparing their financial statements, making it more appropriate to conduct separate studies for these sectors. Consequently, this study specifically focuses on shariah-compliant firms in Indonesia and Malaysia.

To conduct a comprehensive analysis of ESG practices and corporate financial performance among companies in Indonesia and Malaysia using the Refinitiv database, start by defining your research objectives and data requirements. Access the platform by logging into Refinitiv Workspace or Eikon, ensuring you have the necessary

permissions to access the relevant ESG and financial datasets. Focus on filtering companies that are explicitly labeled as Shariah-compliant and based in the target countries. Select a relevant time frame for the analysis, typically the past 5-10 years, to capture any significant trends or changes in ESG practices and financial performance.

Once the companies are selected, proceed with the extraction of detailed ESG scores and relevant financial metrics such as Return on Assets (ROA), Return on Equity (ROE), Tobin's Q. Conduct a thorough data cleaning process to ensure consistency and accuracy, addressing any missing data through appropriate imputation techniques and normalizing the financial data to adjust for company size and industry effects. It's crucial to also collect additional variables that could influence financial performance, including market capitalization, leverage, and macroeconomic indicators, to control for external effects in your analysis.

4.5 THE SAMPLE SELECTION

The current study utilizes the classification method provided by the Dow Jones Islamic Index, which is similar to that in previous studies (Farooq & Alahkam, 2016; Akguc & Al Rahahleh, 2021; Anuar et al., 2009). This classification consists of two steps: In the first step, firms operating in domains such as alcohol, tobacco, pork-related business, entertainment, conventional financial services, and arms manufacturing are classified as non-Shariah-compliant. Utilizing industry classification benchmarks and taxonomies to identify sectors and sub-sectors in which a firm operates, step two requires the total debt, cash, interest-bearing securities, and receivables of a Shariah-compliant firm to each be below 33% when divided by trailing 24-month average market capitalization. It is the use of market capitalization that enables continuous Shariah screening since market capitalization is independent of the publication of financial statements. The data used in this classification are obtained from Worldscope.

ESG data was collected from multiple sources, such as sustainability reports, integrated reports, status reports, and annual reports, over the business years from 2010 to 2022. ESG scores were extracted from the ASSET4 Thomson Reuters database, covering the categories of Environment, Social and Governance. The Asset4 Thomson

Reuters scores range from 0 to 100, with a z-score providing a relative measure indicating the value in terms of standard deviation from the mean of other observations for an individual score. The database also provides an aggregate ESG score, in addition to individual scores for each element of Envi, Soc and Gov. For benchmarking purposes, this research utilized the Thomson Reuters ESG Scores for 2017.

4.5.1 Dependent Variables

The dependent variable in all of the models is Corporate Financial Performance (see Table 4.1). To measure this, three different proxies are used, namely ROA, ROE, and Tobin's Q (Crespi & Migliavacca, 2020; Nazarova, 2022; Bhaskaran, 2023; Chen et al. 2023a; Candio, 2024). ROA is commonly seen as an indicator of operational profitability, as its disclosure yields insight into how much a firm is earning relative to its assets base. In contrast, ROE is an essential measure for gauging a company's earnings performance, and it enables shareholders to ascertain how well the company's investments are being managed. Notably, analysts can utilize the return on equity ratio to decide whether a company is making a profit (or loss). Tobin's Q is calculated by summing the market value of equity (i.e., the firm's market capitalization) and the book value of debt. As Chauhan & Kumar (2018) observed, this ratio reveals the extent to which investors assign a greater or lesser intangible value to a company compared to its book value of assets and reflects market expectations for the firm's future performance.

4.5.2 Independent Variables

The independent variable (ESG scores) was measured using three disclosure indicators (environment disclosure, social disclosure, and corporate governance disclosure) in the specified year. Environment (E) represented a firm's environmental pillar score, (S) was its social pillar score, and (G) constituted the firm's governance pillar score. In addition, ESG (SESG) for this variable was extracted from the yearly ASSET4-Datastream ranging from 2010 to 2022. Each pillar's values varied between 0 and 100, with 100 being the highest possible score. However, the Sensitive industry to ESG (SESG) is

integrated from the dummy variables, which is “1” for the companies that are sensitive industry and “0” for the nonsensitive industry.

4.5.3 Control Variables

This study divided the control variables into three levels: firm-level (e.g., firm size, leverage, and firm age) (Julito & Ticoalu, 2023; Suteja et al., 2023; Duan et al., 2023; Sunarsih & Augustine, 2024), industry-level (e.g., munificence and dynamism) (Haron, 2018; Kabue et al., 2023); and country-level (e.g., inflation and GDP) (Amosh & Khatib, 2023; Renaldo et al., 2023; Rahman et al., 2023). These control variables were included in the regression model to improve the coefficient estimations for independent variables, minimize variable bias and provide interesting insights in and of themselves. Companies facing less risk and thus lower volatility may be more prone to engage in ESG investments, while larger companies may have more and/or cheaper resources to get involved in ESG practices.

In addition, firm size can serve as a mediator for pressuring them to act. Leverage was used in multiple studies included within this literature review. Bodhanwala and Bodhanwala (2018) noted that a high level of leverage can make the markets downscale their opinion of firm risk and harm profitability. For this reason, leverage is included in this study's model to control for firm risk as reflected in debt-equity ratios. Previous studies used the firm age as defined by the number of years since the initial public offering (IPO), as per, among others, Liu et al., (2022) and Ting (2020). A mature firm or relatively old firm can usually have better access to resources and knowledge.

Inflation is measured by the annual rate of GDP deflator and there is a positive relationship between inflation and financial performance (Turgut, 2020; Ali & Ibrahim 2021). The study conducted by Turgut (2020) provides evidence for an inverse correlation between inflation and return on equity with a significant coefficient. Further, this study used the short-run and long-run coefficients of the ARDL model implied that the increase or decrease in inflation was associated with an increase or decrease in return on equity, respectively, for commercial banks in South Africa. However, Batayneh et

al. (2021) confirmed that inflation has a negative impact on the performance of the financial sector through both the short and long-term. These findings are congruent with the theoretical and empirical economic literature, which likewise substantiates the existence of a negative association between inflation and the performance of the financial sector.

Regarding the industry level, two proxies were used in this study: munificence and dynamism. Munificence refers to the availability of resources to support growth within an industry (Dess, 1984). Thus, an industry with high munificence is likely to have higher profitability due to the positive interaction between munificence and organizational slack (Chen et al., 2017). By testing the environmental and organizational data from 110 large manufacturing firms, Keats & Hitt (1988) revealed that increased environmental instability was associated with lower levels of division and diversification. Therefore, the results of the study support that strategic management can lead to improved financial performance.

However, Haron (2018) mentioned that with a high level of munificence and in a highly dynamic environment, firms tend to employ less debt due to heightened retained earnings and higher levels of risk associated with operations. Furthermore, Dess (1984) has defined dynamism as the volatility and unpredictability of changes within a dominant industry, which always causes heightened uncertainty for organizational members. In contrast to munificence, industry dynamism is interpreted as a risk; firms operating in a less predictable environment tend to take on less debt. Ferri and Jones (1979) revealed that the more dynamic the industry, the riskier the situation; as a result, the level of leverage of the firm typically decreases.

Table 4.1 Presentation of Dependent and Independent Variables

Variable	Measurement	Formula	Data Collection	Citation
Dependent variable	ROA	Net income prior to financing costs/Total Assets	Calculated based on data from Refinitiv Eikon	Al Amosh et al., (2022); López-Toro et al., (2021); (S. P. Lee & Isa, 2023)

Variable	Measurement	Formula	Data Collection	Citation
	ROE	Net Income/Total Equity of Common Shares	Calculated based on data from Refinitiv Eikon	Buallay et al., (2020); Behl et al., (2022)
	Tobin's Q	(Market Capitalization + Total debt)/Total Assets	Calculated based on data from Refinitiv Eikon	Velte (2017); Fatemi et al., (2017); Alareeni & Hamdan (2020)
Independent Variable	E score	Refinitiv environmental score	Refinitiv Eikon	Aboud (2018); Rajesh (2020); Lubis (2021)
	S score	Refinitiv social score	Refinitiv Eikon	Saleem (2020); Pu (2022); Buallay et al. (2019)
	G score	Refinitiv governance score	Refinitiv Eikon	Aslam & Haron (2020); Srairi (2015)
	ESG	Refinitiv overall score for environmental, social and governance	Refinitiv Eikon	Abdi et al (2020)
	SIND	Dummy variable, "1" if company sensitive and "0" if company not sensitive	Integrated variable. ESG multiplied with the Sensitive industry dummy	Kim et al. (2023)
Control Variable	Size	Ln (Total assets)	Refinitiv Eikon	Bodhanwala & Bodhanwala (2018); Atan et al., (2018)
	Lev	Total debt/total equity	Refinitiv Eikon	Esteban-sanchez et al., (2017)
	Age	Years since IPO	Calculated based on data from Refinitiv Eikon	De Lucia et al., (2020)

Variable	Measurement	Formula	Data Collection	Citation
	HHI	Sum of the squares of market shares (sales) of firms within a given industry for the year	Calculated based on the data gathered	Haron (2018)
	Munificence	Regressing time against sales of an industry over the 5 years of the period under analysis and (2) taking the ratio of the regression slope coefficient to the mean value of sales over the same period	Calculated based on the data gathered	Haron, (2018); García-Sánchez et al., (2020); Gras & Krause, (2020)
	Dynamism	Standard error of the munificence regression slope coefficient divided by the mean value of sales over the same period	Calculated based on the data gathered	Haron (2018)
	INFL	Annual inflation (consumer prices rate)	Calculated based on data from World Bank	Meiling et al. (2021)
	GDP	Natural log of total gross domestic product	Calculated based on data from World Bank	Fabozzi et al. (2021)

4.6 DATA ANALYSIS PROCEDURE

Data analysis procedure aims to rigorously examine the relationship between ESG performance and corporate financial performance (CFP). This section outlines the sequence of analytical steps, including diagnostic tests, correlation analysis, hypothesis testing through regression models, and robustness checks. The analysis covers both Shariah-compliant and non-compliant companies, as well as data from periods before and after the COVID-19 pandemic, ensuring a comprehensive and reliable understanding of ESG's impact on CFP.

Prior to data analysis, a series of diagnostic tests were performed on the entire sample, as well as on subsets of data from Shariah-compliant and non-compliant companies, and data from periods before and after the COVID-19 pandemic. Key diagnostic tests included the heteroscedasticity test, which was conducted to determine if the error variances are consistent across different groups or entities in the panel data. This test is crucial because heteroscedasticity can affect the reliability of regression coefficients, and addressing it ensures more accurate results (Liu et al., 2019; Jun Liu et al., 2022). Additionally, the multicollinearity test was conducted to assess whether independent variables were highly correlated, which could distort regression results. Finally, autocorrelation analysis was performed to check for any correlation between residuals from different time periods in the panel data model. Specifically, first-order autocorrelation was tested, as addressing this can significantly improve the reliability of regression results (Liu et al., 2019; Jun Liu et al., 2022).

Correlation analysis was then conducted to examine the interrelationships between financial performance metrics, such as ROA, ROE, and Tobin's Q, and ESG scores. This analysis was done on the whole dataset as well as on subsets comprising Shariah-compliant and non-compliant companies, and data from periods before and after the COVID-19 pandemic. The correlation coefficients provided insights into the strength and direction of relationships between these variables, helping to establish preliminary connections and underlying patterns.

Hypothesis testing in this study involved the development of five regression models to address the research hypotheses, employing significance levels of 1%, 5%,

and 10%. Model 1 applied regression analysis to the entire dataset, providing a broad overview of the relationships. Model 2 focused exclusively on data from Shariah-compliant companies, while Model 3 analyzed data from non-Shariah-compliant companies. Models 4 and 5 respectively examined data from the periods before and after the COVID-19 pandemic. These regression models enabled a comprehensive examination of the relationships between ESG scores and financial performance metrics across various contexts and timeframes, adhering to specified levels of statistical significance.

To ensure the robustness of the regression results, various robustness tests were performed, specifically using Return on Assets (ROA) and Return on Equity (ROE) as key financial performance metrics. Sensitivity analysis was conducted to evaluate the consistency of results under different assumptions or using alternative indicators for ESG scores. This approach helped ensure that the findings remained stable and reliable across different scenarios and measurement techniques.

4.7 CONCLUSION

This chapter outlines the research methodology adopted to investigate the future trends of ESG (Environmental, Social, and Governance) performance research and its impact on the financial performance of Shariah-compliant companies in Indonesia and Malaysia. The study uses a positivist approach with a quantitative exploratory design, employing bibliometric analysis and regression analysis to achieve its objectives. The study is developed into two designs: bibliometric analysis for exploring future research trends and quantitative analysis to examine the relationship between ESG scores and corporate financial performance using data gathered from Shariah-compliant companies in Indonesia and Malaysia.

The Bibliometric analysis uses the Scopus database to collect data, generating visual representations and bibliometric indicators using R software. For quantitative analysis, multi-variable regression analysis in a panel data setting examines the influence of ESG on corporate financial performance from 2010 to 2022, employing models such as Fixed Effect, Random Effect, and Pooled OLS using STATA software.

The five research main hypotheses are formulated based on stakeholder theory to test the positive relationship between ESG scores and financial performance. Finally, the data analysis procedure includes diagnostic tests, correlation analysis, hypothesis testing through regression models, and robustness checks to ensure comprehensive and reliable results.



CHAPTER FIVE

THE STUDY FINDINGS ON BIBLIOMETRIC ANALYSIS

5.1 INTRODUCTION

This chapter aims to present the findings of data analyses employed to address two main research objectives: (1) what are the directions of future research on ESG performance? and (2) To identify the relevant research paper based on the emerging topics, collaboration networks and the evolution of research areas.

The bibliometric analysis was performed to indicate the potential future trend of ESG performance research as in the Research Question 1 (Baas et al., 2020; Losse & Geissdoerfer, 2021; Ejaz et al., 2022) . Using R software, bibliometric indicators were generated to create visual representations of the 225 articles collected from the initial screening of 530 documents. In addition, multiple regression analysis was performed using STATA to the panel dataset is established throughout the ESG score and the corporate financial performance observation of Indonesia and Malaysia's Shariah-compliant companies between 2010 and 2022. The following section 5.2. will present the findings from the bibliometric analysis, and section 5.3 will describe quantitative analysis findings from the multiple regression analysis. Finally, section 5.4. will summarise the key findings of the study.

5.2 FUTURE DIRECTION OF ESG PERFORMANCE RESEARCH

As discussed earlier, bibliometric research was performed to obtain a comprehensive review of academic research on ESG performance. Based on a series of bibliometric and network analyses, it identifies the major trends and growth patterns associated with the development of this important subfield of strategic management. The Scopus database was queried for papers with the term: "ESG performance" in the publication between 2013 and 2023. Based on a series of bibliometric and network analyses, it identifies the major trends and growth patterns associated with the development of this important subfield of strategic management; documents which journals, articles, and

authors have had the greatest impact on its development, and presents the intellectual structure and network of authors, publications, and countries. Finally, the major research themes that emerge from the analyses presented are considered in terms of their relevance to future work (Rusydia et al., 2022; Suban et al., 2021; and Wahab et al., 2023).

5.2.1 Publication Trends

This section analyzes the trends in ESG performance studies from 2013 to 2023. Figure 5.1 shows that the ESG performance study was published in 2013 and developed slowly during 2013-2015, with the maximum number of publications being around four articles per year. In 2017, the number of published articles increased to 11. This number decreased in 2017 and 2018, with only four articles per year. From 2019 to 2022, the number of publications on ESG performance increases to 17, 25, and 35 and reaches a peak of 75 publications. The increasing number of publications indicates that academic researchers are increasingly interested in ESG performance and publish their papers in the Scopus database. In this trend analysis, the growing number of publications in the field of ESG performance is not only attributed to the improvement of the recognition of this field but also to the increasing integration of ESG performance into corporate strategies and reporting practices of companies. Another point in Figure 5.1 mentioned that the mean of total citations per article was highest in 2017, followed by 2016 and 2018. The articles published in 2017 and 2018 have impacted most research.

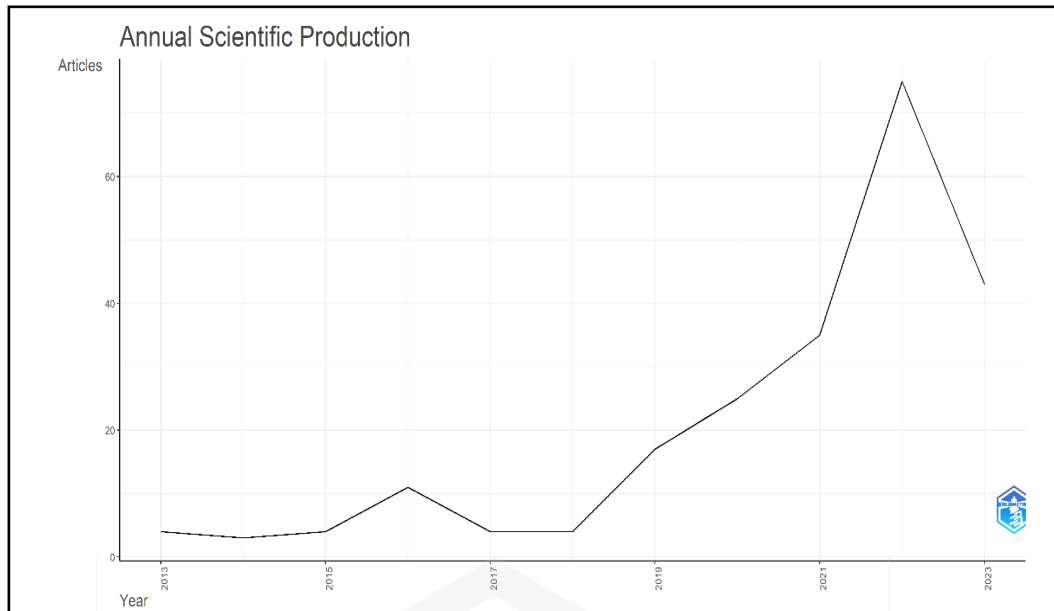


Figure 5.1 Time Trend Of Publications On ESG Performance

5.2.1.1 Leading Journals And Articles

The list of leading journals in terms of number of article publications in ESG performance is shown in Table 5.2. *Business Strategy and The Environment Journals*, in first place among others, had 18 publications from 2014, followed by *Corporate Social Responsibility and Environmental Management*, with 11 articles. The journal *Business Strategy and the Environment* shows a long-term commitment and has published on ESG performance over an extended period, showing strong growth from 2014 to 2022. The *Journal of Sustainable Finance and Investment* steadily increased publications from 1 article in 2015 to 7 in 2022. Publication in *Corporate Social Responsibility and Environmental Management Journal* lasted for years but has had tremendous vertical growth. However, *Finance Research Letter and Frontiers in Environmental Science* have low attention on ESG and just started in 2020 and 2022 with 8 and 12 publications, respectively. *Journal of Sustainable Finance and Investment* and *finance research letters* with 9 publications, respectively. However, *Corporate Governance Journal* encountered some upcoming journals that have shown interest in ESG performance publications, such as *Finance Research Letters* in 2020, with 9 papers, and *Borsa Istanbul Review*, with 3 papers from 2021 starting year.

5.2.1.2 Most Relevant and Cited Sourced

A word cloud is a visualization technique for highlighting the frequency of keywords in a dataset. The size of a keyword is a representation of the frequency with which it appears. The 50 most used author's keywords are presented through the word cloud in Table 5.1. Predictably, governance approach is the most frequently used keyword, appearing 62 times, followed by sustainability, sustainable development, and corporate social responsibility. These keywords are most used in the document as keywords by authors.

Table 5.1 Total Citations

Year	Mean Total Citation Per Article	Number of Article	Mean Total Citation per Year	Citation per year
2013	11.25	4.00	1.02	11
2014	527	3.00	52.70	10
2015	216	4.00	24.00	9
2016	64.73	11.00	8.09	8
2017	96.75	4.00	13.82	7
2018	45.75	4.00	7.62	6
2019	42.65	17.00	8.53	5
2020	31.6	25.00	7.90	4
2021	10.17	35.00	3.39	3
2022	7.04	75.00	3.52	2

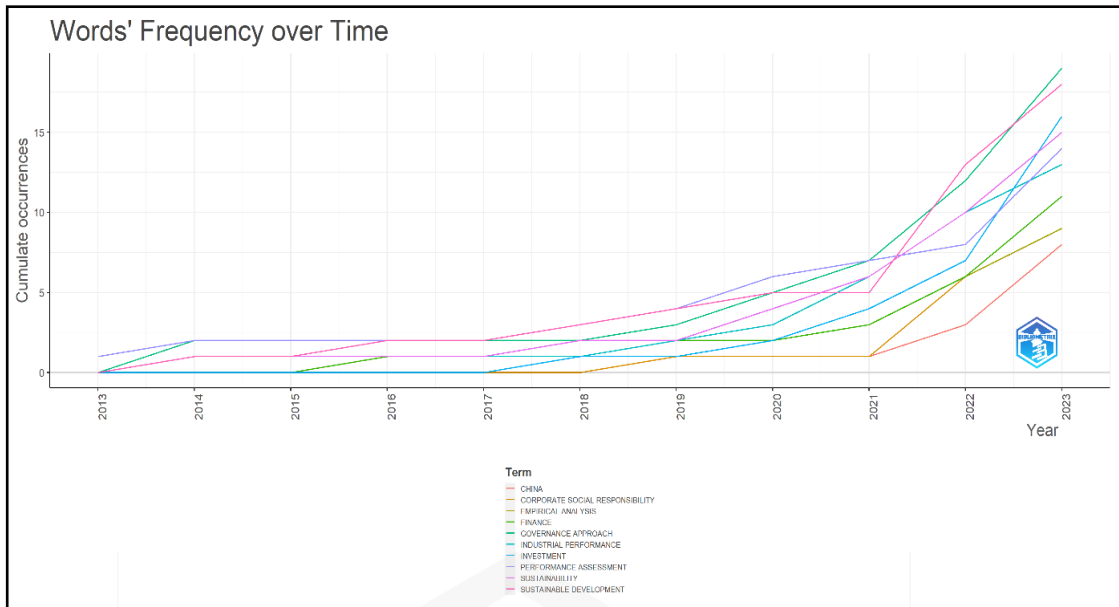


Figure 5.2 Words' Frequency Over Time

The necessary information from the article is keywords supplied by the authors. Usually, the keywords selected by authors represent the major themes or important concepts being analyzed (Secundo et al., 2019). A word cloud of author-supplied keywords is usually presented to show the essential and most frequently used keywords. The result reveals 418 authors' keywords, as shown in Figure 5.3. The font size of a particular word is proportional to the number of times different papers have used it. The keywords “governance approach,” “sustainability,” and “sustainable development” appeared most, for example, 62 times, followed by 58 times and 54 times for sustainability and sustainable development, respectively.



Figure 5.3 Word Cloud of The Keywords

Figure 5.3 shows the most influential journals based on total citations according to Bradford's law (Brookes, 1969). The study results show the most influential journals based on total citations for ESG publications. The journal Business Strategy and Environment (BSE) ranks first with 18 publications in Zone 1, which counts for 12.27% of the total. This percentage is followed by Frontier in Environmental Sciences (FES) with 11.6% and Corporate Social Responsibility and Environmental Management (CSREM) journals with 10.8% publications. Table 5.2 also shows the most cited and influential journals.

Table 5.2 Sources Local Impact

Journal	H-Index	G-Index	M-Index	TC	NP	PY Start
Business Strategy and The Environment	14	18	1.4	1042	18	2014
Corporate Social Responsibility and Environmental Management	7	11	1.4	246	11	2019
Journal Of Sustainable Finance and Investment	6	9	0.667	803	9	2015
Finance Research Letters	5	7	1.25	60	9	2020
Journal Of Global Responsibility	5	8	0.625	290	8	2016
Corporate Governance (Bingley)	4	4	1	142	4	2020
Journal Of Portfolio Management	4	5	1	76	5	2020
Borsa Istanbul Review	3	3	1	35	3	2021
Business And Society	3	3	0.375	101	3	2016
Journal Of Banking and Finance	3	4	0.375	145	4	2016

In addition, the most influential articles are generally ranked based on total citations. On the parameter of total citation, old articles rank highly, but their influence may be less than current articles if the ranking is based on citations per year. Based on the Table 5.2, the article by Velte (2017) has the highest citations. This influential article

was published in the Journal of Global Responsibility with a research focus on ESG performance. Data collection from 2010-2014 with a total observation of 412 firms, the study found that ESGP positively impacts Return on Asset but no impact on Tobin's Q. However, when distinguishing the three components of ESGP, corporate governance has the most substantial impact on financial performance rather than environmental and social performance.

Women on Management Board and ESG Performance as the title of a second-rank article published in the Journal of Global Responsibility (Velte, 2016). This article analyses the position of women on the board of management. The paper also measures the link between gender diversity and ESG performance in European countries. The third most influential article was published in Competitive Review: an International Business Journal, which focuses on sustainability reporting and bank performance in developed and developing countries after the financial crisis. The data utilized 882 banks from a total of 2,456 banks. By using a generalized method of moments, this study attempts to give different insights into the impact of research.

Table 5.3 Document's Trend

Author	Year	Title	Source	DOI	TC	TC/Y
Buallay A	2022	Sustainability Reporting and Retail Sector Performance: Worldwide Evidence	International Review of Retail, Distribution and Consumer Research	10.1080/09593969.2022.2048410	0	0
Buallay et al (2021)	2021	Sustainability Reporting in Smart Cities: A Multidimensional Performance Measures	Cities	10.1016/J.Cities.2021.103397	13	4.333
Buallay, Fadel, Al-Ajmi, et al (2020)	2020	Sustainability Reporting and Performance of Mena Banks: Is There a Trade-Off?	Measuring Business Excellence	10.1108/Mbe-09-2018-0078	39	9.75

Author	Year	Title	Source	DOI	TC	TC/Y
Buallay, Fadel, Alajmi, et al (2020)	2020	Sustainability Reporting and Bank Performance After Financial Crisis: Evidence from Developed and Developing Countries	Competitive ness Review	10.1108/Cr-04-2019-0040	43	10.75
Buallay (2020)	2020	Sustainability Reporting and Firm's Performance: Comparative Study Between Manufacturing and Banking Sectors	International Journal of Productivity And Performance Management	10.1108/Ijppm-10-2018-0371	33	8.25
Buallay (2019)	2019	Between Cost and Value: Investigating the Effects of Sustainability Reporting on A Firm's Performance	Journal Of Applied Accounting Research	10.1108/Jaar-12-2017-0137	30	6
Velte (2020)	2020	Does CEO Power Moderate the Link Between ESG Performance and Financial Performance? A Focus On The German Two-Tier System	Management Research Review	10.1108/Mrr-04-2019-0182	29	7.25
Velte (2019)	2019	The Bidirectional Relationship Between ESG Performance and Earnings Management – Empirical Evidence from Germany	Journal Of Global Responsibility	10.1108/Jgr-01-2019-0001	22	4.4

Author	Year	Title	Source	DOI	TC	TC/Y
Velte (2017)	2017	Does ESG Performance Have an Impact on Financial Performance? Evidence From Germany	Journal Of Global Responsibility	10.1108/Jgr-11-2016-0029	16 2	23.14
Velte (2016)	2016	Women on Management Board and ESG Performance	Journal Of Global Responsibility	10.1108/Jgr-01-2016-0001	79	9.875

Based on Table 5.4 below, the stakeholder theory studied by Freeman has the highest number of references, with 19 citations. There were similar citations from Friede and Orlitzky in their meta-analysis and empirical studies on ESG. Two articles by Serafeim have several references for each article with 15 citations.

Table 5.4 Most Document Citation

Google Scholar	Cited References	Citations
link	Freeman R.E., Strategic Management: A Stakeholder Approach, (1984)	19
link	Friede et al (2015), ESG and Financial Performance: Aggregated Evidence from More Than 2000 Empirical Studies, Journal of Sustainable Finance & Investment, 5, 4, Pp. 210-233	19
link	Orlitzky et al (2003), Corporate Social and Financial Performance: A Meta-Analysis, Organization Studies, 24, 3, Pp. 403-441	19
link	Aupperle et al (1985), An Empirical Examination of The Relationship Between Corporate Social Responsibility and Profitability, Academy of Management Journal, 28, 2, Pp. 446-463	17
link	McWilliams & Siegel (2000), Corporate Social Responsibility and Financial Performance: Correlation or Miss specification? Strategic Management Journal, 21, 5, Pp. 603-609	16
link	Velte (2017), Does ESG Performance Have an Impact on Financial Performance? Evidence From Germany, Journal of Global Responsibility, 8, 2, Pp. 169-178	16

Google Scholar	Cited References	Citations
link	Cheng et al (2014), Corporate Social Responsibility and Access to Finance, Strategic Management Journal, 35, 1, Pp. 1-23	15
link	Eccles et al (2014), The Impact of Corporate Sustainability on Organizational Processes and Performance, Management Science, 60, 11, Pp. 2835-2857	15
link	Nollet et al (2016), Corporate Social Responsibility and Financial Performance: A Non-Linear and Disaggregated Approach, Economic Modelling, 52, Pp. 400-407	15
link	Fatemi A., Glaum M., Kaiser S., ESG Performance and Firm Value: The Moderating Role of Disclosure, Global Finance Journal, 38, Pp. 45-64, (2018)	14

5.2.2 Thematic Analysis: The Procedure and Its Finding

Thematic mapping is used to identify the themes in textual data (Fize et al., 2019) . Themes are formed because of keywords, titles, or abstracts. In this two-dimensional graph, themes are classified based on density and centrality. The X-axis represents the centrality, a measure of a theme's relevance or importance. The density representing a theme's development stage is plotted on the Y-axis. Measures of central tendency like mean and median are employed to assess the centrality and density of a research theme. Figure 5.4 presents a thematic map, which classifies into four quadrants which are divided into:

- 1) Quadrant 1, upper right: Motor-themes. This quadrant has the highest density and high centrality themes. Therefore, they are essential and well-developed. “*Sustainable development goal*,” “*performance*,” “*strategic approach*,” and “*organization*” are placed in this quadrant.
 - a. High Density: This indicates that the themes in Quadrant 1 are deeply studied and have a strong internal structure. The related concepts, methods, and discussions surrounding these themes are cohesive and thoroughly researched. For example, topics like “*sustainable development goal*” and “*performance*” have a wealth of supporting literature, established methodologies, and concrete findings. This high

density shows that the themes are mature and are key to making meaningful progress in the field.

- b. High Centrality: Centrality refers to how connected a theme is to other themes in the research landscape. High centrality suggests that these topics are fundamental to the field and have a broad influence on other areas of research. Themes in this quadrant serve as core areas that link to and impact many other research topics. For instance, a theme like “strategic approach” could influence studies in business, management, sustainability, and organizational theory. Its presence in multiple areas of research means it plays a key role in shaping the direction of research across various domains.

Overall, Motor Themes act as the drivers of research in a field. They are established, critical to ongoing discourse, and serve as the foundation for new discoveries and advancements. Researchers often focus on these themes to build upon a well-developed knowledge base, contributing to the overall progression of the field. Themes in Quadrant 1 are not just well-studied but are essential for understanding and advancing the most critical issues within the research area.

- 2) Quadrant 2, lower right: Basic themes. This is a high centrality-low density quadrant, meaning themes in this quadrant are significant but not adequately developed. Themes in this quadrant are “*governance approach*,” “*sustainable development*,” and “*sustainability*.”

- a. High Centrality: Themes in Quadrant 2 are influential and important within the broader research network. They have many connections to other themes, meaning they are essential building blocks of the field. Even though they may not be fully fleshed out, they are fundamental to understanding and progressing in the research area. For instance, themes like “*governance approach*,” “*sustainable development*,” and “*sustainability*” are key concepts that form the basis for much of the ongoing research. These themes often influence other research areas,

indicating that they are crucial for the overall structure and direction of the field.

- b. Low Density: While these themes are central to the field, their internal development is weaker compared to Quadrant 1. Low density indicates that these topics have not been studied in depth or do not yet have a cohesive body of work surrounding them. There may be fewer established methodologies, less agreement among researchers, or gaps in the literature. For example, while “sustainable development” is highly influential, the research surrounding it may still be fragmented, with different approaches and perspectives that need to be integrated and explored more thoroughly.

Therefore, basic themes are important yet underdeveloped. They are recognized as crucial to the field’s structure but require further exploration and refinement to reach their full potential. These themes represent opportunities for deeper study, as increasing their internal cohesion (density) would enhance their value to the research community. Researchers may focus on these themes to develop more comprehensive theories, methodologies, and applications, ultimately advancing the field by turning these basic but critical concepts into well-rounded, mature research areas. Quadrant 2 themes are often seen as foundation topics that need more attention, and developing them further can lead to breakthroughs or more coherent understanding within the research domain.

- 3) Quadrant 3, lower left: Emerging themes. These themes are weakly developed and emerging and, therefore, are suitable for future research. “*Environmental impact*,” “qualitative analysis,” and “*decision making*” are prominent here.

- a. Low density: Themes in Quadrant 3 are poorly developed and lack strong internal structure. This means that there is not much research or a well-established body of knowledge surrounding these themes. They may have limited studies, few agreed-upon methods, or fragmented

findings. For example, topics like “environmental impact,” “qualitative analysis,” and “decision making” may be studied sporadically, but there is not yet a cohesive framework or consensus on how to approach them. The research is either just beginning or lacks depth, and as a result, these themes remain underdeveloped.

- b. Low centrality: In addition to being underdeveloped, themes in this quadrant also have low importance or low influence on the broader field of research. They are not well-connected to other major themes, which means that they do not play a pivotal role in shaping the overall research landscape at present. Their connections to other areas of study may be weak or limited, and their impact on the broader network of research themes is minimal. However, this does not necessarily mean that they are unimportant—it may just mean that they have not yet reached their full potential or gained widespread recognition.

Themes in Quadrant 3 are often referred to as “emerging” if they are new and still gaining traction in the research community. These topics have the potential to grow into more central themes as research progresses, methodologies are refined, and more scholars begin to explore them. For example, an emerging theme like “qualitative analysis” might become more relevant as researchers seek new ways to analyze complex data in fields like social sciences or environmental studies. Conversely, some themes in this quadrant may be “declining” topics that were once central but are now losing relevance or are being replaced by newer concepts or methodologies. In this case, researchers might move away from these themes as they find them less useful or applicable to current trends.

- 4) Quadrant 4, upper left: niche or specialized themes. This theme is the high-density-low centrality quadrant. Themes like “*disclosure*,” “economic and social effects,” “environmental regulations,” and “green economy” are highly developed themes about ESG and remain at low levels of centrality.

- a. High density: Themes in Quadrant 4 are internally cohesive and well-studied, meaning there is a strong body of research surrounding them. Researchers have thoroughly explored these themes, developing robust methodologies, frameworks, and findings within their domain. For instance, topics like “disclosure,” “economic and social effects,” and “environmental regulations” have been deeply examined, with rich literature that provides a comprehensive understanding of these areas. The high density indicates that these themes are well-established within their specific niche and offer detailed insights to those working directly in these areas.
- b. Low centrality: Despite being well-developed, these themes have limited influence on the broader research field. They are considered specialized because they are highly relevant to a specific community or subfield but do not have widespread impact or connections to other major research themes. Their narrow focus means they do not play a central role in shaping the overall research landscape. For example, “green economy” might be crucial in certain studies related to environmental economics but may not be widely applicable or connected to other dominant research topics, such as those found in sustainability science or organizational strategy.

The low centrality of these themes suggests that while they are valuable within their niche, they do not influence broader interdisciplinary research or other key areas of study. They often serve the needs of specialized communities rather than having universal relevance across multiple research domains. These themes can include highly technical topics, industry-specific concerns, or important regulations in specific contexts but do not drive research beyond their specialized area. Therefore, Quadrant 4: Niche Themes represents well-established, specialized topics that are crucial for experts in certain fields but do not have significant influence beyond their niche. Researchers working in these areas have developed a detailed understanding of the topic, but the research is often within a narrow domain. While these themes might not be central to broader scientific

discourse, they are still highly significant for those engaged in focused research or practical applications related to these topics. They offer deep insights into specific issues but are less likely to drive cross-disciplinary innovation or reshape the field at large.

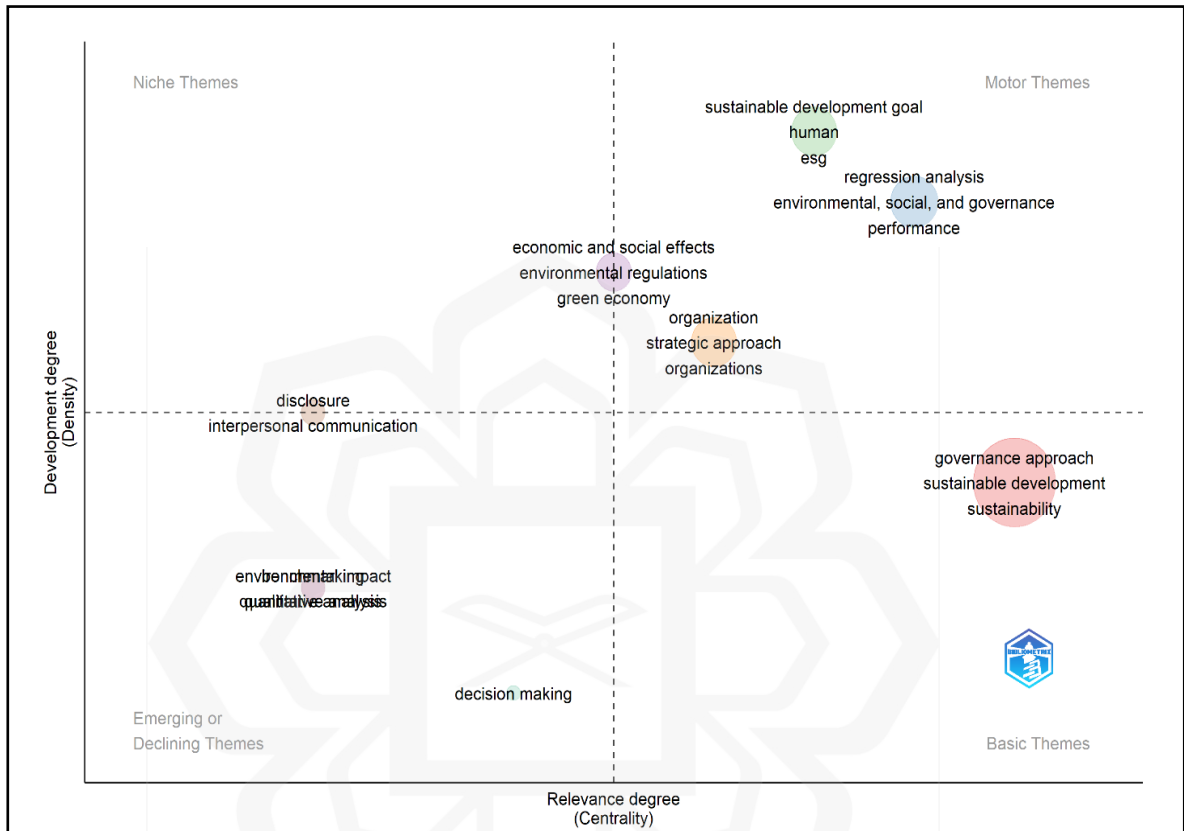


Figure 5.4 Thematic Map

The data for keywords in publications on ESG performance with their typical measurements are presented in Table 5.5. Based on the table below, the cluster on this theme is divided into 5: benchmarking, decision-making, disclosure, economic and social effect, environmental impact, and governance approach.

Table 5.5 Thematic Cluster Measurement

Cluster	Title	DOI	Page rank
Benchmarking	Data-Driven ESG Assessment For Blockchain Services: A Comparative Study In Textiles And Apparel Industry (X. Liu et al., 2023)	10.1016/j.resconrec.2022.106837	0.127
Decision making	Measures For Sustainable Investment Decisions And Business Strategy – A Triple Bottom Line Approach (Cubas-Díaz & Martínez Sedano, 2018)	10.1002/bse.1980	0.089
Disclosure	Corporate Sustainability Performance, Stock Returns, And Esg Indicators: Fresh Insights from Eu Member States	10.1007/s11356-022-20789-8	0.044
Disclosure	Does Environmental, Social, And Governance Performance Mitigate Earnings Management Practices? Evidence From Us Commercial Banks (Kolsi et al., 2023)	10.1007/s11356-022-23616-2	0.096
Economic and social effects	How Volatility in Green Financing, Clean Energy, And Green Economic Practices Derive Sustainable Performance Through ESG Indicators? A Sectoral Study Of G7 Countries (Q. Yang et al., 2022)	10.1016/j.resourpol.2021.102526	0.105
Environmental impact	ESG Performance Scoring Method To Support Responsible Investments In Port Operations	10.1016/j.cstp.2022.01.027	0.024
Governance approach	Do Environmental, Social, And Governance Activities Improve Corporate Financial Performance? (Xie et al., 2019)	10.1002/bse.2224	0.096
Governance approach	Environmental Responsibility And Firm Performance: The Application Of An Environmental, Social And Governance Model (K. H. Lee et al., 2016)	10.1002/bse.1855	0.061
Governance approach	Commitment Strategies For Sustainability: How Business Firms Can Transform Trade-Offs Into Win-Win Outcomes (Beckmann et al., 2014)	10.1002/bse.1758	0.087
Governance approach	Can Sustainable Investments Outperform Traditional Benchmarks? Evidence From Global Stock Markets (Cunha et al., 2020)	10.1002/bse.2397	0.143

5.3 CONCLUSION

The result of the bibliometric analysis clearly shows that the productivity of the most influential works is limited by the number of authors. The most common topics are corporate strategy, stakeholders, governance approach, sustainable development, sustainability, investment, and stock market. In addition, the number of citations in the field of ESG performance is increasing, indicating the current importance of the topic. Consistent with the previous study, China, along with Italy and Germany, tops the list of academic productivity in the field of ESG performance.

Based on the thematic analysis, the main themes and patterns related to ESG performance research emerged. Five main groups were identified in the analysis: Benchmarking, Decision Making, Disclosure, Economic and Social Impact, Environmental Impact, and Governance Approach. However, this study contributes to the existing term literature in several ways; it will enrich the ESG literature database related to corporate performance. In addition, future studies can use this research as a basic reference for understanding the next research topics on ESG performance.

Specifically, the future research agenda focuses on several key areas. Firstly, it aims to enrich the ESG literature database related to corporate performance, providing a valuable resource for scholars in the field. This study serves as a foundational reference for understanding future research topics on ESG performance. Additionally, there is a need to investigate the relationship between ESG disclosure and corporate financial performance and the connection between ESG disclosure and stock prices. Future studies should also explore other data on ESG disclosure to uncover further patterns and impacts. By addressing these areas, future research can contribute significantly to the understanding and advancement of ESG performance.

CHAPTER SIX

THE STUDY FINDINGS FROM THE QUANTITATIVE ANALYSIS

6.1 INTRODUCTION

This chapter presents the findings from data analyses conducted to explore two research questions: (2) the relationship between the ESG scores of Shariah-compliant companies in Indonesia and Malaysia and their Corporate Financial Performance (CFP), and (3) the impact of ESG scores on CFP. For this purpose, multiple regression analysis was performed using STATA on a panel dataset that captured these companies' ESG scores and CFP from 2010 to 2022. This analysis specifically addressed five main hypotheses. However, Section 6.2 provides descriptive statistics of the sample, Section 6.3 delves into the outcomes from diagnostic tests ensuring analysis reliability, Section 6.4 describes the results from correlational analyses, Section 6.5 focuses on hypothesis testing, Section 6.6 addresses the robustness tests, and finally, Section 6.7 summarizes the key findings from the quantitative data analyses.

6.2 DESCRIPTIVE STATISTICS

In the methodology chapter, the focus of the current study was outlined as examining the relationship between the ESG scores of Shariah-compliant companies in Indonesia and Malaysia and their Corporate Financial Performance (CFP). Five distinct sets of data were compiled to facilitate a comprehensive statistical analysis of the study variables: data encompassing the entire sample, data specifically related to Shariah-compliant companies, and data concerning non-Shariah-compliant companies. Additionally, the dataset included information from both Shariah and non-Shariah-compliant companies before and after the COVID-19 pandemic. The following subsections present the descriptive statistics for each dataset.

6.2.1 Descriptive Statistics of The Whole Sample Data

Table 6.1 provides a detailed summary of the descriptive statistics for critical financial and ESG variables using data from a diverse sample of companies.

Table 6.1 Descriptive Statistics of The Whole Sample Data

Variable	Obs	Mean	Std. dev.	Min	Max
ROA	1,448	0.06	0.08	(0.18)	0.47
ROE	1,449	0.15	0.23	(0.60)	1.88
Tobin's Q	1,447	17.31	109.86	0.01	1,410.14
E	1,463	33.49	22.98	0.00	87.24
S	1,449	49.55	21.54	5.56	93.31
G	1,449	51.01	20.80	9.89	91.44
ESG	1,449	45.77	18.14	8.70	85.92
SIND	1,461	38.03	24.38	0	85.92
FirmSize	1,448	20.31	4.74	3.96	25.67
Leverage	1,448	0.70	0.94	0	7.80
FirmAge	1,452	42.97	24.42	6.00	153.00
HHI	1,434	0.17	0.09	0.07	0.59
Munificence	1,441	0.01	0.01	(0.02)	0.05
Dynamism	1,448	0.01	0.00	0.00	0.02
Inflation	1,477	2.54	1.93	(1.14)	6.41
GDP	1,477	3.73	4.07	(5.46)	8.65

As shown in Table 6.1 above, the Return on Assets (ROA) and Return on Equity (ROE) demonstrate moderate average values of 6.33% and 15.18%, respectively. However, both metrics exhibit significant variability in performance across the firms, as reflected by their high standard deviations. This variation suggests differences in efficiency and profitability management among the companies studied. The Tobin's Q ratio, a marker of how well a company uses its assets to generate market value relative to their replacement cost, shows an exceptionally high average of 17.31. The range of this ratio extends dramatically from a low of 0.0147 to a high of 1410.14, indicating major inconsistencies in market valuations across the sample.

On the ESG aspects, the average scores for Environmental (E), Social (S), and Governance (G) stand at 33.49, 49.55, and 51.01, respectively. These scores exhibit considerable spread, pointing to various practices and commitments toward sustainability issues among the sampled firms. The overall ESG score averages at 45.77, while the more targeted sensitive industry on ESG score (SIND) score averages slightly lower at 38.03. Both metrics underscore the diverse degrees of integration and prioritization of ESG principles within the strategic frameworks of these organizations. The two measures (or metrics) being discussed reveal how differently organizations incorporate and emphasize ESG principles in their overall strategies and operations. Essentially, it highlights the variability in how companies adopt ESG standards and the importance they place on them within their strategic plans (Veenstra & Ellemers, 2020).

The descriptive statistics in Table 6.1 also reflect firm characteristics and economic conditions impacting a diverse sample of companies. Firm size, for instance, has a mean of 20.31, suggesting a moderate distribution of company sizes across the sample, though there is some variability. Leverage has an average of 0.71 that indicates a moderate use of borrowing (Baxter, 1967); however, the range shows that some firms operate under significantly higher levels of debt which could influence their risk profiles and financial stability. In addition, the average firm age is nearly 43 years, presenting a substantial breadth in organizational maturity, ranging from relatively new to well-established entities. This diversity could influence management practices, strategic agility, and innovation capabilities (Ruiz et al., 2024).

The Herfindahl-Hirschman Index (HHI), with an average of 0.17, points to a moderate level of market concentration, suggesting competitive yet not overly monopolized market conditions (Kvålseth, 2022). Regarding environmental variables, munificence and dynamism show lower averages, indicating less pronounced but still varying impacts across firms. Munificence, measuring resource availability, and dynamism, reflecting the rate of change in the environment, are critical in shaping strategic responses and operational adaptations in different market conditions (Castrogiovanni, 1991). Lastly, economic indicators such as inflation and GDP growth rates, with averages of 2.54% and 3.73% respectively, demonstrate notable variability.

6.2.2 Descriptive Statistics of The Shariah-Compliant Companies

Table 6.2.2 provides a detailed analysis of financial performance for Shariah-compliant companies. The data on Return on Assets (ROA) shows an average of 6.73%, with a standard deviation of 8.53%. This considerable standard deviation indicates a moderate spread in profitability among the firms, with values ranging sharply from a low of -19.90% up to a high of 45.85%. Such a range suggests varying degrees of operational efficiency across these companies. Furthermore, the Return on Equity (ROE) presents an average of 13.41% and a notably higher standard deviation of 21.61%. The range for ROE extends dramatically from -85.07% to 140.50%, and such an increase emphasizes the significant variability in how effectively firms utilize shareholder equity. This variability points to diverse financial management strategies and differing degrees of financial risk among the companies (Dalwai & Salehi, 2021).

Table 6.2 Descriptive Statistics of The Shariah-Compliant Companies

Variable	Obs	Mean	Std. dev.	Min	Max
ROA	1,024	0.07	0.09	-0.20	0.46
ROE	1,025	0.13	0.22	-0.85	1.41
Tobin's Q	1,024	26.88	145.59	0.05	1525.95
E	1,035	33.19	23.04	0.00	88.61
S	1,025	48.53	20.99	6.90	94.96
G	1,025	49.41	20.68	9.89	92.28
ESG	1,025	44.43	17.67	11.06	85.65
SIND	1,034	36.13	23.84	0.00	85.65
FirmSize	1,024	19.81	4.73	3.95	24.00
Leverage	1,024	0.56	0.60	-2.04	3.80
FirmAge	1,029	41.03	23.87	5.00	156.00
HHI	1,012	0.17	0.11	0.07	0.61
Munificence	1,025	0.01	0.01	-0.02	0.05
Dynamism	1,020	0.01	0.00	0.00	0.02
Inflation	1,045	2.56	1.96	-1.14	6.41
GDP	1,045	3.63	4.15	-5.46	8.65

In addition, as shown in Table 6.2, Tobin's Q stands at an average of 26.88 but with a substantial standard deviation of 145.59. The extreme range of Tobin's Q values, spanning from 0.05 to 1525.95, indicates highly disparate market valuations among the sampled Shariah-compliant companies. This wide disparity could reflect differences in investor perceptions, industry sectors, or market conditions impacting these firms.

Table 6.2 also presents various dimensions of performance and characteristics of Shariah-compliant companies, offering insights into their Environmental, Social, and Governance (ESG) adoption, financial metrics, and market dynamics. The Environmental (E), Social (S), and Governance (G) scores demonstrate mean values of 33.19, 48.53, and 49.41 respectively, each accompanied by moderate standard deviations. This variability suggests the diverse levels of ESG commitment and implementation across different firms. The overall ESG score, averaging at 44.43, and the sensitive industry on ESG score (SIND), at 36.13, further confirm the variation in how deeply ESG practices are embedded within corporate strategies, as indicated by their notable standard deviations.

Furthermore, the firm size data, with an average of 19.81 and a standard deviation of 4.73, reflects a moderate spread in the size of the firms that in turn may affect their operational scopes and market influence. Meanwhile, the leverage ratio averages at 0.56 and this suggest conservative borrowing levels overall (Dang & Tran, 2020). However, with an extensive range from -2.04 to 3.80, some firms may have negative debt levels and this condition could imply different financial management strategies or stages in corporate life cycles. The data from the firm age shows a significant diversity with an average of 41 years and an expansive range from 5 to 156 years, pointing to a mix of both nascent and well-established companies within the sample. This mix indicates varied levels of experience, resilience, and evolution in business practices (Adeoye & Olojede, 2019; Welch & Yoon, 2022).

The Herfindahl-Hirschman Index (HHI), with a mean of 0.17 and a standard deviation of 0.11, suggests a moderately competitive market environment, which could influence strategic decisions and market behaviors of these firms. Munificence and dynamism measure at low means of 0.01 and 0.01 respectively, implying that while the resource availability and rate of environmental change are subtle, they exhibit distinct impacts on firms, potentially affecting their adaptability and resource allocation strategies. Furthermore, the economic indicators of inflation and GDP growth, with

averages of 2.56% and 3.63% respectively, display considerable variability. This variability indicates the different economic conditions these firms face, likely affecting their financial planning, pricing strategies, and overall growth trajectories.

Overall, the data from Table 6.2 portrays a comprehensive picture of the performance and operational environment of Shariah-compliant companies, highlighting their disparate ESG practices, financial health, market positions, and the external economic conditions they navigate. This diversity underscores the necessity for stakeholders to consider a wide array of factors when assessing these firms' stability, potential for growth, and resilience in dynamic markets.

6.2.3 Descriptive Statistics of The Non-Shariah-Compliant Companies

Table 6.3 provides detailed descriptive statistics for a sample of non-Shariah-compliant companies, highlighting various financial metrics and Environmental, Social, and Governance (ESG) performances.

Table 6.3 Descriptive Statistics of Non-Shariah-Compliant Companies

Variable	Obs	Mean	Std. dev.	Min	Max
ROA	424	0.05	0.07	-0.07	0.50
ROE	423	0.20	0.31	-0.13	2.69
Tobin's Q	423	0.77	3.02	0.01	57.75
E	428	34.23	22.85	0.00	85.13
S	424	52.00	22.72	4.53	90.29
G	424	54.89	20.61	11.60	90.45
ESG	424	48.97	18.98	5.06	85.92
SIND	427	42.61	25.08	0.00	85.92
FirmSize	424	21.57	4.55	4.35	26.00
Leverage	428	1.14	1.81	0.00	14.42
FirmAge	424	47.80	26.23	11.00	125.00
HHI	417	0.16	0.05	0.08	0.28
Munificence	424	0.01	0.01	-0.02	0.04
Dynamism	422	0.00	0.00	0.00	0.02
Inflation	432	2.49	1.85	-1.14	6.41
GDP	432	3.97	3.85	-5.46	8.65

As indicated in Table 6.3 above, the Return on Assets (ROA) for these firms shows an average of 5.31% with a standard deviation of 7.23%, illustrating a moderate variability in how efficiently firms convert their assets into profits. The range of ROA values, from -7.10% to 50.43%, indicates that while some firms are experiencing losses relative to their assets, others achieve substantial profitability, reflecting a diverse operational efficiency across the sample. Similarly, the Return on Equity (ROE) presents a considerably broader variation with a mean of 20.12% and a high standard deviation of 31.14%. The ROE values stretch from -13.11% to an impressive 268.57%, mirroring a significant disparity in how effectively companies are using shareholder equity to generate earnings (Ndulue et al., 2021; Esqueda & O'Connor, 2024). This wide range of ROE suggests diverse financial management and performance levels among the firms, likely influenced by varying business models and market conditions. Furthermore, Tobin's Q shows a relatively low average of 0.775 but with a standard deviation of 3.016. The values span from 0.01 to 57.75 which present substantial variation in how the market values these companies compared to their assets. Such variance in Tobin's Q may also reflect differing investor perceptions and expectations based on industry sectors, company strategies, or macroeconomic factors (Bordalo et al., 2022; Neves et al., 2023).

Regarding ESG metrics, the Environmental (E), Social (S), and Governance (G) scores exhibit means of 34.23, 52.00, and 54.89 respectively, each with moderate standard deviations. These scores reveal that while firms generally engage in ESG practices to some extent, there is noticeable variability in commitment and implementation levels across the sample. The overall ESG score, averaging 48.97, and the sensitive industry on ESG score (SIND), with a mean of 42.61, both display notable standard deviations, further underscoring the diversity in ESG practices among these firms. This diversity could be attributed to different industry norms, regulatory environments, or strategic priorities regarding sustainability.

Table 6.3 also illustrates the varied characteristics and financial metrics of the firms in this sample subset. The mean firm size is 21.57 with a standard deviation of 4.55, indicating a moderate variation amongst the companies. Leverage, or debt-to-equity ratio, averages at a relatively high 1.141 with a considerable standard deviation of 1.805, stretching from 0 to 14.417. This wide range indicates significant disparities

in how firms manage their financing structures, with some relying heavily on debt compared to others. Such financial strategies can greatly affect firm risk, investment opportunities, and overall financial health. Moreover, the mean firm age is reported at 47.80 years with a broad standard deviation of 26.23 years, reflecting a diverse array of both young and longstanding firms. This age diversity within the sample can influence organizational culture, innovation, market positioning, and resilience to economic fluctuations.

Market concentration, measured by the Herfindahl-Hirschman Index (HHI), is observed at a mean of 0.164 with a standard deviation of 0.050. Such HHI value indicates moderate competition within the industry sectors represented. A moderately competitive market can foster innovation but may also pose challenges in maintaining market share (Striteska & Prokop, 2020; Handoyo et al., 2023). Munificence, has a mean value of 0.0105 and a standard deviation of 0.0118, showing only slight variability ranging from -0.0187 to 0.0399. In addition, dynamism presents a mean of 0.0046 with a small standard deviation of 0.0028, indicating relatively low but inconsistent rates of change across the sample. Lastly, economic conditions measured by inflation and GDP growth rates highlight significant variabilities with means at 2.49% and 3.97% respectively, and standard deviations at 1.85% and 3.85%. These variations illustrate the different macroeconomic climates that firms are subjected to, impacting their financial planning and market strategies.

6.2.4 Descriptive Statistics of The Companies' Data Before The COVID-19 Pandemic (2010-2019)

The descriptive statistics provided in Table 6.4 for the period before the COVID-19 pandemic give valuable insights into key financial metrics of firms during a pre-pandemic economic environment. The Return on Assets (ROA), with an average of 7.65% and a standard deviation of 8.49%, illustrates a moderate level of variability in how effectively firms could convert their assets into profits. The range of ROA, from -7.64% to 45.85%, indicates a wide disparity in operational efficiency across different firms, suggesting that while some businesses thrived others may have struggled to maintain profitability. Similarly, the Return on Equity (ROE) data shows an average of

19.48% with a standard deviation of 25.61%. This indicates a significant variance in how efficiently these firms have used shareholder investments to generate earnings, with observed values spanning from -24.28% to 234.36%. Such a wide range could imply differing financial management strategies, capital structures, and business risks among the companies analyzed. Tobin's Q score displays an average of 33.10 and a notably high standard deviation of 192.31. The range from 0.02 to 2532.03 suggests exceptionally varied market perceptions and valuations. Such drastic disparities in Tobin's Q highlight the substantial differences in investor expectations and confidence, possibly influenced by sector differences, market conditions, or firm-specific factors during the pre-pandemic period.

Table 6.4 Descriptive Statistics of The Companies' Data Before The COVID-19 Pandemic (2010-2019)

Variable	Obs	Mean	Std. dev.	Min	Max
ROA	742	0.08	0.08	-0.08	0.46
ROE	742	0.19	0.26	-0.24	2.34
Tobin's Q	740	33.10	192.31	0.02	2532.03
E	749	31.42	22.42	0.00	85.89
S	742	47.38	22.45	4.55	93.15
G	742	50.01	20.80	9.43	90.32
ESG	742	44.00	18.12	7.78	84.97
SIND	749	38.96	22.78	0.00	84.97
FirmSize	742	22.30	1.39	19.46	25.81
Leverage	742	0.73	0.89	-1.51	6.60
FirmAge	745	44.78	26.83	5.00	154.00
HHI	744	0.19	0.11	0.09	0.64
Munificence	737	0.01	0.02	-0.02	0.05
Dynamism	740	0.01	0.00	0.00	0.02
Inflation	756	3.24	1.73	0.58	6.41
GDP	745	5.29	0.68	4.41	7.42

As shown in Table 6.4 above, the Environmental (E), Social (S), and Governance (G) scores, the means are reported as 31.42, 47.38, and 50.01 respectively, each accompanied by moderate standard deviations. This variability suggests that firms

have differing levels of commitment and execution of ESG practices, reflecting diverse corporate cultures and priorities within the sample. The overall ESG score has a mean of 43.99 with a sizeable standard deviation, emphasizing the range in firms' integrated performance in ESG practices. A similar diversity is observed in the sensitive industry on ESG score (SIND), with a mean of 38.96. These findings underline the differing degrees to which firms have adopted and successfully implemented ESG initiatives (Naeem et al. 2022).

In terms of firm size, the average is relatively uniform at 22.30 with a minor standard deviation of 1.39, suggesting that the companies within this sample are fairly similar in size. Contrastingly, leverage presents greater variability with a mean of 0.73 and a standard deviation of 0.89, ranging from -1.51 to 6.6. This indicates a wide discrepancy in how firms use debt to finance their operations, which may reflect varying financial strategies or stages of growth within the sample. In addition, the mean firm age is 44.78 years, with a standard deviation of 26.83, showcasing a mix of both established companies and newer entities. The Herfindahl-Hirschman Index (HHI), with a mean of 0.188 and a standard deviation of 0.105, points to a moderately concentrated market, implying that while there is competition, a few players might dominate the market (Yeboah, 2023).

Munificence has an average of 0.01 and this value indicate slight variability in resource availability across firms, which could affect their strategic positioning and capabilities. Dynamism has a mean of 0.01, suggesting that while the rate of environmental change is generally low, it varies among firms, potentially impacting their adaptability and strategic decisions. Furthermore, the economic indicators such as inflation and GDP growth showcase means of 3.24% and 5.29% with varying degrees of volatility, depicted by their respective standard deviations. These differences highlight the variant macroeconomic climates that firms have to navigate, which can significantly influence their business operations and financial outcomes.

6.2.5 Descriptive Statistics of The Companies' Data After The COVID-19 Pandemic (2020-2022)

Table 6.5 offers insightful post-COVID-19 pandemic data regarding the financial performance. This period, fundamentally impacted by the pandemic, displays notable fluctuations in key financial indicators. The Return on Assets (ROA) presents an average of 4.75% with a standard deviation of 7.61%, encapsulating a broad range from -23.55% to an impressive 49.83%. The negative lower end of the spectrum suggests that some firms faced significant challenges, potentially due to operational disruptions caused by the pandemic. Similarly, the Return on Equity (ROE) demonstrates an average of 10.65% with a relatively high standard deviation of 20.43%, and a range extending from -89.18% to 140.50%. Furthermore, Tobin's Q, an indicator of firm value compared to the replacement cost of their assets, shows an average of 6.26 accompanied by a high standard deviation of 47.91. The extreme variability, ranging from a minimal 0.012 to a high of 685.021, highlights substantial differences in market valuations. This suggests that investor perceptions and confidence in the ongoing and future profitability of these firms vary widely, influenced greatly by the pandemic's economic aftermath (Talwar et al., 2021; Caferra et al., 2022; Lim & Morris, 2023).

Table 6.5 Descriptive Statistics of The Companies' Data After The COVID-19 Pandemic (2020-2022)

Variable	Obs	Mean	Std. dev.	Min	Max
ROA	704	0.05	0.08	-0.24	0.50
ROE	704	0.11	0.20	-0.89	1.41
Tobins' Q	703	6.26	47.91	0.01	685.02
E	704	36.07	23.24	0.61	87.24
S	704	51.79	20.49	14.29	93.31
G	704	52.01	20.81	12.04	92.68
ESG	704	47.62	18.11	15.21	87.17
SIND	709	37.03	26.00	0.00	87.17
FirmSize	703	18.03	6.16	3.12	25.51
Leverage	705	0.71	1.20	0.00	12.60
FirmAge	706	40.95	21.66	9.00	137.00
HHI	681	0.14	0.07	0.08	0.53
Munificence	718	0.01	0.01	-0.01	0.04
Dynamism	702	0.01	0.00	0.00	0.02
Inflation	718	1.79	1.85	-1.14	4.21
GDP	718	2.18	5.31	-5.46	8.65

As presented in the above Table, the ESG metrics show average scores of 36.07 for environmental (E), 51.79 for social (S), and 52.01 for governance (G), each with moderate standard deviations. This variation indicates that while there's an overarching commitment to ESG principles, the degree of application and results differ widely among firms. The overall ESG score averages at 47.62, and the Sensitive ESG score (SESG) is at 37.03, both also reflecting notable variability which underscores diverse approaches and effectiveness in integrating these practices within corporate strategies.

In terms of company size, the mean firm size is relatively smaller post-pandemic at 18.03, with a standard deviation of 6.16, reflecting a variability that might suggest consolidation or varying degrees of resilience among firms in responding to the pandemic. Leverage, with a mean of 0.708 and a broader standard deviation of 1.197, indicates a range of financial strategies with respect to using debt, from conservative to more aggressive approaches, influenced partly by the pandemic's financial impact. Furthermore, firm age shows a mean of 40.95 years with a standard deviation of 21.66, indicating a mix of both established companies and younger entrants into the market, each bringing different perspectives and capabilities to navigating the post-pandemic recovery. The Herfindahl-Hirschman Index (HHI), with a mean of 0.143, suggests moderate market concentration, pointing to a competitive industry landscape where no single entity dominates (Tanusondjaja et al., 2021; Peleckis, 2022).

Resource availability, measured by munificence, presents as relatively constrained with a mean of 0.01, mirroring the economic strains post-pandemic. Dynamism has a mean of 0.0058, suggesting a stable yet slowly evolving market environment. Economic conditions, as reflected by inflation and GDP growth rates, show averages of 1.79% and 2.18% respectively, with significant variability especially in GDP growth. This denotes an uneven economic recovery across sectors, influencing firm performance and decision-making processes differently.

Therefore, it can be concluded that non-Shariah-Compliant companies generally exhibit higher ESG scores across all dimensions compared to Shariah-Compliant companies. Specifically, Non-Shariah-Compliant firms have slightly higher Environmental (E) scores (34.23 vs. 33.19), higher Social (S) scores (52.00 vs. 48.53), and significantly higher Governance (G) scores (54.89 vs. 49.41). This trend is reflected

in their overall ESG scores (48.97 vs. 44.43) and Sensitive ESG Scores (SESG) (42.61 vs. 36.13), indicating that Non-Shariah-Compliant companies generally perform better in environmental, social, and governance practices. The higher scores suggest that these firms have more robust sustainability strategies and governance structures, and are more effective in implementing and integrating ESG practices within their operations.

Comparing the pre-COVID-19 and post-COVID-19 periods, there is a notable improvement in ESG scores across companies. Post-COVID-19, companies have shown higher Environmental (36.07 vs. 31.42), Social (51.79 vs. 47.38), and Governance scores (52.01 vs. 50.01), indicating an increased focus on sustainability and social responsibility in the aftermath of the pandemic. The overall ESG score also rose from 44.00 to 47.62, suggesting a stronger integration of ESG practices post-pandemic. However, the Sensitive ESG Scores (SESG) saw a slight decrease from 38.96 to 37.03, which could reflect the challenges companies faced in maintaining sensitive ESG practices during the pandemic. This overall trend highlights the heightened importance of ESG factors in corporate strategies as firms adapt to the new normal and the increasing demand for sustainable and responsible business practices.

6.2.6 Descriptive Statistics of The Data for The Industries

Table 6.6 provides an analysis of sectoral differences concerning financial performance, ESG practices, firm characteristics, market structure, and macroeconomic conditions across various sectors. The analysis highlights significant disparities in how sectors perform and manage resources. The Financial Services sector demonstrates robust asset utilization with the highest Return on Assets (ROA) at 0.88, while the Construction sector lags significantly with an ROA of only 0.02. In the realm of shareholder returns, the Telecommunication & Media sector excels with a Return on Equity (ROE) of 0.57, indicating lucrative returns for its investors, whereas Construction shows the minimal ROE at 0.04. Regarding market valuation measured by Tobin's Q, the Industrial Products (53.30) and Real Estate & Properties (50.45) sectors exhibit exceptionally high values, reflecting strong market valuations in comparison to their asset replacement costs. Conversely, the Financial Services and Construction sectors report the lowest

Tobin's Q values at 0.41 and 0.69, respectively, perhaps indicating undervaluation or conservative asset strategies within these sectors.

Environmental, Social, and Governance (ESG) scores reveal that the Telecommunication & Media sector has robust ESG practices, leading with the highest ratings. Contrastingly, the Information & Technology sector displays notably weaker sustainable ESG practices, having the lowest SIND score at 7.45. This suggests varied commitments to sustainability practices across sectors, potentially impacting their social credibility and operational compliance.

Firm characteristics such as size, leverage, and age also vary significantly between sectors. Financial Services boast the largest average firm size at 23.43, suggesting a dominating presence within the sector, while Information & Technology comprises smaller firms on average, indicated by a size of 17.76. In terms of leverage, Infrastructure experiences the highest levels at 1.97 highlighting substantial debt usage, whereas Mining reports the lowest at 0.20. In assessing firm age, sectors like Industrial Products and Financial Services possess older, more established firms, which contrasts with relatively younger firms in Information & Technology, pointing towards differing market maturities and histories.

The Herfindahl-Hirschman Index (HHI), which measures market concentration, shows that Infrastructure has the highest concentration at 0.25, suggesting less competition, whereas Real Estate & Properties has a broader landscape with the lowest HHI at 0.11. Additionally, munificence, which reflects the availability of resources, is more favorable in Healthcare (0.02) and less so in Construction (-0.00). Dynamism, or the rate of environmental change, varies from highest in Mining (0.01) indicating faster change, to lowest in Financial Services (0.00), suggesting a more static environment.

Table 6.6 Descriptive Statistics of The Data for The Industries

Sector variables	1 (S)	2 (S)	3 (S)	4 (S)	5 (S)	6 (S)	7 (S)	8 (NS)	9 (NS)	10 (S)	11 (NS)	F
ROA	0.63	0.09	0.10	0.88	0.04	0.04	0.02	0.09	0.09	0.04	0.08	0.53*
ROE	0.11	0.13	0.27	0.14	0.07	0.06	0.04	0.10	0.20	0.09	0.57	8.19**
Tobin's Q	1.23	53.30	6.36	0.41	5.09	50.45	0.69	3.09	1.11	29.20	1.51	31.46**
E	35.88	50.20	33.76	38.66	30.84	30.31	27.74	18.43	29.75	45.46	35.13	9.42**
S	40.79	57.29	44.21	56.02	51.73	50.22	42.73	42.11	56.15	54.03	58.06	9.42**
G	46.57	56.47	45.07	64.08	50.53	44.99	49.57	44.64	48.76	45.83	65.74	10.48**
ESG	40.37	54.36	41.11	55.11	45.55	42.21	39.58	37.47	48.71	48.27	56.36	9.57**
SIND	40.37	54.36	30.04	55.11	45.55	35.03	39.58	7.45	0.00	48.27	56.28	23.68**
Firm Size	20.37	21.70	20.34	23.44	21.52	18.62	18.53	17.76	20.52	19.93	21.19	4.58*
Leverage	0.56	0.43	0.73	0.61	1.97	0.51	0.74	0.24	0.35	0.20	1.91	9.37**
Firm Age	46.67	55.73	46.83	52.35	42.01	41.74	30.50	29.60	27.25	42.38	22.69	301.37**
HHI	0.16	0.14	0.12	0.17	0.25	0.11	0.13	0.09	0.16	0.16	0.15	36.36**
Munificence	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.02	0.02	0.01	0.00	1.8*
Dynamism	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	2.47*
No. of firms	16	10	44	23	18	27	20	35	9	20	8	230
% of firms to the total sample N=	7%	4.30%	19%	10%	7.80%	11.70%	8.70%	15%	4%	8.60%	3.50%	

Note: * indicates significance at p = 1%, ** indicates significant at p = 5%, and *** indicates significant at p = 10%. (1) Plantation, (2) Industrial products, (3) Consumer products, (4) Financial services, (5) Infrastructure, (6) Real estate & properties, (7) Construction, (8) Information & technology, (9) Healthcare, (10) Mining, (11) Telecommunication & Media, and F = ANOVA F

Based on the above table, it can be seen that some industries are sensitive to ESG scores, such as plantation, industrial products, consumer products, financial services, infrastructure, real estate and properties, construction, and mining. However, information and technology, healthcare, and telecommunication and media. A sensitive industry in the context of ESG refers to industries that are particularly exposed to or impacted by ESG-related risks and scrutiny. These industries typically face higher environmental, social, or governance risks due to the nature of their operations, and they are often subject to greater regulatory pressures, stakeholder scrutiny, and investor demands for sustainable practices (Qureshi et al. 2021a).

In addition, Table 6.6 not only provides descriptive statistics but also includes a comprehensive analysis of sector-specific variables using an ANOVA (F-test), offering insights into the variability across different industry sectors. The analysis reveals significant differences in key financial metrics such as Return on Assets (ROA) and Return on Equity (ROE). Specifically, ROA is highest in the Plantation sector at 0.6329 and lowest in Real Estate & Properties at 0.0352, indicating varied efficiency in asset utilization across sectors. Similarly, ROE reaches its peak in the Telecommunication & Media sector at 0.5650, demonstrating strong profitability, whereas it falls to its lowest in Construction at 0.0399, suggesting lesser financial effectiveness. Tobin's Q, which assesses a firm's market valuation against its asset replacement cost, shows especially high values in Industrial Products (53.304) and Real Estate & Properties (50.445). These figures suggest that these sectors are perceived as having substantial market value relative to their assets.

The Environmental scores range from 18.43 to 50.20 across sectors, with an F-value of 9.42, indicating statistically significant differences. This suggests that some sectors, likely the more sustainable ones, are adopting stronger environmental practices, including efforts to reduce emissions, manage waste, and improve resource efficiency. Sectors with lower environmental scores may be those in high-pollution industries like mining or fossil fuels, where environmental impacts are harder to mitigate (Radhouane et al. 2019). The wide range of scores points to the disparity in how different industries address environmental concerns, reflecting their unique operational challenges and regulatory pressures (Sandberg et al. 2023).

Social responsibility scores exhibit similar sectoral variation, ranging from 40.79 to 58.06, with the same F-value of 9.42. This indicates that sectors differ substantially in their handling of social issues such as labor practices, community engagement, and diversity (Carmen et al. 2022). Higher scores likely belong to sectors with robust corporate social responsibility programs, possibly in industries with high public visibility, like consumer goods or healthcare (Hichri & Ltifi, 2021). Lower-scoring sectors may struggle with issues related to labor-intensive supply chains or lack of community engagement. These results highlight the importance of social governance, particularly in industries that are closely scrutinized for human rights and workplace standards.

Governance scores range from 44.64 to 65.74, with an F-value of 10.48, the highest among the three individual ESG components. Kumar & Firoz (2022) mentioned that the reflection have a larger variation between sectors when it comes to corporate governance practices, including board structure, shareholder rights, and executive compensation. Sectors like finance, which are heavily regulated and scrutinized for governance issues, may score higher. In contrast, sectors with less stringent governance frameworks or where corporate scandals have occurred may score lower. The larger F-value suggests that governance practices vary more sharply between sectors compared to environmental or social performance.

The combined ESG scores, which integrate the Environmental, Social, and Governance factors, range from 37.47 to 56.36, with an F-value of 9.57. This value indicates that sectors differ significantly in their overall sustainability performance. Industries that score highly on all three pillars of ESG likely have more integrated and comprehensive approaches to sustainability (Ray & Goel, 2022). These sectors, possibly in sustainable finance, technology, or renewable energy, tend to align their environmental, social, and governance efforts cohesively. Lower-scoring sectors may face difficulties balancing all three components, reflecting the complexities in adopting broad ESG strategies across diverse industries.

However, Sensitive industry on ESG score which reflect sustainability standards specific to each industry, show the most variation, ranging from 0.00 to 56.28, with an exceptionally high F-value of 23.68. This suggests that certain sectors face much greater

pressures to adopt sustainability measures, likely due to more stringent regulatory environments or heightened stakeholder expectations. For instance, energy, manufacturing, or chemicals may have more rigid industry-specific sustainability standards compared to others like retail or services. The high F-value indicates that some sectors have made substantial progress in industry-specific sustainability, while others lag behind significantly (Badea et al., 2020; Iskandar, 2019; Pacelli et al., 2022).

6.3 DIAGNOSTIC TESTS

Diagnostic tests in regression analysis are essential for validating the assumptions underlying regression models, thereby ensuring their reliability and accuracy. These tests are critical for detecting potential issues that could compromise the model's validity. Consistent with the descriptive statistical analysis conducted earlier, diagnostic tests were applied to various datasets in this study. These datasets included the entire sample, data specific to Shariah-compliant companies, data from non-Shariah-compliant companies, and data segmented into periods before and after the COVID-19 pandemic.

6.3.1 Diagnostic Test Using The Whole Sample Data

6.3.1.1 Heteroscedasticity

The Modified Wald test is applied to detect heteroskedasticity, a condition where the variance of the errors varies across observations. Specifically, this test checks for groupwise heteroskedasticity, which examines whether the error variances are consistent across different groups or entities in the panel data (Liu et al., 2019; Jun Liu et al., 2022). In this study, the χ^2 statistic obtained is 13,413.60. This statistic, derived from the test, helps determine whether we can reject the null hypothesis. Given the extremely low p-value (0.00), we confidently reject the null hypothesis of homoskedasticity. This result provides strong evidence of groupwise heteroskedasticity in the fixed effect regression model, indicating that the error variances are not equal across the different groups examined (Juhl & Escudero, 2014; Kansil, 2021).

6.3.1.2 Multicollinearity

Based on the VIF values provided for Tobin's Q, ROA, and ROE regression models (see Table 6.7), there is no evidence of multicollinearity among the predictor variables. All VIF values are below the commonly used threshold of 5, indicating that the predictor variables are not highly collinear (Gujarati, D; Porter, 2013). Therefore, the regression models' estimates should be reliable, and the individual effects of each predictor can be interpreted with confidence.

Table 6.7 Multicollinearity Test for Diagnostic Test Using The Whole Sample Data

Variable	Tobin's Q	ROA	ROE
	VIF	VIF	VIF
E	1.99	1.99	1.99
S	2.16	2.17	2.17
G	1.38	1.39	1.39
ESG	1.99	2.06	2
SIND	2.1	2.13	2.1
FirmSize	2.04	2.06	2.05
Leverage	1.08	1.08	1.07
FirmAge	1.1	1.1	1.1
HHI	1.24	1.24	1.22
Munificence	1.23	1.22	1.22
Dynamism	1.14	1.13	1.14
Inflation	2.45	2.44	2.43
GDP	2.89	2.89	2.89

6.3.1.3 Autocorrelation

For Tobin's Q, the p-value is 0.178, which is greater than the common significance levels (0.01, 0.05, or 0.10). Based on the results of the Wooldridge test, we do not find evidence of first-order autocorrelation in the panel data model. This suggests that the error terms in the model are not serially correlated, which is a desirable property for the reliability of the regression results (Vogelsang, 2012). This result is also similar to ROA and ROE with the p-values of 0.6287 and 0.5036, respectively.

6.3.2 Diagnostic Test Using The Data from Shariah-Compliant Companies

6.3.2.1 Heteroscedasticity

The Breusch-Pagan/Cook-Weisberg test indicates the presence of heteroscedasticity in the residuals of the regression model with ROA as the dependent variable (Vogelsang, 2012; Juhl & Sosa-Escudero, 2014; Millo, 2021). This suggests that the variance of the errors is not constant across observations, which could compromise the efficiency of the estimators and the validity of the statistical inferences. To address this issue, robust standard errors or generalized least squares (GLS) can be considered to obtain reliable estimates. The p-values for Tobin's Q, ROA, and ROE are 0, which is significantly below typical significance levels, indicating that we reject the null hypothesis at a 5% significance level, confirming the presence of heteroscedasticity.

6.3.2.2 Multicollinearity

As shown in Table 6.8, all variables have VIF values below 5 for the Tobin's Q, ROA, and ROE regression models, indicating that multicollinearity is not a severe issue (Shrestha, 2020; Bayman & Dexter, 2021). Variables such as Inflation and GDP have VIF values around 3 which indicate moderate multicollinearity. Although these values are acceptable, they lie on the higher end of the acceptable range. Other variables like S, E, and Firm Size also show moderate multicollinearity with VIF values between 2 and 3. In contrast, variables such as Leverage, Firm Age, HHI, Munificence, and Dynamism have low VIF values close to 1, indicating very low multicollinearity. Therefore, the regression coefficients should be relatively stable and reliable. However, it is always practical to monitor for multicollinearity and consider alternative modeling approaches if VIF values increase in future analyses.

6.3.2.3 Autocorrelation

The Wooldridge test for autocorrelation in panel data checks for first-order autocorrelation. The null hypothesis (H0) of this test is that there is no first-order autocorrelation. For Tobin's Q, the F-statistic is 17.55 with a p-value of 0.00, leading us

to reject the null hypothesis. This result indicates significant evidence of first-order autocorrelation in the panel data. Similarly, for ROA, the F-statistic is 12.43 with a p-value of 0.00, indicating autocorrelation. However, for ROE, the F-statistic is 0.310 with a p-value of 0.58, suggesting no evidence of first-order autocorrelation. Thus, the presence of autocorrelation in the Shariah-compliant companies' database may vary across different datasets or models being tested.

6.3.3 Diagnostic Test Using The Data from Non-Shariah Compliant Companies

6.3.3.1 Heteroscedasticity

A huge chi-squared test statistic ($7.90E+08$) indicates a substantial deviation from what would be expected under the null hypothesis of homoscedasticity. The p-value is 0.0000, far below any conventional significance level (e.g., 0.01, 0.05, 0.10). This means we reject the null hypothesis of homoscedasticity at any common significance level. This result like the result for ROA and ROE. Since heteroskedasticity is present, standard errors of the coefficients might be biased, which can lead to invalid inference. Robust standard errors or other heteroskedasticity-consistent methods should be considered to correct this issue (Neto & Lima, 2014; Huang & Li, 2022).

6.3.3.2 Multicollinearity

As indicated in Table 6.8, SESG has the highest VIF value of 2.85 in the Tobin's Q model, which suggests no significant multicollinearity among the predictors. All VIF values are well below the threshold of 5, indicating that multicollinearity is not a concern in this model. For ROA and ROE, the SESG values are 3.23 and 3.13, respectively. Therefore, from the table, we can conclude that the VIF values for all three models (Tobin's Q, ROA, and ROE) are consistently below the threshold of 5. This indicates low multicollinearity among the independent variables in each model for non-Shariah-compliant firms. Consequently, the regression coefficients estimated in these models are reliable, and there is no need for corrective measures to address multicollinearity. The analysis suggests that the independent variables used in these

models for non-Shariah-compliant firms are not highly correlated, ensuring the stability and interpretability of the regression results (Daoud, 2018).

6.3.3.3 Autocorrelation

The Wooldridge test results indicate no significant first-order autocorrelation in the non-Shariah panel data on Tobin's Q, given that the p-value is more significant than 0.05. Hence, we can conclude that autocorrelation is not a concern for this dataset based on the Wooldridge test (Vogelsang, 2012). This result is similar to ROE with the p-value = 0.354, greater than 0.05. Furthermore, the decision rule on ROA is less than the typical significance level of 0.05. Therefore, for ROA, we should reject the null hypothesis. This result implies significant evidence suggesting first-order autocorrelation in the panel data.

Table 6.8 Multicollinearity Test for Diagnostic Test Using The Data From Shariah and Non-Shariah-Compliant Companies

Variable	Shariah			Non-Shariah		
	Tobin's Q	ROA	ROE	Tobin's Q	ROA	ROE
	VIF	VIF	VIF	VIF	VIF	VIF
E	2.2	2.21	2.22	1.9	1.91	1.89
S	2.41	2.44	2.42	2.19	2.23	2.17
G	1.35	1.36	1.35	1.55	1.6	1.58
ESG	1.92	1.94	1.96	2.64	2.8	2.65
SIND	1.96	2	2.05	2.85	3.23	3.13
FirmSize	2.11	2.15	2.15	2.02	1.97	2.04
Leverage	1.07	1.07	1.07	1.2	1.2	1.2
FirmAge	1.12	1.12	1.11	1.18	1.18	1.17
HHI	1.2	1.19	1.18	1.53	1.54	1.54
Munificence	1.25	1.25	1.25	1.32	1.34	1.34
Dynamism	1.16	1.15	1.16	1.37	1.36	1.38
Inflation	2.55	2.55	2.52	2.38	2.38	2.38
GDP	2.96	3	2.98	2.54	2.57	2.57

6.3.4 Diagnostic Test Using The Whole Data Before The Pandemic

6.3.4.1 Heteroscedasticity

The test results for Tobin's Q, ROA, and ROE strongly suggest the presence of unobserved heterogeneity in the data. This is due to the significant correlation between the unique errors and the regressors. Therefore, it is recommended to use the fixed effects model for more accurate and consistent estimates. The p-value is 0.0000, which is much less than 0.05. Thus, the null hypothesis is rejected.

6.3.4.2 Multicollinearity

Before the COVID-19 pandemic, the dataset shows that the VIF values for the variables were mainly below the threshold of 5, indicating no severe multicollinearity among the predictors (see Table 6.9). However, ESG and SESG show relatively higher VIF values but are still under the threshold of concern. There is moderate multicollinearity in variables like S, ESG, and SESG, which might not be immediately problematic but should be monitored, significantly if these values increase in future analyses.

6.3.4.3 Autocorrelation

The Wooldridge test results indicate a significant issue of first-order autocorrelation in the panel data for Tobin's Q. This suggests that the regression model's assumptions are violated, and corrective measures should be considered to improve the reliability and validity of the regression analysis. The F-statistic value for ROA is 11.687. This value measures the ratio of the model's explained variance to the unexplained variance and is used to determine the significance of the autocorrelation test. The p-value associated with the F-statistic is 0.0010. The p-value indicates the probability that the observed data would occur under the null hypothesis. We reject the null hypothesis since the p-value (0.0010) is much less than 0.05. In regard to the dataset with ROE, since the p-value (0.2029) is greater than 0.05, we fail to reject the null hypothesis. The absence of first-order autocorrelation means that the residuals are independent over time, satisfying one of the key assumptions of the regression model (Wang & Lam, 2020). This ensures

that the model's estimates are unbiased and efficient, and that the standard errors are correct, leading to valid hypothesis tests and confidence intervals (Nystrup et al., 2020)

6.3.5 Diagnostic Test Using The Whole Data After The Pandemic

6.3.5.1 Heteroscedasticity

The dataset after the pandemic shows that the dataset between ESG and corporate financial performance has heteroscedasticity. The chi-squared values are $1.30E+33$, $1.4E+33$, and $2.80E+32$, a huge value indicating a significant deviation from the null hypothesis. We reject the null hypothesis since the p-value (0.0000) is less than 0.05. This indicates strong evidence of heteroskedasticity in the data (Godfrey & Orme, 1999; Lewis, 2020). The presence of heteroskedasticity means that the variability of the residuals is not constant across observations. This can lead to inefficient estimates and invalid statistical tests due to incorrect standard errors.

6.3.5.2 Multicollinearity

Based on the results of multicollinearity on the dataset after the pandemic as in Table 6.9, Tobin's Q has the VIF for all the variables below 3, indicating low multicollinearity. The highest VIF is for Inflation (7.07) and GDP (6.45), below the critical value of 10, indicating acceptable multicollinearity levels. For ROA, VIF for Inflation (6.96) and GDP (6.32) are the highest but still below 10, indicating low to moderate multicollinearity. Furthermore, VIF values for E (8.53), S (18.16), and G (9.09) are high in ROE, especially for S, indicating severe multicollinearity, which might require attention. There are no major multicollinearity issues for Tobin's Q and ROA, as the VIF values are within acceptable limits. Meanwhile, ROE has significant multicollinearity issues, as indicated by the high VIF values for E, S, and G.

6.3.5.3 Autocorrelation

Given the p-value of 0.1953, greater than the standard significance level of 0.05, we fail to reject the null hypothesis. This indicates that there is no significant evidence of first-order autocorrelation in the panel data for Tobin's Q. This result implies that the model for Tobin's Q is well-specified in terms of autocorrelation, which is a crucial diagnostic to ensure the validity of the regression results. The p-value of ROA is 0.0001, which is less than the standard significance level of 0.05; we reject the null hypothesis. This indicates significant evidence of first-order autocorrelation in the panel data (Nystrup et al., 2020). Since there is no indication of autocorrelation, with a p-value of 0.7843, there is no need for further adjustments to the model to account for autocorrelation effects. The model can be considered appropriate for addressing autocorrelation for the ROE data.

Table 6.9 Multicollinearity Test for Diagnostic Tests Using the Whole Data Before and After the COVID-19 pandemic

Variable	Before			After		
	Tobin's Q	ROA	ROE	Tobin's Q	ROA	ROE
	VIF	VIF	VIF	VIF	VIF	VIF
E	1.85	1.84	1.83	2.34	2.34	8.53
S	2.39	2.38	2.36	2.44	2.46	18.16
G	1.62	1.61	1.61	1.31	1.33	9.09
ESG	2.91	2.96	2.85	1.19	1.2	1.85
SIND	2.97	2.96	2.93	1.86	1.86	1.9
FirmSize	1.25	1.26	1.27	2.14	2.15	2.17
Leverage	1.07	1.07	1.07	1.16	1.11	1.09
FirmAge	1.16	1.15	1.15	1.12	1.12	1.12
HHI	1.15	1.14	1.14	1.31	1.28	1.24
Munificence	1.37	1.39	1.38	1.54	1.45	1.68
Dynamism	1.21	1.21	1.21	1.46	1.4	1.51
Inflation	1.24	1.23	1.23	7.07	6.96	6.89
GDP	1.36	1.37	1.37	6.45	6.32	6.28

6.4 CORRELATION ANALYSES

The correlation matrix displayed provides a comprehensive view of the relationships between various financial performance indicators (ROA, ROE, Tobin's Q), ESG scores, firm-specific factors (Firm Size, Leverage, Firm Age), and external factors (HHI, Munificence, Dynamism, Inflation, GDP). The values in the matrix range from -1 to 1, indicating the strength and direction of the linear relationships between the variables (Brody et al., 1981; Shen & Chawla, 2001).

6.4.1 Correlation Analysis Using The Whole Sample Data

The correlation matrix provides a comprehensive view of how various financial performance metrics and ESG factors interact with firm characteristics and external economic indicators. ROA (Return on Assets) and ROE (Return on Equity), both measures of profitability, show a strong positive correlation (0.8242), suggesting that firms with higher asset efficiency also deliver better equity returns. However, these financial measures exhibit weak or slightly negative correlations with ESG factors, with ROA at -0.0605 and ROE at -0.0052, indicating that higher profitability does not necessarily align with more robust ESG performance.

Examining the ESG components—E (Environmental), S (Social), and G (Governance)—the matrix highlights strong internal correlations. For example, S and E are highly correlated (0.5692), implying that firms excelling in environmental sustainability are likely to score well in social dimensions. The ESG composite measure has a very strong correlation with S (0.8523) and E (0.7435), underscoring that firms committed to one ESG area tend to perform well across others. This suggests a cohesive ESG strategy within these firms, where improvements in one domain often align with progress in others.

Firm characteristics like FirmSize and Leverage demonstrate notable relationships with financial performance and economic conditions. FirmSize has a mild positive correlation with TobinsQ (0.1065), suggesting that larger firms may have slightly higher market valuations. Additionally, FirmSize is influenced by external

economic factors, as seen in its strong positive correlations with Inflation (0.4769) and GDP (0.5913). On the other hand, Leverage has a negative correlation with ROA (-0.3746), indicating that firms with higher debt levels tend to experience lower profitability, likely due to the financial burden of servicing debt.

Lastly, the external environment also impacts firm performance, as indicated by variables like Munificence and Dynamism. Munificence, which measures the abundance of resources in a firm's environment, is positively correlated with ROA (0.2523) and ROE (0.277), suggesting that firms operating in more resource-rich environments tend to perform better financially. In contrast, Dynamism, which reflects environmental volatility, has a weaker positive relationship with ROA (0.2216), implying that while firms can thrive in dynamic environments, the stability provided by a munificent environment may offer greater benefits to profitability.

6.4.2 Correlation Analysis Using The Data From Shariah-Compliant Companies

The correlation matrix shows the relationships between various financial performance measures, ESG factors, firm characteristics, and economic indicators. ROA (Return on Assets) and ROE (Return on Equity) exhibit a very strong positive correlation (0.8988), suggesting that firms that are more efficient with their assets tend to generate higher equity returns as well. However, the relationship between ROA, ROE, and ESG factors like E (Environmental), S (Social), and G (Governance) remains weak or slightly negative, indicating that higher profitability does not necessarily correspond with better ESG performance. For example, ROA has a weak negative correlation with ESG (-0.0407) and E (-0.0256), implying that firms with strong profitability might not prioritize environmental or sustainability aspects as much.

Within the ESG components, there are strong internal correlations, particularly between E and S (0.61), and ESG is highly correlated with both E (0.8015) and S (0.8466). This suggests that firms that perform well in one ESG area, such as environmental sustainability, are likely to do well in social and governance aspects too, indicating a cohesive approach to ESG initiatives. FirmSize shows moderate positive correlations with both TobinsQ (0.1808) and Inflation (0.4728), which suggests that

larger firms are more responsive to market valuation metrics and macroeconomic changes (Doğan, 2013; Rabbani et al., 2015; Dang et al., 2018; Bhat et al., 2023).. Additionally, FirmAge shows little correlation with profitability, suggesting that the age of a firm does not significantly impact its financial performance metrics (Baxter, 1967; Daruwala, 2023).

Macroeconomic factors like Inflation and GDP also demonstrate interesting relationships with firm characteristics. Inflation has a moderate positive correlation with FirmSize (0.4728) and GDP (0.7409), indicating that macroeconomic changes more influence larger firms and that these economic conditions affect the overall market environment (Alareeni, 2020a; R El Khoury, 2021; Shaikh, 2022). Munificence (0.359) and Dynamism (0.19) are positively correlated with ROA, indicating that firms in resource-rich and less volatile environments tend to perform better financially (Al Amosh et al., 2023; Aydoğmuş et al., 2022; Karolina et al., 2021; Sandberg et al., 2023). In contrast, Leverage has a negative correlation with both ROA (-0.4709) and ROE (-0.2406), showing that highly leveraged firms are less profitable and may face more financial strain due to debt servicing.

6.4.3 Correlation Analysis Using The Data From Non Shariah-Compliant Companies

This correlation matrix highlights the complex relationships between firm performance, ESG factors, and other firm characteristics. ROA (Return on Assets) and ROE (Return on Equity) exhibit a weak positive correlation (0.4335), indicating a mild connection between asset efficiency and equity returns (Sharairi, 2020; Behl et al., 2022b; Crace & Gehman, 2023).. However, ROA shows a stronger positive correlation with TobinsQ (0.5329), suggesting that firms with better asset performance also tend to have higher market valuations. Interestingly, ROA has negative correlations with G (Governance) (-0.1983) and FirmSize (-0.5557), indicating that larger firms or those with strong governance practices may experience lower asset efficiency.

The ESG factors, particularly E (Environmental), S (Social), and G (Governance), are highly interrelated, with a strong positive correlation between S and

ESG (0.8723) and between S and E (0.5433). This suggests that firms that perform well on social factors also tend to excel in environmental and overall ESG performance (Younis & Sundarakani, 2019); (Abdi et al., 2021). HHI (Herfindahl-Hirschman Index). However, the weak to negative correlation between ESG and financial performance metrics such as ROA (-0.0068) and ROE (0.0114) indicates that firms with high ESG scores may not necessarily have stronger financial outcomes. The negative correlation between FirmSize and ESG (0.1416) suggests that larger firms may have more difficulty achieving high ESG scores (Aras & Kazak, 2022).

Macroeconomic factors like Inflation and GDP also show varying relationships with firm characteristics. Inflation positively correlates with FirmSize (0.2905), indicating that larger firms are more sensitive to inflationary changes. On the other hand, GDP shows a significant positive correlation with FirmSize (0.4683), suggesting that larger firms are more affected by broader economic growth trends (Nguyen et al., 2022). However, GDP exhibits weak or negative correlations with profitability metrics like ROA (-0.1934) and ROE (-0.2512), implying that macroeconomic growth might not always translate into higher profitability for firms. Dynamism, which reflects market volatility, has a positive correlation with ROA (0.3133), showing that firms can still perform well in dynamic and unstable environments (Akhter et al., 2022; Dkhili, 2024).

6.4.4 Correlation Analysis Using The Whole Data Before The Pandemic

This correlation matrix provides insights into the relationships between key financial performance metrics, ESG factors, firm characteristics, and macroeconomic indicators. ROA and ROE show a strong positive correlation (0.7443), suggesting that firms with higher asset efficiency tend to generate stronger equity returns (Giannopoulos et al. 2022b). Additionally, TobinsQ, which measures market valuation relative to the firm's asset replacement cost, is also strongly correlated with both ROA (0.6892) and ROE (0.4722). These findings indicate that firms with better financial performance tend to be more highly valued by the market (Charles et al., 2023). However, ROA has negative correlations with ESG (-0.1167) and its components like G (Governance) -0.1935),

reflecting that firms with high profitability may not always prioritize strong governance practices or sustainability efforts.

The ESG factors, such as E, S, and G, are strongly correlated with each other, indicating that firms committed to one area of ESG tend to excel in others as well. For example, S has a strong positive correlation with both E (0.4515) and ESG (0.8408), demonstrating that firms with strong social responsibility also tend to have strong environmental and overall ESG performance (Liu et al. 2022). However, ROE and TobinsQ have weak or negative correlations with ESG, implying that high market valuations and strong equity returns do not necessarily align with high ESG performance. Additionally, the positive correlation between SIND (an index of social responsibility in industry) and ESG (0.8587) highlights the importance of industry-level social initiatives in driving overall ESG performance.

FirmSize shows an interesting negative correlation with ROA (-0.4055) and TobinsQ (-0.4842), suggesting that larger firms may face challenges in maintaining high profitability and market valuation relative to their smaller counterparts (Arifaj et al. 2023). Additionally, FirmSize shows a weak positive correlation with G (0.2456), indicating that larger firms may have more structured governance systems (Disli et al., 2022). However, the negative correlation between FirmSize and Leverage (-0.4279) indicates that larger firms tend to rely less on debt financing compared to smaller firms, which could affect their financial strategies and growth prospects (Dang & Tran, 2020). FirmAge is positively correlated with ROA (0.1652), implying that older firms may have better asset efficiency due to their experience and established operations.

Macroeconomic indicators such as Inflation and GDP also reveal important relationships with firm performance and characteristics. Inflation shows a positive correlation with both ROA (0.2344) and ROE (0.2444), suggesting that firms may perform better financially during inflationary periods. On the other hand, GDP shows a weaker correlation with ROA (0.1501) and ROE (0.1808), indicating that while economic growth influences firm performance, its effect may not be as pronounced. Interestingly, Munificence (resource availability in a firm's environment) has a negative correlation with ESG (-0.1891), suggesting that firms operating in resource-rich environments may prioritize financial performance over sustainability initiatives.

Overall, the matrix highlights the complex interplay between financial performance, ESG priorities, and macroeconomic factors in shaping firm behavior and outcomes.

6.4.5 Correlation Analysis Using The Whole Data After The Pandemic

The correlation matrix highlights the relationships between key financial performance metrics, ESG factors, and firm characteristics. ROA (Return on Assets) and ROE (Return on Equity) have a strong positive correlation (0.8929), showing that firms that are efficient in generating returns on their assets also tend to have higher returns on equity. Additionally, TobinsQ is positively correlated with both ROA (0.4497) and ROE (0.4056), indicating that firms with stronger financial performance are generally valued higher in the market. However, Leverage shows a negative correlation with both ROA (-0.3841) and ROE (-0.1648), suggesting that firms with higher debt levels tend to experience lower profitability, as leveraging impacts overall financial health.

The ESG factors, E (Environmental), S (Social), and G (Governance)—demonstrate strong internal correlations. S has a particularly strong positive correlation with both E (0.6505) and ESG (0.8791), implying that firms performing well on social aspects are likely to excel in environmental and governance practices too. ESG also shows positive correlations with ROA (0.11) and ROE (0.118), though these are not as strong, indicating that firms with higher ESG ratings may see some improvement in financial performance but not overwhelmingly so. SIND (industry social responsibility) is moderately correlated with ESG (0.6149), indicating that industry-level social responsibility can contribute significantly to a firm's overall ESG score.

Firm characteristics like FirmSize and Leverage exhibit interesting dynamics in the matrix. FirmSize has a positive correlation with TobinsQ (0.2753), suggesting that larger firms tend to have higher market valuations. FirmSize also correlates positively with E (0.2144) and S (0.1864), indicating that larger firms may be more likely to engage in environmental and social practices. However, the negative correlation between FirmAge and profitability measures like ROA (-0.0799) and ROE (-0.1169) suggests that older firms may face diminishing returns on their assets and equity over time. In terms of macroeconomic factors, Inflation and GDP are strongly correlated with FirmSize (Inflation: 0.7082, GDP: 0.6651), showing that larger firms are more exposed to changes in broader economic conditions.

Table 6.10 Correlation Analysis Using The Whole Dataset

	ROA	ROE	TobinsQ	E	S	G	ESG	SIND	FirmSize	Leverage	FirmAge	HHI	Munificence	Dynamism	Inflation	GDP
ROA	1															
ROE	0.8242	1														
TobinsQ	0.5142	0.4469	1													
E	-0.0352	-0.0463	0.0828	1												
S	-0.0396	-0.0094	0.0022	0.5692	1											
G	-0.0631	0.0057	-0.0692	0.1393	0.228	1										
ESG	-0.0605	-0.0052	0.0058	0.7435	0.8523	0.5715	1									
SIND	-0.0897	-0.0332	-0.0283	0.5635	0.6978	0.5084	0.8096	1								
FirmSize	0.031	0.1298	0.1065	0.0983	0.1003	0.0711	0.1379	0.1202	1							
Leverage	-0.3746	-0.0355	-0.0981	0.0138	-0.0165	0.0688	0.0404	0.05	0.0957	1						
FirmAge	0.0289	-0.0553	-0.0474	0.1041	0.0847	-0.0405	0.0619	0.0696	0.0733	-0.0856	1					
HHI	0.1031	0.2219	0.0103	-0.0417	0.1183	0.147	0.1271	0.1175	0.2354	0.2265	0.0422	1				
Munificence	0.2523	0.277	0.0529	-0.1244	-0.1822	0.0209	-0.1321	-0.0841	0.277	-0.0694	0.0344	0.2406	1			
Dynamism	0.2216	0.1148	0.0915	-0.0526	-0.0938	-0.0559	-0.1149	-0.0082	0.0134	-0.1163	0.0588	-0.0265	0.2234	1		
Inflation	0.2157	0.1993	0.1118	-0.0671	-0.0234	0.0912	0.0017	0.002	0.4769	-0.0562	0.1475	0.2199	0.2911	0.1594	1	
GDP	0.156	0.1563	0.0357	-0.0822	-0.0634	0.0189	-0.0563	-0.019	0.5913	-0.0972	0.0224	0.0731	0.3494	0.1221	0.7298	1

Table 6.11 Correlation Analysis Using The Data from Shariah-Compliant Companies

	ROA	ROE	TobinsQ	E	S	G	ESG	SIND	FirmSize	Leverage	FirmAge	HHI	Munificence	Dynamism	Inflation	GDP
ROA	1															
ROE	0.8988	1														
TobinsQ	0.4818	0.4393	1													
E	-0.0256	0.0092	0.0453	1												
S	-0.0527	0.0027	-0.0278	0.61	1											
G	-0.0311	0.0163	-0.0767	0.1954	0.2572	1										
ESG	-0.0407	0.0264	-0.0179	0.8015	0.8466	0.5894	1									
SIND	-0.0862	-0.0251	-0.0392	0.6277	0.6994	0.4957	0.8068	1								
FirmSize	0.1276	0.1387	0.1808	0.1442	0.1364	0.0802	0.1722	0.1677	1							
Leverage	-0.4709	-0.2406	-0.163	-0.0102	0.0011	0.0863	0.0444	0.0466	0.0086	1						
FirmAge	0.052	-0.0525	-0.0334	0.1337	0.1164	-0.0487	0.0771	0.0596	0.0961	-0.2039	1					
HHI	0.2225	0.2453	0.0658	0.0807	0.2335	0.1855	0.2258	0.1188	0.1785	-0.0423	0.0006	1				
Munificence	0.359	0.3523	0.1747	-0.0789	-0.1447	-0.0262	-0.099	-0.0441	0.2437	-0.1707	0.0238	0.2158	1			
Dynamism	0.19	0.1458	0.0522	-0.0614	-0.1434	0.0126	-0.0975	-0.0354	0.1056	-0.1472	0.0306	0.0573	0.3162	1		
Inflation	0.2445	0.2138	0.0991	-0.0783	-0.0419	0.0962	-0.0204	0.0099	0.4728	-0.1136	0.1489	0.2232	0.335	0.245	1	
GDP	0.1787	0.1415	0.0533	-0.0879	-0.07	0.0096	-0.0722	-0.0098	0.5511	-0.1334	0.0387	0.0747	0.3346	0.2079	0.7409	1

Table 6.12 Correlation Analysis Using The Data from Non-Shariah Compliant Companies

	ROA	ROE	TobinsQ	E	S	G	ESG	SIND	FirmSize	Leverage	FirmAge	HHI	Munificence	Dynamism	Inflation	GDP
ROA	1															
ROE	0.4335	1														
TobinsQ	0.5329	0.1115	1													
E	0.1352	0.1081	-0.0575	1												
S	0.0521	0.0608	-0.1638	0.5433	1											
G	-0.1983	-0.1407	-0.3575	0.1009	0.2056	1										
ESG	-0.0068	0.0114	-0.2635	0.6072	0.8723	0.6072	1									
SIND	-0.2386	-0.0217	-0.3512	0.4032	0.6542	0.5531	0.7668	1								
FirmSize	-0.5557	-0.0122	-0.4126	0.0406	0.0391	0.196	0.1416	0.1844	1							
Leverage	-0.0378	0.35	0.2356	-0.0202	-0.0484	-0.0989	-0.0867	0.024	-0.0057	1						
FirmAge	0.0301	0.0639	-0.002	0.0687	-0.1263	0.2656	0.0568	-0.0339	0.0668	-0.1041	1					
HHI	-0.0527	0.0166	-0.1119	0.0273	-0.0435	0.1351	0.0206	0.0635	0.0349	0.309	0.1403	1				
Munificence	-0.1429	0.0891	-0.1258	-0.0211	-0.2421	-0.0857	-0.2198	-0.1853	0.2527	0.1301	0.0542	0.3744	1			
Dynamism	0.3133	0.0147	0.358	-0.0627	-0.1373	-0.3218	-0.2934	-0.1528	-0.5164	0.1718	-0.051	-0.0328	-0.0544	1		
Inflation	-0.0195	-0.0821	-0.0858	0.027	0.0524	0.1044	0.0821	0.1037	0.2905	-0.0688	0.1758	0.2942	0.1302	-0.0931	1	
GDP	-0.1934	-0.2512	-0.0844	-0.0198	-0.0714	0.0379	-0.0178	-0.0057	0.4683	-0.1021	0.0648	-0.0083	0.102	-0.1228	0.5281	1

Table 6.13 Correlation Analysis Using The Whole Data Before Covid-19 Pandemic

	ROA	ROE	TobinsQ	E	S	G	ESG	SIND	FirmSize	Leverage	FirmAge	HHI	Munificence	Dynamism	Inflation	GDP
ROA	1															
ROE	0.7443	1														
TobinsQ	0.6892	0.4722	1													
E	-0.0642	-0.1116	-0.0082	1												
S	0.0341	-0.0231	0.0215	0.4515	1											
G	-0.1935	-0.0217	-0.2173	0.0096	0.1213	1										
ESG	-0.1167	-0.067	-0.1199	0.6421	0.8408	0.4931	1									
SIND	-0.1579	-0.0718	-0.0763	0.5655	0.681	0.518	0.8587	1								
FirmSize	-0.4055	0.0047	-0.4842	0.0749	0.0407	0.2456	0.1639	0.2812	1							
Leverage	-0.4279	-0.0205	-0.2491	-0.0308	-0.0471	0.0955	0.0292	0.0562	0.2333	1						
FirmAge	0.1652	0.0882	-0.0002	0.1144	0.0008	0.0285	0.041	0.0856	0.1481	-0.1251	1					
HHI	0.1084	0.197	0.0432	-0.0723	0.1805	-0.0464	0.0636	0.0681	0.2147	0.1115	0.0552	1				
Munificence	0.1416	0.1889	0.0129	-0.1673	-0.2361	0.0247	-0.1891	-0.1455	-0.0012	-0.0496	0.0478	0.0561	1			
Dynamism	0.1715	0.0107	0.1505	-0.1911	-0.202	-0.177	-0.2999	-0.1582	-0.2217	-0.1373	0.0911	-0.0578	0.1539	1		
Inflation	0.2344	0.2444	0.1141	-0.069	0.0102	0.0857	0.0137	0.0568	-0.0059	-0.0167	0.1767	0.2119	0.1018	0.0145	1	
GDP	0.1501	0.1808	0.0797	-0.116	-0.1786	0.1148	-0.1057	-0.0026	0.0008	-0.0216	0.0121	0.0292	0.2844	0.0439	0.4432	1

Table 6.14 Correlation Analysis Using The Whole Data After Covid-19 Pandemic

	ROA	ROE	TobinsQ	E	S	G	ESG	SIND	FirmSize	Leverage	FirmAge	HHI	Munificence	Dynamism	Inflation	GDP
ROA	1															
ROE	0.8929	1														
TobinsQ	0.4497	0.4056	1													
E	0.0598	0.0568	0.1545	1												
S	0.0552	0.067	0.0147	0.6505	1											
G	0.1217	0.1073	-0.0249	0.1795	0.3021	1										
ESG	0.11	0.118	0.0774	0.7895	0.8791	0.595	1									
SIND	-0.0739	-0.033	-0.0874	0.5204	0.5318	0.3622	0.6149	1								
FirmSize	0.0714	0.1073	0.2753	0.2144	0.1864	-0.0069	0.1983	0.1981	1							
Leverage	-0.3841	-0.1648	-0.0798	0.0165	-0.0223	-0.0332	-0.0058	0.0877	0.1179	1						
FirmAge	-0.0799	-0.1169	-0.1213	0.0495	0.0702	-0.0297	0.0421	0.0686	0.1377	-0.0664	1					
HHI	0.0039	0.102	-0.071	0.0876	0.0806	0.1654	0.1489	0.3072	0.187	0.1769	0.0509	1				
Munificence	0.2624	0.2195	0.1264	0.0718	0.015	0.0653	0.0817	0.0152	0.225	-0.0947	0.0737	0.1881	1			
Dynamism	0.1522	0.1085	0.0688	0.1034	0.0113	0.0258	0.0369	0.1795	0.1854	0.007	0.0735	0.2088	0.383	1		
Inflation	0.1497	0.1127	0.1481	0.0663	0.0601	0.021	0.0751	0.075	0.7082	-0.0432	0.1417	0.1358	0.3357	0.3325	1	
GDP	0.1196	0.0907	0.0785	0.0337	0.0297	-0.0043	0.0271	0.1048	0.6651	-0.0929	0.1152	0.052	0.3925	0.2921	0.8938	1

6.5 HYPOTHESES TESTING

In the methodology chapter of the study, we discussed the objective of exploring the relationship between ESG scores of Shariah-compliant companies in Indonesia and Malaysia and their CFP. To facilitate this investigation, we constructed five regression models to analyze the impact of various independent variables on the market performance (Tobin's Q). Model 1 applies regression analysis to the entire dataset. Model 2 focuses exclusively on data from Shariah-compliant companies, while Model 3 analyzes data from non-Shariah-compliant companies. Models 4 and 5, respectively, examine data from periods before and after the COVID-19 pandemic. The outcomes of these analyses are detailed in Table 6.15, where we present regression coefficients, standard errors (shown in parentheses), and significance levels, highlighted by asterisk notations: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ for each model. This structured approach allows for a nuanced understanding of how various factors influence ROE among different groups and periods.

6.5.1 The Impact of ESG on Corporate Financial Performance Using Whole Sample

As indicated in Table 6.15 below, findings from the regression analysis in Model 1 reveal several significant relationships between the independent variables and ROE. Specifically, environmental, social, and governance scores, firm size, leverage, HHI, and munificence (as a control variable) show significant negative relationships with ROE. Firstly, the environmental score (E) indicates a coefficient of 0.40, suggesting a positive relationship with Tobin's Q. However, this relationship is not statistically significant (t-value of -1.10), implying that the environmental score does not significantly impact firm value in this model. Next, the social score (S) has a coefficient of 1.15, which is significant at the 10% level (t-value of 1.92). This finding suggests that better social performance is associated with higher Tobin's Q, indicating that firms with higher social scores tend to have higher market valuations (Shaikh, 2021a; Aydoğmuş et al., 2022; Al Amosh et al., 2023). The governance score (G) shows a coefficient of 0.58, but this is not statistically significant (t-value of 1.38). This implies that the governance score does not have a clear impact on Tobin's Q in this model. For the overall ESG scores, the coefficient is -1.78, indicating a negative relationship with

Tobin's Q. However, this relationship is not statistically significant (t-value of -1.43). Thus, the overall ESG score does not have a significant effect on firm value. The SESG score also does not significantly influence Tobin's Q, with a coefficient of -0.20, which is not statistically significant (t-value of -1.03).

Table 6.15 Regression Result

Tobin's Q	Model 1	Model 2	Model 3	Model 4	Model 5
E	0.40	0.10	-0.01	2.11**	0.47
	-1.10	-0.10	(-0.133)	-2.17	-0.58
S	1.15*	0.57	-0.05	1.15*	0.66
	-1.92	-0.86	(-1.01)	-1.75	-1.25
G	0.58	-2.52	0.07	-3.00	-1.71
	-1.38	(-1.05)	-0.55	(-1.27)	(-0.95)
ESG	-1.78	0.11	-0.03	0.18	0.19
	(-1.435)	-0.14	(-1.14)	-0.33	-0.35
SIND	-0.20	1.26*	0.00	-0.43	-0.64
	(-1.035)	-1.74	(-0.06)	(-0.33)	(-1.08)
FirmSize	1.15	-1.62	-0.18**	-7.70	-1.69***
	-1.23	(-1.59)	(-2.26)	(-0.55)	(-4.75)
Leverage	-4.41	-4.80	0.07	-5.22	5.06
	(-1.38)	(-0.60)	-0.32	(-0.62)	-0.94
FirmAge	-0.37***	3.30**	0.00	-5.01**	-9.70**
	(-2.78)	-2.17	(-0.00)	(-2.01)	(-2.01)
HHI	-11.29	118.87	11.31	-59.81	-62.73
	(-0.30)	-0.88	-0.75	(-0.33)	(-0.75)
Munificence	-540.35	-214.20	27.62	-704.76**	-22.87
	(-1.61)	(-0.86)	-1.20	(-2.15)	(-0.12)
Dynamism	3188.90***	295.61	18.98	54.32	-1205.64*
	-2.95	-0.30	-0.21	-0.04	(-1.94)
Inflation	15.28***	4.29	-0.05	-1.63	2.19
	-5.28	-1.52	(-0.28)	(-0.48)	-1.21
GDP	-0.03	-0.33	0.13	-1.90	2.62***
	(-0.01)	(-0.28)	-1.62	(-0.3206)	-2.90
Cons	-46.36**	-75.83	2.63	448.76	474.59**
	(-2.12)	(-1.26)	-0.48	-1.45	-2.37
Obs.	1213.00	850.00	360.00	627.00	575.00
R-Square	0.05	0.03	0.05	0.04	0.10
F-Stat.	4.75	1.31	1.12	1.53	2.85
F(p)	0.00	0.20	0.34	0.10	0.00

Notes: * p<0.05, ** p<0.01, *** p<0.001

In Model 1, firm-level control variables such as leverage and firm age exhibit negative and significant relationships with Tobin's Q, with coefficients of -4.41 and -0.37, respectively. Conversely, firm size shows a positive and statistically significant relationship. At the industry level, the Herfindahl-Hirschman Index (HHI) and munificence show negative but insignificant relationships. However, dynamism, with a coefficient of 3188.90, is statistically significant at the 1% level, indicating that higher dynamism is associated with higher Tobin's Q. Inflation also significantly affects market performance, with higher inflation rates correlating with higher Tobin's Q. GDP did not show a significant correlation and was negatively insignificant with the dependent variable. To conclude, the model indicates a negative and statistically significant relationship at the 5% level.

6.5.2 The Impact of ESG on The Financial Performance of Shariah-Compliant Companies

Table 6.15 also presents the regression model 2, which examines the impact of ESG on the financial performance of Shariah-compliant companies. The findings from the regression analysis in Model 2 indicate that the sensitive ESG score (SESG) is positively associated with Tobin's Q at the 10% significance level, suggesting that firms with higher sensitive ESG scores tend to have higher market valuations (Sani et al. 2020). Firm age is also positively associated with Tobin's Q at the 5% significance level, indicating that older firms tend to be valued higher (Jung et al. 2022). However, most other variables, including environmental, social, and governance scores and economic indicators, do not significantly impact Tobin's Q in this model. The R-squared value of 0.0252 indicates that the model explains about 2.5% of the variance in Tobin's Q, suggesting that other factors not included in the model may also influence firm value.

For the environmental score (E) and financial performance, the coefficient for E is 0.1026, indicating a positive relationship with Tobin's Q. However, this coefficient is not statistically significant (t-value of -0.10), implying that the environmental score does not significantly impact firm value in this model. The social score (S) has a coefficient of 0.57, which is not statistically significant (t-value of -0.86), suggesting the social score does not significantly influence Tobin's Q. Similarly, the governance

score (G) has a coefficient of -2.52, which is not statistically significant (t-value of -1.05), indicating that the governance score does not clearly impact Tobin's Q in this model. The overall ESG score has a coefficient of 0.1093, indicating a positive relationship with Tobin's Q, but this is not statistically significant (t-value of -0.14). Thus, the overall ESG score does not significantly affect firm value. However, the sensitive ESG score (SESG) is significant at the 10% level with a coefficient of 1.26 (t-value of -1.74), suggesting that a higher specific ESG score is associated with a higher Tobin's Q, indicating that firms with higher specific ESG scores tend to have higher market valuations.

Firm size and leverage, as control variables, show a negative and statistically insignificant relationship with Tobin's Q, indicating that these factors do not have a significant impact on Tobin's Q for Shariah-compliant companies. Similarly, industry-level factors such as the Herfindahl-Hirschman Index (HHI) and Dynamism show positively insignificant differences, while Munificence is negatively insignificant to Tobin's Q. Inflation and GDP also imply no significant influence on Tobin's Q. These results suggest that the financial performance, as measured by Tobin's Q, is influenced by specific ESG scores and firm age, while other factors included in the model do not show significant associations.

6.5.3 The Impact of ESG on The Financial Performance of Non-Shariah-Compliant Companies

The regression analysis of non-Shariah compliant companies' data is presented in Model 3, where the dependent variable is Tobin's Q, a measure of firm value (see Table 6.15). This model includes a similar set of independent variables as Model 2, but uses a different subset of observations or possibly different model specifications.

For the environmental score (E), the coefficient is -0.01, indicating a very weak negative relationship with Tobin's Q. However, this coefficient is not statistically significant (t-value of -0.13), implying that the environmental score does not significantly impact firm value in this model. The social score (S) has a coefficient of -0.05, which is also not statistically significant (t-value of -1.01), suggesting that the

social score does not significantly impact Tobin's Q. Similarly, the governance score (G) has a coefficient of 0.07, which is not statistically significant (t-value of -0.55), indicating that the governance score does not clearly impact Tobin's Q in this model. The combined ESG score, with a coefficient of -0.03, indicates a weak negative relationship with Tobin's Q, but this relationship is not statistically significant (t-value of -1.14). Thus, the overall ESG score does not significantly affect firm value. The sensitive industry on ESG score (SESG) also does not significantly influence Tobin's Q, as indicated by the t-value of -0.06.

The coefficient for firm size is -0.18, which is significant at the 5% level (t-value of -2.26). This indicates that larger firm size is associated with a lower Tobin's Q, suggesting that smaller firms may be valued higher in the market relative to their size (D'Amato et al., 2021; Drnevich & West, 2023). Firm age, on the other hand, shows a negatively insignificant relationship with market performance. HHI, Munificence, and Dynamism together have positive but not significant impacts on Tobin's Q.

Overall, Model 3 shows that most variables, including environmental, social, and governance scores, as well as economic indicators, do not significantly impact Tobin's Q. The only significant variable in this model is firm size, which has a negative relationship with Tobin's Q, suggesting that larger firms tend to have lower market valuations relative to their size. The R-squared value of 0.05 indicates that the model explains about 4.8% of the variance in Tobin's Q, which is slightly higher than in Model 2, but still relatively low, suggesting that other factors not included in the model may also influence firm value.

6.5.4 The Impact of ESG on The Corporate Financial Performance Before and After The Covid-19 Pandemic

The impact of ESG on corporate financial performance before and after the COVID-19 pandemic is presented in Model 4 and Model 5, respectively, as shown in Table 6.15. The regression analysis reveals that the Environmental score (E) has a coefficient of 2.1075, which is statistically significant at the 5% level (t-value of -2.1678). This indicates a positive relationship between environmental scores and Tobin's Q,

suggesting that firms with higher environmental scores tend to have higher market valuations (Gonçalves et al., 2023; Dohrmann et al., 2024). Similarly, the Social score (S) has a coefficient of 1.1455, which is statistically significant at the 10% level (t-value of -1.7487), indicating that firms with better social performance are valued higher in the market. However, the Governance score (G) has a coefficient of -2.9967, which is not statistically significant (t-value of -1.2705), implying that governance scores do not clearly impact Tobin's Q in this model. The combined ESG score has a coefficient of 0.184, but this is not statistically significant (t-value of -0.3288), and similarly, SESG has a coefficient of -0.4292, which is also not statistically significant (t-value of -0.3312). These results suggest that the overall ESG score and specific ESG score do not significantly affect firm value in this model.

Regarding control variables, firm size, leverage, and age negatively impact market performance but are statistically insignificant, with coefficients of -7.696, -5.2196, and -5.0123, respectively. Additionally, all industry-level variables negatively affect market performance in non-Shariah-compliant companies, except for dynamism, which shows no significant impact. There are also negative correlations between Inflation and GDP in this model.

In summary, Model 4 indicates that environmental and social scores have significant positive relationships with Tobin's Q, implying that better environmental and social performance are associated with higher firm valuations (Xie, 2018; Gull et al., 2022; Boulhaga et al., 2023). However, the governance score, overall ESG score, and specific ESG score do not significantly impact Tobin's Q. Furthermore, firm age shows a significant negative relationship with Tobin's Q, indicating that older firms tend to have lower market valuations (Putri & Rachmawati, 2018; Lambey, 2021). Munificence also has a significant negative impact, suggesting that firms in more resource-rich environments may have lower market valuations. The R-squared value of 0.0365 indicates that the model explains about 3.7% of the variance in Tobin's Q, implying that other factors not included in the model may also influence firm value.

Futhermore, in Model 5, the regression analysis explores the impact of ESG scores on Tobin's Q, a measure of firm value. The analysis indicates that environmental scores do not clearly impact Tobin's Q, with a coefficient value of 0.4708 and a non-

significant t-value of -0.5767. Similarly, social scores have a coefficient of 0.6605, which is not statistically significant (t-value of -1.2462), suggesting no significant influence on Tobin's Q. The governance score shows a coefficient of -1.7073, again not statistically significant (t-value of -0.9490), implying no significant effect on Tobin's Q. The overall ESG score has a coefficient of 0.1904, but this is not statistically significant (t-value of -0.352), indicating no significant impact on firm value. Additionally, the Sensitive ESG score (SESG) has a coefficient of -0.6371, which is not statistically significant (t-value of -1.0750), suggesting no significant influence on Tobin's Q.

Firm size has a coefficient of -1.6872, which is statistically significant at the 1% level (t-value of -4.7539), indicating a negative relationship with Tobin's Q. This suggests that larger firms tend to have lower market valuations (Ibrahim, 2017; Carpenter et al., 2021; Cooper & Lambertides, 2023). Furthermore, firm age shows a significant negative relationship with Tobin's Q, with a coefficient of -9.7028, statistically significant at the 5% level (t-value of -2.0114). This indicates that older firms tend to have lower market valuations. Leverage does not impact market performance, and the industry-level variables (HHI, Munificence, and Dynamism) also do not significantly affect Tobin's Q in the dataset after the pandemic. GDP and Inflation, however, are positively significant, with values of 2.6225 and 2.1898, respectively. The constant term is 474.5863, statistically significant at the 5% level (t-value of -2.3711), indicating a considerable baseline level of Tobin's Q when all other variables are zero.

The post-pandemic dataset reveals that firm size and firm age have significant negative relationships with Tobin's Q, indicating that larger and older firms tend to have lower market valuations (Chittenden et al., 1996; Bauman et al., 1998; Sampson & Shi, 2023). Dynamism also has a significant negative impact, suggesting that firms in more dynamic environments may have lower market valuations (Clarke, 2016; Petrus, 2019). Conversely, GDP has a significant positive relationship with Tobin's Q, indicating higher GDP levels are associated with higher firm valuations. Despite these findings, environmental, social, governance, and overall ESG scores do not significantly impact Tobin's Q in this model. The R-squared value of 0.0987 indicates that the model

explains about 9.87% of the variance in Tobin's Q, suggesting that other factors not included in the model may also influence firm value.

6.6 ROBUSTNESS TEST

As indicated in the methodology chapter, robustness tests were performed to ensure the reliability of the regression results. These tests specifically examined Return on Assets (ROA) and Return on Equity (ROE) as key financial performance metrics to help ensure that the findings remained stable and reliable across various scenarios and measurement techniques. Table 6.16 at the end of the section presents the results of five regression models, each assessing the impact of various independent variables on ROA and ROE. In Model 1, E (Environmental score) shows a negative but statistically insignificant effect on both ROA and ROE (Iwata & Okada, 2011; Manrique & Martí-Ballester, 2017; Sichigea et al., 2020; Gangi et al., 2020). S (Social score) significantly negatively affects ROE at the 1% level. G (Governance score) negatively impacts ROE significantly. ESG (combined Environmental, Social, and Governance score) has a significant positive effect on ROE. SESG (Sensitive ESG) negatively impacts both ROA and ROE significantly. Firm Size shows an insignificant effect on both ROA and ROE. Leverage negatively affects ROA significantly and positively affects ROE. Firm Age has a negligible and mostly insignificant impact. Munificence, Dynamism, Inflation, and GDP show varying degrees of influence, with Inflation showing a significant positive effect on both ROA and ROE.

Model 2 continues with E showing no significant impact, while S has a considerable positive effect on ROE. G's influence remains insignificant. ESG remains insignificant, but SESG still indicates a significant negative impact on ROE. Firm Size and Leverage's effects are consistent with Model 1. Munificence shows a considerable positive impact on both ROA and ROE. Dynamism has a significant positive effect on ROA. The impact of inflation remains positive but insignificant on ROA.

Model 3 sees E negatively and significantly impacting ROE, while S's effect turns insignificant. G's influence remains non-significant. ESG's impact is mixed but mostly insignificant, while SESG shows a significant positive effect on ROA. Leverage

significantly negatively impacts ROA and positively impacts ROE. Munificence's effect is positive and significant on ROA. Dynamism significantly positively affects ROA.

Model 4 shows no significant impact of E, while S positively and significantly affects ROA. G and ESG's impacts remain mostly non-significant. SESG negatively impacts ROE significantly. Firm Size shows no significant effect. Leverage's impact is positive on ROE. Munificence shows a significant positive effect on ROA, while Dynamism has a significant positive impact on ROA.

Model 5 shows E's negative but insignificant impact on ROA and ROE. S negatively impacts both significantly. G's influence remains non-significant. ESG's effect is positive and significant on ROA. SESG has a significant negative impact on ROE. Firm Size shows no significant effect. Leverage positively impacts ROE significantly. Munificence has a significant positive effect on ROA and ROE, and Dynamism shows a significant positive impact on ROA.

Across all models, key factors like SESG and Leverage demonstrate consistent significant impacts, with SESG mostly negatively affecting performance metrics and Leverage showing a mixed influence (Qureshi, 2020; Kumari et al., 2022). Munificence and Dynamism often show significant positive effects, highlighting the importance of resource availability and environmental change rate on firm performance (Mooneepen et al., 2022; Shaikh, 2021a; Yang, 2022). The results underline the complexity of the relationships between these variables and firm performance indicators like ROA and ROE.

Table 6.16 Robustness Test

<i>Variables</i>	Model 1		Model 2		Model 3		Model 4		Model 5	
	<i>ROA</i>	<i>ROE</i>	<i>ROA</i>	<i>ROE</i>	<i>ROA</i>	<i>ROE</i>	<i>ROA</i>	<i>ROE</i>	<i>ROA</i>	<i>ROE</i>
E	0.00	-0.0008*	0.00	0.00	0.00	-0.0015**	0.00	0.00	0.00	0.00
	(-0.4591)	(-1.7943)	-0.92	-1.57	(-1.4210)	(-2.1692)	-0.43	(-1.0795)	(-1.0404)	(-0.5769)
S	0.00	-0.0016***	0.00	0.0029**	0.00	0.00	0.0011*	0.00	-0.0045**	0.00
	-0.30	(-4.4318)	-1.62	-2.09	(-0.7417)	(-0.2312)	-1.87	(-0.6420)	(-2.4120)	(-1.1701)
G	0.00	-0.0014**	0.00	0.0021*	0.00	0.00	0.00	0.00	0.00	0.00
	(-0.8556)	(-2.4367)	-1.24	-1.80	(-1.1407)	(-1.0258)	-1.13	(-0.6864)	(-1.5519)	(-0.4774)
ESG	0.00	0.0079***	0.00	-0.01	0.00	0.01	0.00	0.01	0.0064*	0.01
	-1.74	-4.10	(-1.0783)	(-1.4864)	-0.53	-1.20	(-0.5790)	-1.36	-1.67	-1.37
SIND	-0.0011***	-0.0030***	0.00	0.00	0.0014**	0.00	0.00	-0.0037*	0.00	-0.0070**
	(-4.1832)	(-3.6341)	(-0.7743)	(-1.4834)	-2.14	(-1.1146)	(-1.5178)	(-1.7313)	-0.76	(-2.0675)
FirmSize	0.00	0.00	0.00	0.00	0.00	0.01	-0.0420*	-0.03	0.00	0.00
	(-1.1896)	(-1.3049)	(-0.5013)	(-0.7932)	-0.24	-1.40	(-1.9334)	(-1.0970)	-1.00	-0.90
Leverage	-0.0065*	0.0259*	-0.0275***	-0.02	-0.0088*	0.0739***	-0.01	0.03	-0.01	0.0542**
	(-1.9499)	-1.84	(-3.1562)	(-0.8213)	(-1.9548)	-3.94	(-0.8590)	-0.54	(-1.2332)	-2.35
FirmAge	0.00	0.0008***	0.00	0.00	-0.01	-0.02	-0.0031*	0.00	0.01	-0.01
	-1.10	-4.70	(-1.5988)	(-0.0789)	(-1.6159)	(-1.4552)	(-1.9802)	(-1.0180)	-0.34	(-0.2744)
HHI	0.03	0.11	-0.01	-0.09	0.09	-0.9512*	0.00	-0.12	-0.03	-0.41
	-0.84	-1.35	(-0.0880)	(-0.3082)	-0.35	(-1.7734)	(-0.0264)	(-0.3393)	(-0.1581)	(-0.7109)
Munificence	-0.02	0.32	0.4598***	0.7943**	0.03	-0.23	0.3863**	0.67	1.0441***	3.1748***
	(-0.0949)	-0.49	-2.69	-2.19	-0.10	(-0.1716)	-2.20	-0.95	-2.77	-2.76

	Model 1		Model 2		Model 3		Model 4		Model 5	
<i>Variables</i>	<i>ROA</i>	<i>ROE</i>	<i>ROA</i>	<i>ROE</i>	<i>ROA</i>	<i>ROE</i>	<i>ROA</i>	<i>ROE</i>	<i>ROA</i>	<i>ROE</i>
Dynamism	3.5110***	3.4383*	1.0699*	2.43	3.2515**	10.6864**	0.97	2.12	-0.05	-1.55
	-6.83	-1.81	-1.81	-1.46	-2.38	-2.24	-1.48	-0.87	(-0.0314)	(-0.3883)
Inflation	0.0099***	0.0140***	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00
	-4.63	-3.55	-0.91	-0.92	-0.88	-0.96	-0.32	-1.39	(-1.1501)	-0.52
GDP	0.00	0.00	0.00	0.00	0.00	-0.0065*	0.00	0.00	0.00	0.00
	(-1.4274)	-0.50	-1.40	-1.17	(-0.8359)	(-1.7583)	-0.13	(-0.7652)	-0.17	-0.09
_cons	0.0695*	0.02	0.1612***	0.17	0.2843*	0.8709*	1.1260**	1.0033*	-0.18	0.47
	-1.87	-0.32	-2.93	-1.25	-1.76	-1.89	-2.49	-1.92	(-0.2439)	-0.35
Obs.	1215.00	1218.00	849.00	856.00	359.00	359.00	632.00	631.00	575.00	578.00
R-Square	0.16	0.13	0.21	0.09	0.22	0.23	0.27	0.07	0.13	0.14
F-Stat.	75017.53	37170.00	5.87	4.43	3.12	12.50	3.65	4.33	2.13	2.88
F(p)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00

6.7 SUMMARY OF THE KEY FINDINGS

We conclude this section by summarizing all the findings in the Table 6.17 below. Each of our formulated hypotheses was tested by assessing the probability of the statistical null hypothesis to hold genuine (no relationship between variables). If said p-value is below 1%, we reject the null hypothesis and confirm a statistical relationship.

Table 6.17 Hypothesis Testing Summary of The Tobin's Q

Panel	1: Full sample	2: Shariah-compliant companies	3: Non-Shariah compliant	4: Before the Pandemic	5: After the Pandemic
<i>Hypothesis</i>	<i>Result & Sign</i>	<i>Result & Sign</i>	<i>Result & Sign</i>	<i>Result & Sign</i>	<i>Result & Sign</i>
H1	.....	.....	.....	Supported (+)	.....
H2	Supported (+)	.....	.....	Supported (+)	.....
H3	.....	.....	.....	.....	.....
H4	.....	.....	.....	.....	.....
H5	.....	Supported (+)	.....	.....	.....

The Table provides a summary of hypothesis testing results across different panels: the full sample, Shariah-compliant companies, and non-Shariah-compliant companies, before the pandemic and after the pandemic. For Hypothesis 1, the relationship between E score and Tobin's Q shows support with a positive sign before the pandemic but no significant findings in other panels. Hypothesis 2, S score, and Tobin's Q are supported with a positive sign in the whole sample and before the pandemic panels, indicating a consistent positive relationship across these groups. There is no relationship between the G score and the combined ESG score with Tobin's Q, which are for hypotheses 3 and 4. Hypothesis 5 finds support with a positive sign in the Shariah-compliant company's panel. The Table highlights the variability in hypothesis support across different contexts and periods, suggesting that the impacts of the tested variables may differ based on specific conditions such as compliance with

Shariah principles or the timing relative to the pandemic (Lee & Isa, 2020c; Rahmaningsih, 2022; Qoyum et al., 2022; Rabbani et al., 2021; Laronde et al., 2022).

Table 6.18, as a robustness result test presents the results of testing five hypotheses (H1 to H5) across multiple models, each focusing on two financial performance indicators: ROA (Return on Assets) and ROE (Return on Equity). The results for each hypothesis show whether it is supported, and if supported, whether the relationship is positive (+) or negative (-). This approach helps understand how different variables affect financial performance, as indicated by the respective hypotheses. For H1, E score and CFP results are reported in Models 2 and 4 for ROE. In both models, the hypothesis is supported by a negative relationship. This means that the variables tested under H1 are related to lower returns on equity, suggesting that certain factors negatively impact profitability as measured by ROE. No results are provided for ROA or other models, indicating that the focus of this hypothesis was primarily on ROE. Thus, the key takeaway is that H1 is valid when analyzing its effect on ROE but with a negative effect on financial performance in these two models.

Hypothesis 2, which explains the relationship between S score and corporate financial performance, shows positive and negative relationships across different models and financial indicators. In Model 2, the S score and financial performance hypothesis is supported with a negative relationship to ROE, suggesting that certain variables negatively impact equity returns. However, in Model 3, the hypothesis is supported with a positive relationship to ROE, showing a contrasting effect. Moving to Model 4, the relationship between the S score is positively supported for ROA, indicating that the variables tested positively affect asset returns. Finally, in Model 5, hypothesis 2 is supported with a negative relationship to ROA, meaning it negatively impacts asset returns in that specific model. The variation in the direction of relationships (positive or negative) indicates that the factors influencing ROA and ROE can have different effects depending on the model or context, making H2 both complex and multifaceted.

For hypothesis 3, the relationship between G score and corporate financial performance, results are reported in Model 2 and Model 3, and the hypothesis shows different relationships across these models. In Model 2, hypothesis 3 is supported with a negative relationship to ROE, indicating a negative impact on equity returns.

However, in Model 3, H3 is supported with a positive relationship to ROE, suggesting the opposite effect, with variables contributing positively to returns on equity in that model. This divergence highlights that H3 is context-dependent, with the relationship between the tested variables and ROE varying across models. In addition, the relationship between combine ESG and corporate financial performance as hypothesis 4 shows positive support in two instances. Model 2 is supported with a positive relationship to ROE, meaning that the tested factors positively affect equity returns. Similarly, in Model 5, hypothesis 4 is supported with a positive relationship to ROA, suggesting that these factors also positively influence asset returns in this model. Both results indicate that H4 has a favorable impact on financial performance, regardless of whether ROE or ROA measures it, but this relationship is only reported in these specific models.

Last but not least, the relationship between sensitive industry on ESG score and corporate financial performance presents a mix of negative and positive relationships across models and financial indicators. Model 1 is supported by a negative relationship for both ROA and ROE, indicating that the variables tested under H5 negatively impact both asset and equity returns. In Model 2, the hypothesis is also negatively supported for ROE, further confirming the negative impact on equity returns. However, in Model 3, hypothesis 5 is supported with a positive relationship to ROA, indicating a positive effect on asset returns in that model. Finally, in Model 4 and Model 5, hypothesis is again supported with a negative relationship for ROE and ROA, respectively. Overall, H5 generally shows a negative impact on financial performance, with the exception of Model 3, where it has a positive effect on ROA.

Therefore, it can be conclude that the results highlight the varying effects of the hypotheses on ROA and ROE across different models. Hypothesis 1 and hypothesis 5 largely show negative relationships, indicating that the tested factors often reduce financial performance. Hypothesis 2 and hypothesis 3 show mixed results, with both positive and negative relationships depending on the model, reflecting the complexity of the relationships between variables and financial outcomes. H4 consistently shows positive support, suggesting a favorable impact on financial performance in the specific models where it is tested. These results underscore the importance of context and model-specific factors when interpreting the effects of variables on financial performance indicators like ROA and ROE.

Table 6.18 . Summary of Hypothesis Using Robustness Test

	Model 1		Model 2		Model 3		Model 4		Model 5	
	ROA	ROE	ROA	ROE	ROA	ROE	ROA	ROE	ROA	ROE
<i>Hypothesis</i>	<i>Result & sign</i>		<i>Result & sign</i>		<i>Result & sign</i>		<i>Result & sign</i>		<i>Result & sign</i>	
H1	.....	Supported (-)	.....	.....	.....	Supported (-)	.....	.....	.....	.....
H2	.....	Supported (-)	.....	Supported (+)	.....	.....	Supported (+)	.....	Supported (-)	.....
H3	.....	Supported (-)	.....	Supported (+)	.....	.....	.....	.....	.....	.....
H4	.....	Supported (+)	.....	.....	.....	.....	.....	.....	Supported (+)	.....
H5	Supported (-)	Supported (-)	.....	.....	Supported (+)	.....	.....	Supported (-)	.....	Supported (-)

CHAPTER SEVEN

DISCUSSION OF THE STUDY FINDINGS

7.1 INTRODUCTION

This section discusses the results within a theoretical framework and extended literature context. Possible explanations are theorized whenever our findings deviate from those previously identified by other scholars. The regression analysis was conducted to test the study's hypotheses and measure the effects of independent variables on the dependent variables. The chapter is organized into six sections. Section 7.2 examines the impact of environmental factors on corporate financial performance in companies from both Indonesia and Malaysia. Section 7.3 explores the influence of the social domain, and section 7.4 discusses the effect of governance on corporate financial performance. Sections 7.5 and 7.6 present discussions on the impact of Environmental, Social, and Governance (ESG) factors on corporate financial performance, as well as the sensitivity of ESG factors in relation to corporate financial performance.

7.2 THE IMPACT OF ENVIRONMENT ON CORPORATE FINANCIAL PERFORMANCE IN INDONESIA AND MALAYSIA

As discussed earlier, bibliometric research was performed to obtain a comprehensive review of academic research on ESG performance. Based on a series of bibliometric and network analyses, it identifies the major trends and growth patterns associated with the development of this important subfield of strategic management. The Scopus database was queried for papers with the term: "ESG performance" in the publication between 2013 and 2023. Based on a series of bibliometric and network analyses, it identifies the major trends and growth patterns associated with the development of this important subfield of strategic management; documents which journals, articles, and authors' articles have had the greatest impact on its development, and presents the intellectual structure and network of authors, publications, and countries. Finally, the major research themes that emerge from the analyses presented are considered in terms of their relevance to future work.

The main objective of the current study is to test whether environmental scores significantly affect financial performance. To this end, we tested the relationship of three E scores with market performance (Tobin's Q) and accounting performance (ROA and ROE). Operationalizing RQ2 by the corresponding hypothesis with five different valuation models leads to different results and interpretations. We find a positive, non-significant relationship between Environmental scores and Tobin's Q in the sample analysis. This suggests that while there may be an association between good environmental performance and higher market valuations, it is not strong enough to obtain statistical significance within this study.

The relationship between environmental scores and Tobin's Q has been explored in the literature. For example, Gutiérrez-Ponce & Wibowo (2023) and Naseer et al. (2024) show that ESG performance positively impacted Return on Assets (ROA) but did not affect Tobin's Q. Potential explanations for our findings include varying perceptions of environmental initiatives among investors, differences in industry impacts, and the implementation stage of such initiatives. First, investors' perceptions of environmental initiatives vary widely; in industries like technology, financial returns often outweigh sustainability efforts, while sectors such as energy are more attuned to these measures (Lubis & Rokhim, 2021a; Weston & Nnadi, 2023). Second, the impact of environmental scores differs across industries; high-risk sectors like manufacturing may derive more immediate benefits from improved environmental performance (Rajesh, 2020c; Baran et al., 2022; Gutsch & Leker, 2024). Third, the stage of implementation matters; early-stage initiatives may not yet produce tangible financial gains, making their impact less visible in market valuations. These factors collectively contribute to the nuanced findings of the study (Qian et al. 2023).

However, the current study's positive coefficient of 0.40 suggests a positive association between environmental performance and the dependent variable in some contexts, but not significant. This observation could imply that companies exhibiting better environmental performance may achieve higher returns or improved financial metrics, such as greater operational efficiency or cost savings from sustainable practices. However, these financial benefits may not be substantial or visible enough to translate into significant market valuations, as indicated by Tobin's Q (Ray & Goel, 2022). This aligns with recent studies that have found that companies investing in

sustainable practices often see long-term financial benefits due to increased efficiency, better regulatory compliance, and enhanced reputation (Singh et al., 2022; Son & Kim, 2022).

More importantly, a significant positive relationship exists between environmental scores and Tobin's Q in model 4. Such a significant positive relationship between environmental scores and Tobin's Q in Model 4 highlights the value of sustainability reporting and practices. This relationship is consistent with the broader body of research, suggesting that a strong focus on ESG factors can lead to improved market performance. For example, research by Buallay (2019) found a significant positive relationship between ESG and firm value, as measured by Tobin's Q, in the European banking sector. This suggests that sustainability reporting, represented by ESG scores, is associated with enhanced performance, particularly in market valuation. Moreover, Alareeni (2020) also highlighted a significant positive relationship between Corporate Social Responsibility (CSR) and firms' market performance, specifically Tobin's Q, among US&P 500-listed firms. This indicates that focusing on ESG factors can lead to improved market performance, as reflected in Tobin's Q. In other words, companies that prioritize and transparently report their sustainability efforts are likely to see higher market valuations, and this effort will address the strategic value of integrating environmental considerations into core business practices (Fernando et al., 2022).

Furthermore, the impact of ESG performance on financial performance using measures like ROA and Tobin's Q as in the current study also discussed in the literature. Shahrin et al. (2023) found that individual environmental scores hurt ROA but positively impacted ROE and Tobin's Q. Atan et al. (2018) highlighted that improved environmental performance can increase Tobin's Q, indicating long-term value for investors. Furthermore, research by Nazarova (2022) indicated that ESG components positively affect Tobin's Q, with negative events in the ESG area potentially leading to a decrease in Tobin's Q. Jyoti & Khanna (2021) found a significant negative relationship between environmental scores and ROA in Indian service sector firms. Additionally, Rachmat et al. (2024) demonstrated a favorable relationship between sustainability disclosures and financial performance in Indonesian firms.

The findings of the current study also reveal a negative but insignificant relationship between environmental (E) scores and Return on Assets (ROA), while a negatively significant correlation exists between E scores and Return on Equity (ROE). This suggests that although there is a trend indicating that higher environmental scores may be associated with lower ROA, the relationship is not strong enough to be statistically significant. Specifically, the significant negative correlation between E scores and ROE implies that companies with higher environmental scores experience a decrease in profitability relative to shareholders' equity. This might be because investments in environmental initiatives can initially reduce net income due to the high costs of implementing sustainable practices, and such a condition could lower the returns on equity (Chen et al., 2023b). The relationship between environmental scores and Return on Assets (ROA) has been explored in various studies. The current research is similar to the study by Shobhwani & Lodha (2023), which discovered that the ESG risk score had an insignificant negative impact on ROA, suggesting a lack of a significant relationship between environmental risk scores and ROA. In contrast, Shaikh (2021) mentioned that the environmental dimension appears intimidating across accounting and market-based firm performance. Furthermore, Mititean and Sărmaş (2023) emphasized that the ESG score significantly negatively influenced ROA in the European energy industry and beyond. These studies collectively indicate a negative and significant relationship between environmental scores and ROA, underscoring the necessity for further research to comprehend this connection's intricacies.

Finally, the current study findings show that the environment and accounting performance (ROE) have a negative significant relationship in models 1 and 3. This suggests that higher environmental scores are associated with lower returns on equity, possibly due to the high costs of implementing sustainable practices (Ojobor & Raha, 2022; Serzante, 2024). This result opposes our initial hypothesis of a positive relationship between corporate ESG performance and market performance. Previous research supports the complexity of this relationship. For example, Qureshi et al. (2021) mentioned in their study that the sampled firm's environmental, social, and overall ESG performances are pretty good predictors of future CFP in the market. The current study also follows the previous studies by Chininga et al. (2023), using two-stage least squares instrumental estimation analysis reveals that investment in ESG initiatives improves both accounting and market-based indicators of financial performance. The study by

Lee and Isa (2022) found a positive relationship between ESG practices and financial performance, suggesting that ESG practices can enhance firm value. These studies underscore the potential long-term benefits of ESG investment, despite the short-term negative impact on ROE observed in our findings. This highlights the need for firms to balance the immediate costs of ESG initiatives with their potential to drive long-term financial performance (Shobhwani & Lodha, 2023).

7.3 THE IMPACT OF SOCIAL DOMAIN ON CORPORATE FINANCIAL PERFORMANCE

Findings related to the impact of the social domain on corporate financial performance show the positive coefficient, suggesting that an increase in social score is associated with an increase in the firm's market value. This suggests that firms that perform better in social aspects, such as employee welfare, community engagement, and ethical practices, tend to have higher market valuations (Zhou et al., 2022; Chen et al., 2023b). However, the t-statistic of -1.92, while negative, mainly indicates the level of significance rather than the direction of the relationship. The negative sign does not alter the interpretation of the positive coefficient. This finding supports hypothesis H2, suggesting that the social component plays a meaningful role in this model, in line with studies by with Brogi & Lagasio (2019); Pu (2022); Trisnowati et al. (2022); Aqabna et al. (2023). Particularly, Buallay and Marri (2022) examined the impact of sustainability disclosure on the performance of the telecommunication and information technology sectors globally. Their research analyzed how sustainability disclosure, based on environmental, social, and governance (ESG) scores, affects operational, financial, and market performance indicators, such as Return on Assets (ROA), Return on Equity (ROE), and Tobin's Q (TQ). The study revealed a significant positive correlation between social scores and Tobin's Q, indicating that social considerations enhance firm market performance. Therefore, social scores, as a part of ESG practices, are positively related to Tobin's Q, underscoring the significance of social factors in improving firm market performance.

In the case of Shariah-compliant companies, this study found a positive but not significant relationship between social scores and Tobin's Q. This indicates that while

there is a tendency for firms with higher social performance scores to have higher market valuations, the relationship is not strong enough to be statistically significant within the context of this analysis. Shariah-compliant companies, by definition, adhere to Islamic principles and guidelines, which include ethical and socially responsible business practices. These principles inherently align with many elements of social performance, such as fairness, transparency, and community welfare (Lee & Isa, 2023). This finding is consistent with Bahadır and Akarsu (2024), who investigated the relationship between ESG components and financial performance metrics, including Tobin's Q. Furthermore, Hasan et al. (2022) revealed that using the ESG score as a proxy for Corporate Social Responsibility Disclosure (CSR) in Indian companies shows a positive association with Corporate Financial Performance (CFP). These findings indicate that the type of industry and the financial performance indicator used can influence the dynamics of CSR-CFP relationships. The relevance of this study lies in highlighting the increasing importance of social responsibility and the growing contribution of emerging markets to international business.

The finding of a positive but insignificant relationship between social scores and Return on Assets (ROA) for companies reporting social performance in Indonesia and Malaysia suggests a strong interaction between corporate social responsibilities and financial efficiency. Although higher social scores correlate with improved asset utilization, the lack of statistical significance implies that the impact is not strong or consistent enough to be definitively identified. Previous studies have shown similar results. For example, Emmanuel et al. (2024) found a positive but insignificant association with ROA in the Nigerian exchange group. Conversely, Alamsyah and Muljo (2023) found a negative effect on ROA for overall ESG scores. However, Burhanuddin and Marsoem (2024) focused on Islamic commercial banks in Indonesia and found that Islamic Corporate Social Responsibility (ICSR) had a positive and significant effect on financial performance. These varied results suggest that the influence of social and ESG scores on financial performance can differ based on regional, sectoral, and methodological contexts. More specifically, with the regards of the current study findings, cultural and regulatory differences in Indonesia and Malaysia may influence how social performance translates into financial metrics. This finding underscores the complexity of linking social responsibility to financial performance and

indicates that while social initiatives are valuable, their financial benefits might not always be immediately apparent or uniformly recognized across different contexts.

The panel regression between corporate social responsibility and ROE revealed a negative significant coefficient of -0.00. A similar study by Fandella et al. (2023) covering BRICS countries from 2014 to 2019 suggested that the combined ESG score does not affect a firm's financial risk. In contrast, studies by Neves et al. (2023) and Akhand et al. (2024) showed that environmental and social expenditures positively affect market perception, indicating that addressing poverty and protecting the environment are essential long-term goals. These findings highlight the complex and varied impact of ESG practices on financial performance, underscoring the importance of context, industry, and specific performance metrics in understanding these dynamics.

7.4 THE IMPACT OF GOVERNANCE DOMAIN ON CORPORATE FINANCIAL PERFORMANCE

Model 1 reveals a positive but insignificant relationship within the whole dataset analysis, indicating that higher governance scores are associated with better financial outcomes, but not strongly enough to be statistically significant. In other words, while there may be an association between improved governance practices and financial performance, the relationship lacks the strength or consistency needed to draw definitive conclusions. Several reasons may contribute such a finding, indicating there is a wide variation in implementing government regulation and its report. For instance, companies may implement governance practices differently, leading to inconsistent impacts on financial performance. High governance scores may not uniformly translate to financial benefits if the practices are not effectively executed or optimally aligned with the company's specific needs. The study findings are in line with the study by Folger-Laronde et al. (2022), during the pandemic, the high level of sustainability performance does not safeguard investments from financial losses. In addition, Ronoowah and Seetanah (2023), using multivariate panel data regression techniques for the data from 38 listed Mauritanian non-financial companies from 2009 to 2019. The study found a positively insignificant influence on the relationship between corporate governance and Tobin's Q and ROE. This aligns with the current study's results,

suggesting that while there is a trend towards positive financial outcomes from better governance, it may not be robust enough to withstand various external and internal factors consistently (Kumar & Firoz, 2022; Ji et al., 2023; Agarwal et al., 2023).

For the robustness test, using an accounting performance (ROE), the study findings reveals that there is a significant positive relationship between ESG and ROE. The robustness test's confirmation of a significant positive relationship between ESG scores and ROE highlights the importance of sustainable and responsible business practices in driving financial performance. The finding is supported by the previous studies by Alam et al. (2024) that examined board accountability, transparency, and audit committees for the corporate governance index. Moreover, it included 300 bank-year observations from Islamic and conventional banks from 2010 to 2021, Farooq et al. (2023) mentioned that the board size, female participation in the board, and director remuneration significantly impact bank performance. Differ from the above explanation, Kafidipe et al. (2021) mentioned the negative and significant relationship between corporate governance (shareholders, board meetings, and members of the boards) and ROE. Zureigat et al. (2024) found an insignificant effect on ROA and ROE ratios with CEO duality in the Jordanian companies listed on the Amman Stock Exchange (ASE). In brief, from the previous study's perspective, while ESG initiatives broadly contribute to financial success, their specific governance elements must be carefully tailored to each firm's unique needs and contexts.

Furthermore, the current study shows a positive significant relationship between CG and ROA in model 2. This finding suggests that companies with strong corporate governance practices tend to achieve higher returns on their studies. This finding highlights the importance of effective corporate governance in enhancing a company's financial performance. By implementing effective governance mechanisms, such as responsible leadership, clear performance metrics, and regular monitoring, companies can enhance their ability to utilize their assets efficiently and generate greater profitability. The current study's finding is similar with Morri et al. (2023), by focusing on real estate investment trusts (REITs) in the USA, demonstrate the positive impact of shareholder-oriented corporate governance mechanisms on performance and value (ROE and Tobin's Q). The study has implications to motivate shareholders to establish new corporate control mechanisms to maximize value, attract more capital, and improve

operating performance. Moreover, this result allows investors to direct the investors' resources toward real estate firms with effective corporate governance mechanisms that may return higher performance and value.

7.5 ENVIRONMENTAL, SOCIAL, AND GOVERNANCE AND CORPORATE FINANCIAL PERFORMANCE

The result shows that there is a positive but not significant relationship between ESG and the market value for the second model of analysis. The current study in line with the study by Kalia & Aggarwal (2023) and Dkhili (2024), reporting a significantly positive relationship between ESG and financial performance but not significant with the market value. Furthermore, the whole sample has a positive but not statistically significant relationship. This suggests that while there is a positive association between the variable and ROA, it is not strong enough to be considered statistically significant. This study has a similar result with Aqabna et al. (2023). On the other hand, there is a different result with Sandberg et al. (2023) which mentioned that the relationship between ESG score and ROE is negatively significant. Although the effect shows a weak positive and non-significant relationship with Tobin's Q and ROA, it shows a significant negative relationship with ROE. It indicates that the variable considerably impacts ROE but not Tobin's Q and ROA.

For the whole dataset analysis, there is a negative, insignificant relationship between ESG and Tobin's Q. A negative coefficient (-1.7841) essentially means that higher ESG scores are linked to lower financial performance. This result implies that firms with better ESG performance may experience lower profitability returns, at least within the scope of this particular dataset and model analysis. This study have different result of study with the previous study by Firmansyah et al. (2023), with the unbalanced panel data of listed Saudia Arabian companies. Furthermore, the similar result of the current study found a positive relationship between ESG scores with financial performance based on the shareholder and signalling theory for the worldwide organizations (Chen et al., 2023b). In summary, across all five models, the ESG variable does not show a statistically significant relationship with Tobin's Q as a market value, as indicated by the low t-statistics in each model.

Despite some variation in the direction of the coefficients between variables (positive in some models while not in others), none of the relationships are statistically robust. This suggests that ESG might not strongly predict the dependent variable in these models. There is a positive significance for the relationship between ESG scores and ROE in model 1 with a coefficient of 0.0079. This result suggests that ESG has a positive and highly significant impact on return on equity. The study findings align with a growing body of literature suggesting that firms with better ESG performance exhibit better financial performance, possibly due to increased investors. This study is in line with Ismail & Azman (2024), which is about the companies in Japan from 2018 to 2022 and is based on the stakeholder theory. The research highlights the importance of companies adopting ESG policies to improve their financial performance.

The robustness test for the Shariah-compliant companies' dataset shows insignificant relationship between ESG and accounting financial performance (ROA and ROE). Candio (2024) using six measures of financial performance and three regression frameworks analysis for the European context for ten years, we have a similar result, and overall patterns are inconsistent in the effect identified across ESG predictors and financial performance. Conversely, the study is not identical to the previous one (Aqabna et al., 2023). The study employed the random effect method and GMM regression analysis on the CSR data from the MENA region. The study mentioned that environmental, social, and governance scores have a favorable impact on ROA and little impact on ROE.

7.6 SENSITIVE INDUSTRY ON ENVIRONMENTAL, SOCIAL, AND GOVERNANCE AND CORPORATE FINANCIAL PERFORMANCE

Concerning the fifth hypothesis (H5), the insignificant relationship of market performance is consistent with Saci et al. (2024) and Khamisu et al. (2024). The negative relationship with coefficient (-0.2041) in model 1 on SESG with Tobin's Q. However, the robustness test on ROA and ROE negatively correlated with several model analyses, with a significance level of 1%. This result highlights a potential trade-off between pursuing high ESG for the sensitive industry (such as industrial, utilities, basic materials and oil and gas) and achieving an immediate financial return

(<https://www.sensitiveindustries.com>). However, it is essential to consider the long-term benefits of high SESG performance, which might not be immediately visible in short-term financial metrics but could lead to sustainable growth and risk mitigation in the long run. Therefore, the study highlighting the strategic importance of ESG in enhancing firm value (Kim et al., 2023). Furthermore, consistent with the study of Rahmaniati & Ekawati (2024), there is a significant positive relationship between SESG and Tobin's Q. The findings imply that when viewed from shareholder's theory, the existence of binding laws and regulations for companies in the sensitive industry will cause their costs. When the amount is large enough, it will result in economic losses that will lower ROE and company value.

Moreover, all other firm-specific control variables (Firm size, Leverage, and Firm age) were significant (Ibrahim, 2017; Bhat et al., 2023; G Zhou et al., 2022). Regarding firm size, the results generally indicate a significant negative relationship with Tobin's Q. It suggests that larger firms tend to have lower market value. This result is in line with El Khoury et al. (2023), which results in a negatively affected performance. The study shows that banks with lower profitability and larger sizes have a higher ESG disclosure. On the other hand, Fahlevi et al. (2023) have a significant influence on a firm value on the LQ45 index companies. Larger companies are perceived to be better able to manage their business and return funds to their investors, contributing to an increase in the company's value. However, Putra et al. (2023) mentioned there is no effect the cash holdings.

Arifaj et al. (2023) shows in their study that firm size and financial leverage determine the financial performance of corporations in Kosovo, as indicated by ROA. That is different from the current study, which depicts the negative and non-significant relationship between firm size and returns on assets. Generally, a negatively insignificant relationship exists between firm size and accounting performance (ROA and ROE). However, there was a significant negative impact on model 4 with the company's data before the pandemic. Furthermore, firm size positively affected ROA based on the Tehran stock exchange database. This result also supports the trade-off theory, which explains the relationship between firm size, capital structure, and profitability (Ahmed et al. 2023).

The analysis reveals that the leverage variable has no statistically significant effect on the dependent variables in any model. The direction of the relationship varies across models, with both positive and negative coefficients observed. Sunarsih & Augustine (2024), Fadillah & Noormansyah (2023), have a result of a study that shows leverage in the relationship between ESG and the market value does not have a substantial impact because the coefficient values of -4.4103, -4.7965, 0.0652, -5.2196, and 5.064, respectively. This suggests that leverage may not be a reliable predictor in this study and that other factors likely play a more significant role in influencing Tobin's Q. Furthermore, Ghardallou (2023) mentioned in the heterogenous effect of leverage that by using GMM and quantile regression, leverage hurts a large company, whereas the influence becomes negative in smaller ones. In contrast, there are a positive and statistically significant effect on ROA, ROE and Tobin's Q for the selected 257 companies in Japan (Arhinful & Radmehr, 2023; Bui et al., 2023).

Consistent with Mansikkamäki (2023) which mentioned that young firms face fewer risk from growing at a low profitability level than other firms, and the benefits of firms size for future performance depend on the firm's current profitability. On the other side, based on the data on the Indonesia stock exchange with the observation of 2016-2021, the firm size positively affect the firm value (Julito & Ticoalu, 2023). All those studies are similar to the previous studies such as (Bhat et al., 2023; El Khoury et al. 2023), which has a negative and positive relationship between the variables.

Across all models, the coefficient for HHI vary in sign and magnitude, but none of the relationships are statistically significant with Tobin's Q, as indicated by the low p-value. Consistent with Soeharjoto et al. (2023), this study suggests that HHI does not significantly impact the dependent variables in these models. However, there is a positive significant relationship between industry munificence and leverage decisions (Usman et al. 2021). This study is similar to the result of model 2 with the Shariah-compliant companies' dataset for accounting performance with the coefficients of 0.4598 and 0.4943 for ROA and ROE. Therefore, this study indicates that the variables they represent have a solid positive impact on the accounting performance of the firms.

There is a strong positive and significant impact on dynamism, and Tobin's Q suggests that higher market dynamism can significantly boost firm value in specific

contexts. However, other models, particularly Model 5, indicate a potential negative or no significant effect. This variability highlights the complexity of the relationship and suggests that the impact of market dynamism on firm value may depend on other contextual factors or model specifications. This study is consistent with Chen et al. (2017) which mentioned that the environmental responsibility and how the resource of organizational slack moderates those relationships.

The significant positive relationship between inflation and Tobin's Q in model 1 with coefficient 15.278 suggests that firm's profitability (in terms of market value) tends to increase during inflation, possibly due to effective cost management or pricing power. The current study consistent with the study by Maralutua & Pulungan (2022). On the other hand, Ahmad et al. (2024) show that oil prices contribute to inflation in South Asian economies. Furthermore, Firm value is unaffected by inflation since financial performance has a positive impact on firm's market value (Sormin et al. 2023).

However, the non-significant relationship in other models indicates that the effect of inflation on financial metrics can vary depending on the specific context and the financial metric being analyzed. These mixed results highlight the complexity of inflation's impact on corporate performance and suggest that firms may need to adopt different strategies to mitigate the adverse effects of inflation on their financial outcomes. This study has a similar result to the previous study (Raza et al. 2023; Turgut, 2020) that there is no effect between inflation and ROA in the banking sub-sector on the Indonesia Stock Exchange (Hulu et al. 2023). Furthermore, Alfiana et al. (2023) also depicts that inflation does not have an influence on Islamic commercial and profit banks in the period 2018 – 2022.

7.7 THEORETICAL ANALYSIS OF THE STUDY FINDINGS: THE IMPACT OF ESG ON CORPORATE FINANCIAL PERFORMANCE

Integrating Maqasid Shariah theory and ESG (Environmental, Social, and Governance) principles into corporate governance can have a significant impact on corporate financial performance. On the positive side, this integration enhances a company's ethical reputation and risk management capabilities, attracting investors and customers

who prioritize ethical and sustainable practices. This can lead to improved financial stability and profitability, as seen in studies where firms committed to both ESG and Shariah principles often outperform their peers (Lee, 2023). However, the integration process can also bring challenges, including higher operational costs and complexity. Compliance with these rigorous standards requires substantial investments in governance structures, technology, and training, which can strain financial resources and reduce short-term profitability. Furthermore, the dual compliance can introduce operational inefficiencies and slower decision-making processes, affecting a company's agility and competitive edge, potentially leading to lower market valuations.

ESG (Environmental, Social, and Governance) principles can significantly influence a company's financial performance, particularly in terms of Return on Assets (ROA), Return on Equity (ROE), and Tobin's Q. Stakeholder Theory posits that companies should create value for all stakeholders, not just shareholders, aligning well with ESG's broader focus on ethical and sustainable practices. This alignment can lead to enhanced corporate reputation, better risk management, and increased investor trust, thereby improving financial metrics like ROA and ROE while integrated with the Stakeholder theory.

Empirical studies such as (Alareeni, 2020a; Alamsyah & Muljo, 2023) have shown that firms with robust ESG practices tend to have higher ROA and ROE, reflecting efficient asset utilization and strong equity returns due to improved operational performance and lower risk premiums. Moreover, companies that integrate stakeholder and ESG principles often experience a positive impact on Tobin's Q, which measures market valuation relative to asset replacement costs. This is because the market perceives these firms as less risky and more sustainable, thus valuing them higher. However, the initial costs of implementing ESG strategies can temporarily strain financial resources, impacting these metrics in the short term before the long-term benefits materialize.

Moreover, legitimacy theory posits that companies seek to operate within the bounds and norms of their respective societies to maintain legitimacy and ensure long-term survival. Integrating ESG (Environmental, Social, and Governance) principles into corporate strategies can enhance a firm's legitimacy by demonstrating a commitment to

ethical, sustainable, and socially responsible practices. This enhanced legitimacy can positively impact corporate financial performance by attracting ethically conscious investors, customers, and other stakeholders, thereby increasing market value and financial stability.

Empirical evidence supports the notion that strong ESG performance can lead to improved financial outcomes (Khalil et al. 2022). Companies that effectively implement ESG practices often experience higher returns on assets (ROA) and equity (ROE) due to more efficient operations, reduced risk, and increased investor confidence (Chen et al. 2023c). Additionally, firms with robust ESG frameworks tend to have higher Tobin's Q ratios, reflecting a higher market valuation relative to their asset replacement costs. This positive financial impact arises because stakeholders perceive these companies as less risky and more sustainable, which enhances their overall market performance (Ishak et al., 2024). However, the initial costs and complexities of integrating ESG principles can temporarily strain financial resources and reduce short-term profitability. Despite these challenges, the long-term benefits, including enhanced legitimacy, improved stakeholder relations, and increased financial performance, often outweigh the initial drawbacks.

Finally, the theory integrated with ESG and corporate financial performance with more focus on the conflicts of interest between principals (shareholders) and agents (company executives) is agency theory (Romano et al. 2020). Integrating ESG (Environmental, Social, and Governance) principles into corporate strategies can help mitigate these conflicts by aligning the interests of both parties towards long-term sustainable growth. When executives incorporate ESG initiatives, they address shareholder concerns about ethical and sustainable practices and enhance the company's overall reputation and risk management. Companies with strong ESG practices often report higher ROA and ROE, indicating better asset utilization and equity returns (Teng et al. 2022). This improvement is attributed to enhanced operational efficiencies, reduced risks, and stronger stakeholder relations.

7.8 CONCLUSION

In conclusion, the current study contributes to the growing body of research on ESG performance and its financial implications by demonstrating that environmental scores have a nuanced impact on financial metrics like Tobin's Q, ROA, and ROE. While the study found a positive but insignificant relationship between environmental scores and Tobin's Q, it also revealed a negative and significant correlation with ROE. These findings suggest that while companies with strong environmental performance may experience operational benefits and long-term value, the immediate financial gains—particularly in terms of equity returns—may be limited due to the high costs of implementing sustainable practices. This aligns with the broader literature, which shows a complex, industry-dependent relationship between ESG practices and financial performance. Long-term benefits such as improved efficiency, reputation, and regulatory compliance often outweigh short-term profitability challenges, highlighting the strategic importance of ESG in modern corporate governance.

However, integrating Maqasid Shariah theory and ESG principles into corporate governance profoundly impacts corporate financial performance, both positively and negatively. The alignment with ethical, sustainable, and socially responsible practices improves corporate reputation, attracts ethically conscious investors, and enhances risk management, leading to higher ROA, ROE, and Tobin's Q. Empirical studies consistently show that companies with strong ESG and Maqasid Shariah practices outperform their peers, with enhanced operational efficiency, reduced risk premiums, and stronger stakeholder relations contributing to long-term profitability and stability.

However, the integration process is not without challenges. It can lead to higher operational costs, increased governance complexity, and potential inefficiencies that strain financial resources and impact short-term profitability. This is especially pronounced during the initial stages of implementation, where companies face increased demands in terms of technology, training, and compliance structures. Nevertheless, in the long run, these companies tend to experience greater legitimacy, improved market performance, and stronger stakeholder relationships, ultimately enhancing their financial standing. Incorporating agency and stakeholder theories further strengthens this argument, as these frameworks emphasize aligning corporate

strategies with broader ethical and stakeholder interests. This alignment reduces conflicts of interest between shareholders and executives while ensuring the company's practices are sustainable and focused on long-term value creation. While the journey to full integration may pose temporary financial challenges, the long-term gains in reputation, risk management, and financial performance make this a compelling strategy for companies committed to both maqasid Shariah and ESG principles.



CHAPTER EIGHT

CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

8.1 INTRODUCTION

Chapter eight summarizes the insights gained concerning the research questions formulated in the introduction. This chapter is organized into four sections. Section 8.2 begins by summarizing the key findings of the research, providing a comprehensive overview of how each research question has been addressed. Additionally, it interprets these findings within the broader theoretical and practical context. Section 8.3 discusses the limitations of the study and suggests avenues for future research, aiming to inspire continued investigation and development in this field. Section 8.4 offers practical recommendations for managers and investors, based on the study's findings, to enhance decision-making, corporate governance, and financial performance. Section 8.5 explores the broader implications of the findings, discussing how they can influence policy and practice, and finally, Section 8.6 proposes a future research agenda, highlighting potential areas and methodologies for further studies.

8.2 CONCLUSION

The study examines the relationship between ESG and corporate financial performance among Shariah-compliant companies in Indonesia and Malaysia from 2010 to 2022. ESG scores and corporate financial performance were collected from the Refinitiv database, which includes inflation and GDP data from the World Bank. The study also aimed to provide a deeper understanding by decomposing ESG and exploring the impact of each pillar, as well as investigating the relationship between ESG and corporate financial performance across the entire dataset, both before and after the COVID-19 pandemic.

The current study's findings suggest a positive relationship between a company's financial performance and its ESG practices. Companies that prioritize strong ESG

practices typically experience improved long-term financial performance. This improvement can be attributed to enhanced operational efficiency, superior risk management, and greater stakeholder trust, collectively contributing to increased profitability and market value. ESG-focused companies tend to innovate more effectively and achieve higher brand loyalty, thereby reducing costs and enhancing revenues. Combining ESG criteria, stakeholder theory of Maqasid Shariah, legitimacy theory and principal-agent theory can provide a solid foundation for promoting corporate responsibility and sustainability in the economy. A company's reputation can be enhanced by ensuring that its operations are based on ethical and social norms. For example, Maqasid Shariah promotes ethical and just practices to ensure that companies do not negatively impact social and environmental well-being. Meanwhile, stakeholder theory goes beyond shareholders and advocates for value creation for all stakeholders, including employees, customers, suppliers and society at large.

In addition, the legitimacy theory emphasizes the need for companies to act in accordance with society's values and standards. This requires them to continually maintain their right to operate in society. This requires clear disclosure practices and active engagement with all stakeholders to maintain public trust. Companies that are perceived as legitimate typically enjoy benefits such as improved reputation, customer loyalty, and investor confidence, which collectively have a positive impact on financial performance. Aligning corporate operations with ESG principles is a way to hedge risks and avoid regulatory threats while exploring opportunities for sustainable development.

Principal-agent theory provides an additional layer, focusing on aligning management's interests with those of shareholders. Incorporating ESG goals into management incentives can reduce agency costs and promote ethical behavior and accountability, fostering a broader view of business that goes beyond mere profitability to include responsibility and sustainability. In conclusion, integrating these theoretical perspectives into ESG criteria can attract ethical investments, improve long-term financial performance, and create sustainable value for all stakeholders, positioning companies favorably in an evolving business environment.

8.3 LIMITATIONS

While this study offers a comprehensive analysis of how ESG factors influence corporate financial performance, several limitations must be acknowledged. First, the study primarily relies on publicly available ESG data, which can exhibit significant variability in terms of consistency, completeness, and quality across different companies and regions. This variation arises from several factors, including differences in the methodologies used for data collection, the scope and depth of the information provided, and the frequency of updates. The absence of a standardized framework for ESG reporting further exacerbates these issues, making it challenging to accurately compare and evaluate the sustainability practices of different companies. For instance, a company in one region might report comprehensive and regularly updated ESG data, while another in a different region might provide sparse or outdated information. This lack of standardization can affect the reliability of the study's findings, as conclusions drawn from inconsistent data may not fully capture the true relationship between ESG practices and financial performance.

Second, the study's geographical focus is limited to companies in Indonesia and Malaysia, posing challenges for generalizing the findings to other regions. Indonesia and Malaysia have distinct regulatory frameworks, economic conditions, and cultural contexts that uniquely influence corporate behavior and financial performance. For example, regulatory policies on environmental protection and social responsibility may vary significantly between these countries and others, shaping different corporate practices and outcomes. Similarly, cultural attitudes towards governance and sustainability can differ, impacting how companies implement ESG strategies and how these strategies affect financial performance. Consequently, the insights derived from this study may not be directly applicable to other regions with different socio-economic and regulatory environments. Thus, future research should aim to encompass a broader geographical scope, including diverse regions with varying socio-economic backgrounds and regulatory contexts, to test the generalizability of these findings.

Third, the study employs primarily quantitative methods, such as regression analysis, to explore the relationship between ESG factors and financial performance. While these methods provide valuable insights, they may not fully capture the

complexity of this relationship. Incorporating qualitative approaches, such as case studies and interviews with corporate leaders, employees, and other stakeholders, could offer deeper insights into the mechanisms through which ESG factors impact financial performance. These methods can unveil the specific strategies companies employ, the challenges they face, and the contextual factors that influence outcomes, providing a richer, more comprehensive understanding.

Additionally, the cross-sectional design of the study limits its ability to capture long-term trends and causal relationships. Cross-sectional studies provide a snapshot of data at a single point in time, which can identify associations but not causality or temporal changes. Longitudinal studies, on the other hand, track the same variables over extended periods, allowing researchers to observe changes, establish timelines, and infer causality. Implementing longitudinal designs in future research would enable a more robust assessment of the sustained impact of ESG factors on financial performance over time, capturing long-term trends and providing clearer evidence of causality.

8.4 RECOMMENDATION

Based on the analysis, we can formulate several practical recommendations for management and investors to better integrate ESG (environmental, social, and governance) factors into their strategies and decision-making processes. For management, it is crucial to prioritize transparency in ESG reporting. Management must implement robust ESG reporting practices and ensure their disclosures are comprehensive, accurate, and consistent with standardized frameworks such as the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB). This way, companies can increase investor confidence, demonstrate accountability, and attract capital from ESG-conscious investors.

Managers should also focus on embedding ESG considerations into the core strategic planning and operational processes of the company. This involves setting clear, measurable ESG goals and integrating them into performance metrics and executive compensation structures. By linking executive incentives to ESG performance,

companies can align the interests of management with those of shareholders and other stakeholders, promoting long-term sustainable growth. Additionally, managers should foster a culture of sustainability within the organization, encouraging innovation in sustainable practices and technologies, and ensuring that ESG principles are embraced at all levels of the company.

For investors, it is essential to incorporate ESG criteria into investment decision-making processes. Investors should conduct thorough due diligence on potential investments, evaluating companies' ESG performance alongside traditional financial metrics. Utilizing ESG ratings and frameworks can help investors identify companies that are likely to achieve sustainable, long-term growth. Moreover, investors should engage with companies on ESG issues, advocating for improved disclosure practices, better governance structures, and more ambitious sustainability targets. Active engagement can drive positive change and enhance the overall value of the investment portfolio.

Investors should also consider diversifying their portfolios to include companies with strong ESG performance, as these companies are often better positioned to manage risks and capitalize on opportunities related to sustainability. By prioritizing investments in companies that demonstrate a commitment to ESG principles, investors can support the transition to a more sustainable economy while potentially achieving superior financial returns. Additionally, investors should stay informed about evolving ESG standards and regulations to ensure that their investment strategies remain aligned with best practices and emerging trends in sustainability.

8.5 POLICY IMPLICATIONS

The analysis of the current study's data highlights the need for comprehensive policy measures to promote integrating ESG (environmental, social, and governance) factors into corporate strategies. Regulators should consider introducing ESG disclosure obligations for listed companies to ensure transparency and provide investors with important information to evaluate sustainability practices. Governments and financial institutions can provide incentives to companies to achieve good ESG performance

through tax breaks, subsidies, or preferential interest rates. These measures would encourage the widespread adoption of sustainable business models, thereby promoting the corporate sector's long-term financial health and resilience. Improved corporate governance standards, such as board diversity policies and executive remuneration linked to ESG performance, would further align management's interests with those of shareholders and stakeholders, promoting ethical behavior and accountability.

In addition, it is important to support the integration of ESG criteria into investment decision-making processes. By developing standardized ESG metrics and frameworks, regulators can encourage asset managers and institutional investors to consider ESG factors in their strategies. Promoting ESG education and awareness among business leaders, investors, and the general public will promote the spread of sustainable practices. Furthermore, international cooperation and standardization of ESG reporting frameworks will increase the comparability and reliability of ESG data, facilitate cross-border investment, and enable multinational companies to optimize their reporting processes. These policies will not only improve companies' financial performance but also bring broader social and environmental benefits and ensure that companies operate responsibly and sustainably.

8.6 FUTURE RESEARCH AGENDA

Based on the comprehensive analysis and gaps in the existing literature on ESG (environmental, social, and governance) performance, several critical areas for future research emerged. A key recommendation is to expand the data sources and methodologies used in ESG research. Future studies should not rely solely on Scopus but incorporate a broader range of databases, such as Web of Science, JSTOR, and specialized industry databases, to obtain more comprehensive and diverse datasets. Advanced analytical techniques, such as machine learning and dynamic modeling, can provide deeper insights into ESG impacts and trends. Longitudinal studies are particularly important in understanding the long-term impact of ESG practices, as they provide a more detailed view of sustainability outcomes over time.

Sector-specific regional analysis is also important to adapt ESG insights to different contexts. Industry-specific research can provide more targeted recommendations, focusing on unique challenges and opportunities in energy, technology, and finance. Expanding research across different geographies can help identify regional differences in ESG impact and effectiveness, especially in emerging and developing countries, and create region-specific policies and strategies. Understanding these differences can help derive global best practices while considering local conditions and needs.

Another critical area requiring further investigation is corporate governance mechanisms and their impact on ESG performance. Future research should explore how specific governance structures such as board composition, executive compensation, and shareholder engagement affect ESG outcomes. This understanding will help develop better governance frameworks that support sustainability goals. Additionally, investigating the impact of different regulatory environments and government policies on ESG performance can provide insights into how legal and policy frameworks can be optimized to promote sustainable practices.

Finally, research that goes beyond financial metrics and explores the broader social and environmental impacts of ESG practices is needed. Considering the impact of ESG initiatives on relationships with stakeholders such as employees, customers, and communities can lead to a more comprehensive understanding of ESG value creation. Documenting case studies of companies that have successfully integrated ESG principles can provide practical insights and actionable strategies for other organizations. By addressing these areas, future research can provide a nuanced and comprehensive understanding of ESG performance, guiding both academic research and practical applications in the corporate world to promote a more resilient and responsible global economy.

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APPENDIX A

SHARIAH-COMPLIANT COMPANIES IN INDONESIA

Country	Industry	No	Company	
Indonesia	Plantation	1	Astra Agro Lestari Tbk	
		2	Aneka Tambang Tbk	
	Industrial products	3	Barito Pacific Tbk	
		4	Vale Indonesia Tbk	
		5	Indah Kiat Pulp & Paper Tbk	
		6	Indocement Tunggal Prakarsa	
		7	Indo Tambangraya Megah Tbk	
		8	Merdeka Copper Gold Tbk	
		9	Semen Indonesia Tbk	
		10	Pabrik Kertas Tjiwi Kimia Tbk	
		11	Chandra Asri Petrochemical Tbk	
		12	Astra International Tbk	
		13	United Tractors Tbk	
		14	Global Mediacom Tbk	
		15	Matahari Department Store Tbk	
		Consumer products	16	Ace Hardware Indonesia Tbk
			17	Akasha Wira International Tbk
	18		Charoen pokphand Indonesia Tbk	
	19		Garudafood Putra Putri Jaya Tbk	
	20		Indofood CBP Sukses Makmur Tbk	
	21		Indofood Sukses Makmur Tbk	
	22		Unilever Indonesia Tbk	
	23		Japfa Comfeed Indonesia Tbk	
	Financial services	24	ABM Investama Tbk	
		25	Bank BTPN Syariah Tbk	
		26	Bank Panin Dubai Syariah	
	Infrastructure, utilities & transportation	27	Acset Indonusa Tbk	
		28	XL Axiata Tbk	
		29	Indosat Tbk	
		30	Cikarang Listrindo Tbk	
		31	Telkom Indonesia Tbk	
	Real Estate & Properties	32	Pakuwon Jati Tbk	
		33	Bumi Serpong Damai Tbk	
		34	Summarrecon Agung Tbk	
	Construction	35	Lippo Karawaci Tbk	
	Information & technology	36	Quantum clovera investama Tbk	
		37	Media Nusantara Citra Tbk	
		38	Metrodata Electronics Tbk	

Country	Industry	No	Company
		39	Surya Citra Media Tbk
	Healthcare	40	Kalbe Farma Tbk
	Mining	41	Adaro Energy Tbk.
		42	AKR Corporindo Tbk.
		43	Bayan Resources Tbk
		44	Bumi Resources Tbk
		45	Perusahaan Gas Negara Tbk
		46	Bukit Asam Tbk



APPENDIX B

SHARIAH-COMPLIANT COMPANIES IN MALAYSIA

Country	Industry	No	Company
Malaysia	Plantation	1	FGV Holdings Bhd
		2	Genting Plantations Bhd
		3	IOI Corporation Bhd
		4	Jaya Tiasa Holdings Bhd
		5	Kuala Lumpur Kepong bhd
		6	PLS Plantations Bhd
		7	Rimbunan Sawit Bhd
		8	Sarawak Oil Palms Bhd
		9	Sime Darby Plantation Bhd
		10	Sarawak Plantations Bhd
		11	Ta Ann Holdings Bhd
		12	TH Plantations Bhd
		13	IOI Properties Group Bhd
		14	Kesm Industries Bhd
		15	TSH Resources Bhd
	Financial services	16	Malaysia Building Society Bhd
		17	RCE Capital Bhd
		18	Syarikat Takaful Malaysia Keluarga Bhd
	Infrastructure, utilities & transportation	19	Petronas Gas Bhd
		20	Salcon Bhd
		21	Tenaga Nasional Bhd
		22	Taliworks Corporation Bhd
	Real Estate & Properties	23	Eco World
		24	Eco Development Group Bhd
		25	Eastern & Oriental Bhd
		26	Engtex Group Bhd
		27	HCK Capital Group Bhd
		28	I-Bhd
		29	Iskandar Waterfront City Bhd
		30	KSL Holdings Bhd
		31	LBS Bina Group Bhd
		32	Mah Sing Group Bhd
		33	Naim Holdings Bhd
		34	NCT Alliance Bhd
		35	Poh Kong Holdings Bhd
		36	Scientex Packaging (Ayer keroh) Bhd
		37	S P Setia Bhd
		38	Supermax Corporation Bhd
		39	Suria Capital Holdings Bhd

Country	Industry	No	Company
		40	Symphony Life Bhd
		41	Tropicana Corporation Bhd
		42	UEM Sunrise Bhd
	Construction	43	Ekovest Bhd
		44	Gadang Holdings Bhd
		45	Gamuda Bhd
		46	Gabungan AQRS Bhd
		47	IJM Corporation Bhd
		48	Jaks Resources Bhd
		49	Kerjaya Prospek Group Bhd
		50	MGB Bhd
		51	Mitrajaya Holdings Bhd
		52	Muhibbah Engineering (M) Bhd
		53	Pesona Metro Holdings Bhd
		54	Sunway Bhd
		55	Tafi Industries Bhd
		56	TRC Synergy Bhd
		57	WCT Holdings Bhd
		58	ATA IMS Bhd
		59	Fajarbaru Builder Group Bhd
		60	GDB Holdings Bhd
		61	WCE Holdings Bhd
		Information & technology	62	Able Global Bhd
	63		AwanBiru Technology Bhd
	64		Dataprep Holdings Bhd
	65		Dagang Nextchange Bhd
	66		D & O Green Technologies
	67		GHL Systems Bhd
	68		Greatech Technology Bhd
	69		Hong Seng Consolidated Bhd
	70		Inari Amertron Bhd
	71		JCY International
	72		JHM Consolidation Bhd
	73		My EG Services Bhd
74	Notion Vtec Bhd		
75	Omesti Bhd		
76	Pertama Digital Bhd		
77	Pentamaster Corporation Bhd		
78	Star Media Group Bhd		
79	TDM Bhd		
80	Unisem Bhd		
81	UWC Bhd		
82	Vitrox Corporation Bhd		
83	VSTEC Bhd		
Healthcare	84	IHH Healthcare Bhd	

Country	Industry	No	Company
		85	KPJ Healthcare Bhd
		86	Kossan Rubber Industries Bhd
		87	TMC Life Sciences Bhd
		88	Pharmaniaga Bhd
		89	Hartalega Holdings Bhd
	Mining	90	Carimin Petroleum Bhd
		91	Dialog Group Bhd
		92	Deleum Bhd
		93	Hengyuan Refining Company Bhd
		94	Hibiscus Petroleum Bhd
		95	Icon Offshore Bhd
		96	Malaysia Marine & Heavy Engineering Holdings Bhd
		97	Perdana Petroleum Bhd
		98	Sapura Energy Bhd
		99	Serba Dinamik Holdings Bhd
	Telecommunication & Media	100	UZMA Bhd
		101	Velesto Energy Bhd
		102	Kim Loong Resources Bhd
		103	KNM Group Bhd
		104	Yinson Holdings Berhad
105		Axiata Group Bhd	
106		Maxis Bhd	
107		OCC Group Bhd	
108		Time DotCom Bhd	
109		Telekom Malaysia Bhd	

APPENDIX C

NON-SHARIAH COMPLIANT COMPANIES IN INDONESIA

Country	Industry	No	Company
Indonesia	Finance	1	Bank Central Asia Tbk
		2	Bank Negara Indonesia Tbk
		3	Bank Rakyat Indonesia Tbk
		4	Bank Tabungan Negara Tbk
		5	Bank Danamon Indonesia Tbk
		6	Bank Mandiri Tbk
	Consumer Non-Cyclicals	7	Bumi Resources Tbk
		8	Gudang Garam Tbk
		9	Hanjaya Mandala Sampoerna Tbk
	Infrastructure	10	Jasa Marga Tbk
		11	Tower Bersama Infrastructure Tbk PT
		12	Sarana Menara Nusantara Tbk
		13	Waskita Karya Tbk

APPENDIX D

NON-SHARIAH COMPLIANT COMPANIES IN MALAYSIA

Country	Industry	No	Company
Malaysia	Financial services	1	Affin Bank Bhd
		2	Alliance bank Malaysia
		3	AMMB Holdings Bhd
		4	Bursa Malaysia Bhd
		5	CIMB Group Holdings Bhd
		6	Hong Leong Bank Bhd
		7	Hong Leong Financial Group Bhd
		8	Malayan Banking Bhd
		9	Public Bank Bhd
		10	RHB Bank Bhd
		11	Tune Protect Group Bhd
	Telecommunication & Media	12	Astro Malaysia Holdings Bhd
		13	CelcomDigi Bhd
		14	Media Prima Bhd
	Industrial products & services	15	CJ Century Logistics Holdings Bhd
		16	Can-One Bhd
		17	Coastal Contracts Bhd
		18	Comfort Gloves Bhd
		19	Cypark Resources Bhd
		20	Evergreen Fibreboard Bhd
		21	Favelle Favco Bhd
		22	Hap Seng Consolidated Bhd
		23	Kumpulan Perangsang Selangor Bhd
		24	Leong Hup International Bhd
		25	Malayan Cement Bhd
		26	MNRB Holdings Bhd
		27	Malaysian Pacific Industries Bhd
		28	Paramount Corporation Bhd
		29	Tomypak Holdings Bhd
		30	Berjaya Corporation Bhd
		31	BP Plastics Holdings Bhd
		Construction	32	ATA IMS Bhd
	33		Fajarbaru Builder Group Bhd
	34		GDB Holdings Bhd
	35		Matrix Concepts Holdings Bhd
	36		WCE Holdings Bhd
	Real Estate Investment Trust	37	Axis Real Estate Investment Trust
		38	Hektar Real Estate Investment Trust
		39	KIP Real Estate Investment Trust

Country	Industry	No	Company
		40	Kenanga Investment Bank Bhd
	Consumer products & services	41	Beshom Holdings Bhd
		42	CAB Cakaran Corporation Bhd
		43	DKSH Holdings (Malaysia) Bhd
		44	Genting Malaysia Bhd
		45	7-Eleven Malaysia Holdings Bhd
		46	Sports Toto Bhd
	Technology	47	Datatrep Holdings Bhd
		48	Dagang Nexchange Bhd
		49	D&O Green Technologies Bhd
		50	DRB-Hicom Bhd
		51	Dufu Technology Corp Bhd
		52	Duopharma Biotech Bhs
		53	Excel Force Msc Bhd
		54	George Kent (Malaysia) Bhd
		55	Globetronics Technology Bhd
	Plantation	56	Willowglen Msc Bhd
		57	Genting Plantations Bhd
		58	IOI Properties Group Bhd
		59	Kesm Industries Bhd
	Healthcare	60	TSH Resources Bhd
		61	Hartalega Holdings Bhd
		62	KPJ Healthcare Bhd
63		Top Glove Corporation Bhd	
Energy	64	YSP Southeast Asi Holdings Bhd	
	65	Kim Loong Resources Bhd	
	66	KNM Group Bhd	
Property	67	Yinson Holdings Berhad	
	68	Land & General BHD	
Utilities	69	Tropicana Corporation Bhd	
	70	Leon Fuat Bhd	
	71	Luster Industries Bhd	
	72	Malakoff Corp Bhd	
	73	YTL Corporation Bhd	

APPENDIX E

ESG DATA ON SHARIAH-COMPLIANT COMPANIES

No	NAME	Year	E	S	G	ESG	SESG
1	Astra Agro Lestari Tbk	2010	20.2	41.9	6.99	26.55	26.55
1	Astra Agro Lestari Tbk	2011	20.12	47.47	17.09	31.68	31.68
1	Astra Agro Lestari Tbk	2012	16.03	41.47	5.56	24.78	24.78
1	Astra Agro Lestari Tbk	2013	17.08	38.26	9.43	24.64	24.64
1	Astra Agro Lestari Tbk	2014	25.03	29.62	13.74	24.15	24.15
1	Astra Agro Lestari Tbk	2015	28.77	32.63	11.67	26.05	26.05
1	Astra Agro Lestari Tbk	2016	32.36	46.03	16.67	33.44	33.44
1	Astra Agro Lestari Tbk	2017	33.61	45.2	10.61	32.83	32.83
1	Astra Agro Lestari Tbk	2018	29.23	42.73	10.64	30.47	30.47
1	Astra Agro Lestari Tbk	2019	42.38	45.88	12.23	36.08	36.08
1	Astra Agro Lestari Tbk	2020	36.1	46.46	15.09	35.29	35.29
1	Astra Agro Lestari Tbk	2021	53.38	49.67	30.07	45.62	45.62
1	Astra Agro Lestari Tbk	2022	29.52	42.28	13.32	30.97	30.967
2	FGV Holdings Bhd	2011	0.62	10.37	18.77	9.59	9.59
2	FGV Holdings Bhd	2012	0.62	9.41	30.71	12.45	12.45
2	FGV Holdings Bhd	2013	24.39	44.23	50.68	40.21	40.21
2	FGV Holdings Bhd	2014	22.99	49.81	32.81	37.66	37.66
2	FGV Holdings Bhd	2015	31.84	47.24	21.63	36.12	36.12
2	FGV Holdings Bhd	2016	34.16	49.91	34.96	41.48	41.48
2	FGV Holdings Bhd	2017	46.4	45.72	28.39	41.38	41.38
2	FGV Holdings Bhd	2018	44.36	48.75	58.31	49.99	49.99
2	FGV Holdings Bhd	2019	41.77	48.99	58.97	49.52	49.52
2	FGV Holdings Bhd	2020	61.95	57.88	61.23	59.93	59.93
2	FGV Holdings Bhd	2021	56.13	64.16	83.16	66.82	66.82
2	FGV Holdings Bhd	2022	33.20	43.32	43.62	40.47	40.47
3	Genting Plantations Bhd	2010	13.17	15.6	52.2	24.46	24.46
3	Genting Plantations Bhd	2011	14.15	20.18	48.67	25.89	25.89
3	Genting Plantations Bhd	2012	22.48	17.63	50.99	27.74	27.74
3	Genting Plantations Bhd	2013	24.57	17.36	49.94	27.95	27.95
3	Genting Plantations Bhd	2014	29.11	15.64	38	25.35	25.35
3	Genting Plantations Bhd	2015	59.16	32.95	31.51	40.11	40.11
3	Genting Plantations Bhd	2016	59.73	47.44	29.43	46.27	46.27
3	Genting Plantations Bhd	2017	69.75	59.47	33.5	55.64	55.64
3	Genting Plantations Bhd	2018	65.93	58.4	39.51	55.63	55.63
3	Genting Plantations Bhd	2019	63.36	66.73	27.33	55.47	55.47
3	Genting Plantations Bhd	2020	57.83	60.87	29.07	51.69	51.69
3	Genting Plantations Bhd	2021	72.69	68.08	31.1	59.82	59.82
3	Genting Plantations Bhd	2022	69.83	68.45	33.38	59.69	59.69
4	IOI Corporation Bhd	2009	29.72	13.99	40.04	25.32	25.32

No	NAME	Year	E	S	G	ESG	SESG
4	IOI Corporation Bhd	2010	14.39	13.69	39.81	20.72	20.72
4	IOI Corporation Bhd	2011	37.41	28.83	59.83	39.39	39.39
4	IOI Corporation Bhd	2012	38.8	21.13	43.91	32.16	32.16
4	IOI Corporation Bhd	2013	40.95	21.74	28.37	28.99	28.99
4	IOI Corporation Bhd	2014	39.92	24.02	67.66	39.99	39.99
4	IOI Corporation Bhd	2015	47.73	29.19	35.67	36.21	36.21
4	IOI Corporation Bhd	2016	54.74	36.44	36.63	41.75	41.75
4	IOI Corporation Bhd	2017	50.57	33.9	23.61	36	36
4	IOI Corporation Bhd	2018	58.85	50.04	16.78	43.88	43.88
4	IOI Corporation Bhd	2019	65.61	53.89	20.49	48.53	48.53
4	IOI Corporation Bhd	2020	64.04	52.43	41.2	52.83	52.83
4	IOI Corporation Bhd	2021	66.04	53.09	53.26	56.86	56.86
4	IOI Corporation Bhd	2022	74.63	57.83	66.49	64.92	64.92
5	Jaya Tiasa Holdings Bhd	2020	10.995	36.385	45.74	27.05	27.05
5	Jaya Tiasa Holdings Bhd	2021	8.78	38.6	42.55	25.95	25.95
5	Jaya Tiasa Holdings Bhd	2022	13.21	34.17	48.93	28.15	28.15
6	Kuala Lumpur Kepong bhd	2009	0.67	9.31	43.96	13.66	13.66
6	Kuala Lumpur Kepong bhd	2010	2.27	10.76	46.32	15.37	15.37
6	Kuala Lumpur Kepong bhd	2011	9.95	10.95	75.48	25.02	25.02
6	Kuala Lumpur Kepong bhd	2012	8.98	6.57	69.87	21.71	21.71
6	Kuala Lumpur Kepong bhd	2013	6.66	5.03	75.44	21.46	21.46
6	Kuala Lumpur Kepong bhd	2014	6.37	6.85	72.1	21.29	21.29
6	Kuala Lumpur Kepong bhd	2015	8.21	4.08	71.07	20.73	20.73
6	Kuala Lumpur Kepong bhd	2016	29.7	35.41	63.33	39.41	39.41
6	Kuala Lumpur Kepong bhd	2017	25.84	46.7	65.5	42.65	42.65
6	Kuala Lumpur Kepong bhd	2018	38.47	64.19	60.6	53.2	53.2
6	Kuala Lumpur Kepong bhd	2019	45.41	65.69	70.83	58.81	58.81
6	Kuala Lumpur Kepong bhd	2020	47.95	65.51	47.51	55.18	55.18
6	Kuala Lumpur Kepong bhd	2021	47.51	65.12	58.86	56.75	56.75
6	Kuala Lumpur Kepong bhd	2022	60.17	73.34	66.89	66.68	66.68
7	PLS Plantations Bhd	2020	20.205	40.595	12.765	25.67	25.67
7	PLS Plantations Bhd	2021	15.68	36.95	7.32	21.22	21.22
7	PLS Plantations Bhd	2022	24.73	44.24	18.21	30.12	30.12
8	Rimbunan Sawit Bhd	2020	4.2	15.725	21.07	13.21	13.21
8	Rimbunan Sawit Bhd	2021	4.2	15.71	21.3	12.66	12.66
8	Rimbunan Sawit Bhd	2022	4.2	15.74	20.84	13.76	13.76
9	Sarawak Oil Palms Bhd	2020	41.68	46.71	56.535	47.83	47.83
9	Sarawak Oil Palms Bhd	2021	40.7	48.83	67.29	51.32	51.32
9	Sarawak Oil Palms Bhd	2022	42.66	44.59	45.78	44.34	44.34
10	Sime Darby Plantation Bhd	2018	70.76	72.97	98.74	79.07	79.07
10	Sime Darby Plantation Bhd	2019	72.78	74	96.71	79.58	79.58
10	Sime Darby Plantation Bhd	2020	73.95	72.44	90.48	77.59	77.59
10	Sime Darby Plantation Bhd	2021	72.7	74.72	95.49	79.56	79.56
10	Sime Darby Plantation Bhd	2022	65.63	62.81	95.43	72.14	72.14
11	Sarawak Plantations Bhd	2020	11.665	15.165	27.66	17.42	17.42

No	NAME	Year	E	S	G	ESG	SESG
11	Sarawak Plantations Bhd	2021	9.07	15.61	30.24	17.55	17.55
11	Sarawak Plantations Bhd	2022	14.26	14.72	25.08	17.29	17.29
12	Ta Ann Holdings Bhd	2020	22.71	39.66	38.76	34.55	34.55
12	Ta Ann Holdings Bhd	2021	18.7	38.69	44.69	34.51	34.51
12	Ta Ann Holdings Bhd	2022	26.71	40.63	32.82	34.59	34.59
13	TH Plantations Bhd	2020	13.66	18.04	19.71	17.22	17.22
13	TH Plantations Bhd	2021	12.75	19.05	16.48	16.57	16.57
13	TH Plantations Bhd	2022	14.56	17.02	22.94	17.86	17.86
14	IOI Properties Group Bhd	2014	19.61	49.99	60.19	43.74	43.74
14	IOI Properties Group Bhd	2015	25.5	51.6	62.2	46.83	46.83
14	IOI Properties Group Bhd	2016	26.54	57.66	62	49.26	49.26
14	IOI Properties Group Bhd	2017	44.64	60.08	69.61	58.32	58.32
14	IOI Properties Group Bhd	2018	54.87	71.66	77.87	68.39	68.39
14	IOI Properties Group Bhd	2019	51.82	64.5	69.41	62.1	62.1
14	IOI Properties Group Bhd	2020	66.3	59.54	71.68	65.63	65.63
14	IOI Properties Group Bhd	2021	70.16	81.39	75.24	75.85	75.85
14	IOI Properties Group Bhd	2022	68.66	85.2	75.27	76.75	76.75
15	Kesm Industries Bhd	2020	6.27	25.41	24.44	19.19	19.19
15	Kesm Industries Bhd	2021	2.36	25.18	26.6	18.44	18.44
15	Kesm Industries Bhd	2022	10.17	25.63	22.28	19.94	19.94
16	TSH Resources Bhd	2020	33.93	35.43	73.19	44.86	44.86
16	TSH Resources Bhd	2021	30.37	35.41	75.72	44.49	44.49
16	TSH Resources Bhd	2022	37.49	35.44	70.66	45.23	45.23
17	Aneka Tambang Tbk	2010	34.89	72.76	61.23	56.6	56.6
17	Aneka Tambang Tbk	2011	37.64	76.1	61.33	58.94	58.94
17	Aneka Tambang Tbk	2012	56.25	81.95	76.15	71.48	71.48
17	Aneka Tambang Tbk	2013	54.73	75.99	70.56	67.17	67.17
17	Aneka Tambang Tbk	2014	61.94	79.98	36.26	62.89	62.89
17	Aneka Tambang Tbk	2015	69.81	85.03	63.28	74.33	74.33
17	Aneka Tambang Tbk	2016	67.65	88.5	53.31	72.52	72.52
17	Aneka Tambang Tbk	2017	70.18	85.47	41.96	69.4	69.4
17	Aneka Tambang Tbk	2018	69.42	72.55	43.47	64.31	64.31
17	Aneka Tambang Tbk	2019	73.14	67.34	72.78	70.72	70.72
17	Aneka Tambang Tbk	2020	66.02	67.86	76.63	69.37	69.37
17	Aneka Tambang Tbk	2021	70.45	71.03	68.71	70.26	70.26
17	Aneka Tambang Tbk	2022	77.94	74.31	83.65	77.88	77.88
18	Barito Pacific Tbk	2018	8.86	11.85	23.26	13.22	13.22
18	Barito Pacific Tbk	2019	45.15	51.2	36.87	45.59	45.59
18	Barito Pacific Tbk	2020	51.59	58.47	48.03	53.4	53.4
18	Barito Pacific Tbk	2021	49.1	52.03	45.57	49.42	49.42
18	Barito Pacific Tbk	2022	53.84	53.17	42.97	51.15	51.15
19	Vale Indonesia Tbk	2010	50.1	30.47	53.3	42.99	42.99
19	Vale Indonesia Tbk	2011	49.21	38.57	68.95	49.77	49.77
19	Vale Indonesia Tbk	2012	49.95	35.87	54.76	45.46	45.46
19	Vale Indonesia Tbk	2013	48.51	38.21	70.54	49.78	49.78

No	NAME	Year	E	S	G	ESG	SESG
19	Vale Indonesia Tbk	2014	54.1	33.41	85.04	53.37	53.37
19	Vale Indonesia Tbk	2015	55.29	64.4	77.23	64.34	64.34
19	Vale Indonesia Tbk	2016	51.22	46.95	83.22	57.36	57.36
19	Vale Indonesia Tbk	2017	72.09	93.37	89.68	84.97	84.97
19	Vale Indonesia Tbk	2018	66.66	91.6	91.06	82.69	82.69
19	Vale Indonesia Tbk	2019	67.28	91.13	86.89	81.96	81.96
19	Vale Indonesia Tbk	2020	65.7	88.68	83.08	79.22	79.22
19	Vale Indonesia Tbk	2021	60.65	77.4	88.18	74.15	74.15
19	Vale Indonesia Tbk	2022	57.56	60.84	77.66	63.84	63.84
20	Indah Kiat Pulp & Paper Tbk	2017	38.98	14.19	18.97	26.64	26.64
20	Indah Kiat Pulp & Paper Tbk	2018	37.78	22.97	12.33	27.17	27.17
20	Indah Kiat Pulp & Paper Tbk	2019	43.25	24.41	9.58	29.44	29.44
20	Indah Kiat Pulp & Paper Tbk	2020	41.15	24.5	10.32	28.69	28.69
20	Indah Kiat Pulp & Paper Tbk	2021	45.08	22.48	9.37	29.64	29.64
20	Indah Kiat Pulp & Paper Tbk	2022	41.25	21.71	12.11	28.32	28.32
21	Indocement Tunggul Prakarsa	2010	19.92	35.75	25.39	26.61	26.61
21	Indocement Tunggul Prakarsa	2011	19.38	36.04	33.49	28.42	28.42
21	Indocement Tunggul Prakarsa	2012	33.57	82.68	76.83	60.6	60.6
21	Indocement Tunggul Prakarsa	2013	33.96	86.62	72.78	61.14	61.14
21	Indocement Tunggul Prakarsa	2014	35.29	86.56	44.62	54.97	54.97
21	Indocement Tunggul Prakarsa	2015	41.22	83.14	57.5	59.37	59.37
21	Indocement Tunggul Prakarsa	2016	43.64	69.83	56.54	55.63	55.63
21	Indocement Tunggul Prakarsa	2017	37.06	67.07	48.04	49.89	49.89
21	Indocement Tunggul Prakarsa	2018	33.95	62.64	31.04	43.02	43.02
21	Indocement Tunggul Prakarsa	2019	57.64	58.32	35.77	52.66	52.66
21	Indocement Tunggul Prakarsa	2020	72.01	60.53	48.99	62.62	62.62
21	Indocement Tunggul Prakarsa	2021	67.02	60.91	57.95	62.78	62.78
21	Indocement Tunggul Prakarsa	2022	75.83	57.56	57.28	65.19	65.19
22	Indo Tambangraya Megah Tbk	2010	33.87	48.26	79.12	51.67	51.67
22	Indo Tambangraya Megah Tbk	2011	31.48	49.78	61.49	45.73	45.73
22	Indo Tambangraya Megah Tbk	2012	70.35	59.22	78.06	69.59	69.59
22	Indo Tambangraya Megah Tbk	2013	80.98	82.71	88.98	83.9	83.9
22	Indo Tambangraya Megah Tbk	2014	74.78	85.43	88.1	81.81	81.81
22	Indo Tambangraya Megah Tbk	2015	75.7	76.75	83.87	78.48	78.48
22	Indo Tambangraya Megah Tbk	2016	78.96	72.05	78.81	76.98	76.98
22	Indo Tambangraya Megah Tbk	2017	84.11	79.39	92.28	85.28	85.28
22	Indo Tambangraya Megah Tbk	2018	77.02	74.54	87.35	79.47	79.47
22	Indo Tambangraya Megah Tbk	2019	77.28	69.58	81.55	76.43	76.43
22	Indo Tambangraya Megah Tbk	2020	74.32	81.96	77.78	77.51	77.51
22	Indo Tambangraya Megah Tbk	2021	77.84	79.88	90.55	82.28	82.28
22	Indo Tambangraya Megah Tbk	2022	85.62	82.07	88.96	85.65	85.65
23	Merdeka Copper Gold Tbk	2019	14.2	30.65	30.16	24.75	24.75
23	Merdeka Copper Gold Tbk	2020	25.84	27.22	26.72	26.61	26.61
23	Merdeka Copper Gold Tbk	2021	25.91	27.04	28.42	26.98	26.98
23	Merdeka Copper Gold Tbk	2022	39.7	39.42	41.93	40.13	40.13

No	NAME	Year	E	S	G	ESG	SESG
24	Semen Indonesia Tbk	2010	25.89	27.7	62.84	35.31	35.31
24	Semen Indonesia Tbk	2011	30.04	40.46	62.45	41.31	41.31
24	Semen Indonesia Tbk	2012	29.4	33.5	67.54	39.89	39.89
24	Semen Indonesia Tbk	2013	27.36	40.64	62.74	40.31	40.31
24	Semen Indonesia Tbk	2014	27.2	51.38	68.03	45.16	45.16
24	Semen Indonesia Tbk	2015	36.26	47.56	59.03	45.53	45.53
24	Semen Indonesia Tbk	2016	39.79	54.31	61.75	49.97	49.97
24	Semen Indonesia Tbk	2017	35.87	48.54	64.23	46.94	46.94
24	Semen Indonesia Tbk	2018	36.77	43.08	55.85	43.47	43.47
24	Semen Indonesia Tbk	2019	55.79	47.31	61	54.15	54.15
24	Semen Indonesia Tbk	2020	57.71	50.65	52.34	54.02	54.02
24	Semen Indonesia Tbk	2021	74.28	66.88	66.03	69.79	69.79
24	Semen Indonesia Tbk	2022	76.02	66.91	68.9	71.22	71.22
25	Pabrik Kertas Tjiwi Kimia Tbk	2017	21.23	24.04	32.22	24.72	24.72
25	Pabrik Kertas Tjiwi Kimia Tbk	2018	18.32	53.66	38.73	33.96	33.96
25	Pabrik Kertas Tjiwi Kimia Tbk	2019	12.93	52.71	36.67	30.72	30.72
25	Pabrik Kertas Tjiwi Kimia Tbk	2020	15.52	50.9	29.44	29.62	29.62
25	Pabrik Kertas Tjiwi Kimia Tbk	2021	24.66	59.8	25.3	35.49	35.49
25	Pabrik Kertas Tjiwi Kimia Tbk	2022	38.13	51.88	35.36	41.64	41.64
26	Chandra Asri Petrochemical Tbk	2020	69.295	67.33	48.57	63.92	63.92
26	Chandra Asri Petrochemical Tbk	2021	73.65	64.65	53.03	65.61	65.61
26	Chandra Asri Petrochemical Tbk	2022	64.94	70.01	44.11	62.23	62.23
27	Astra International Tbk	2010	22.22	48.61	26.91	34.32	34.32
27	Astra International Tbk	2011	23.12	41.33	29.09	32.17	32.17
27	Astra International Tbk	2012	32.62	41.42	42.7	38.73	38.73
27	Astra International Tbk	2013	34.62	36.7	34.45	35.44	35.44
27	Astra International Tbk	2014	32.15	36.27	50.5	38.33	38.33
27	Astra International Tbk	2015	26.71	32.38	50.92	34.96	34.96
27	Astra International Tbk	2016	27.42	25.12	47.31	31.31	31.31
27	Astra International Tbk	2017	31.91	36.17	40.82	35.78	35.78
27	Astra International Tbk	2018	37.89	40.56	40.21	39.52	39.52
27	Astra International Tbk	2019	30.15	35.02	42.23	35.03	35.03
27	Astra International Tbk	2020	54.47	38.89	40.71	44.91	44.91
27	Astra International Tbk	2021	66.69	59.11	49.8	59.55	59.55
27	Astra International Tbk	2022	64.08	60.11	53.65	59.96	59.96
28	United Tractors Tbk	2010	66.03	49.83	31.98	51.14	51.14
28	United Tractors Tbk	2011	66.89	44.54	49.89	55.47	55.47
28	United Tractors Tbk	2012	72.71	52.17	50.08	60.08	60.08
28	United Tractors Tbk	2013	62.1	59.37	41.2	54.97	54.97
28	United Tractors Tbk	2014	56.76	52.99	41.91	51.19	51.19
28	United Tractors Tbk	2015	49.08	49.04	26.59	42.22	42.22
28	United Tractors Tbk	2016	63.43	62.84	54.19	60.45	60.45
28	United Tractors Tbk	2017	53.13	67.83	40.93	53.52	53.52
28	United Tractors Tbk	2018	44.69	88.08	57.24	60.63	60.63
28	United Tractors Tbk	2019	60.45	82.92	58.01	65.98	65.98

No	NAME	Year	E	S	G	ESG	SESG
28	United Tractors Tbk	2020	59.65	82.42	59.97	66.11	66.11
28	United Tractors Tbk	2021	58.62	84.72	64.2	67.61	67.61
28	United Tractors Tbk	2022	65.82	83.52	75.01	73.56	73.56
29	Global Mediacom Tbk	2012	3.03	11.93	19.76	13.38	13.38
29	Global Mediacom Tbk	2013	3.89	9.81	17.58	11.51	11.51
29	Global Mediacom Tbk	2014	5.66	10.24	13.52	10.19	10.19
29	Global Mediacom Tbk	2015	5.98	10.01	29.3	16.03	16.03
29	Global Mediacom Tbk	2016	3.03	7.18	52.91	23.53	23.53
29	Global Mediacom Tbk	2017	3.89	7.97	49.29	22.56	22.56
29	Global Mediacom Tbk	2018	5.66	8.83	53.57	24.6	24.6
29	Global Mediacom Tbk	2019	0.45	10.16	54.71	25.75	25.75
29	Global Mediacom Tbk	2020	0.35	35.01	53.73	37.71	37.71
29	Global Mediacom Tbk	2021	5.34	39.08	68.53	45.95	45.95
29	Global Mediacom Tbk	2022	5.98	38.19	69.6	45.99	45.99
30	Matahari Department Store Tbk	2013	17.45	37.35	20.3	25.48	25.48
30	Matahari Department Store Tbk	2014	14.63	41.68	18.57	25.57	25.57
30	Matahari Department Store Tbk	2015	17.44	45.19	47.63	37.71	37.71
30	Matahari Department Store Tbk	2016	21.15	60.03	49.33	44.66	44.66
30	Matahari Department Store Tbk	2017	20.51	62.37	33.02	39.65	39.65
30	Matahari Department Store Tbk	2018	17.12	55.02	41.97	39.13	39.13
30	Matahari Department Store Tbk	2019	22.74	65.92	39.99	43.99	43.99
30	Matahari Department Store Tbk	2020	20.57	47.08	48.01	39.45	39.45
30	Matahari Department Store Tbk	2021	37.71	52.25	55.88	49.14	49.14
30	Matahari Department Store Tbk	2022	36.55	53.6	63.14	51.79	51.79
31	Ace Hardware Indonesia Tbk	2019	21.51	17.71	20.3	19.43	0
31	Ace Hardware Indonesia Tbk	2020	46.56	32.67	21.1	30.9	0
31	Ace Hardware Indonesia Tbk	2021	41	29.62	25.38	30.17	0
31	Ace Hardware Indonesia Tbk	2022	23.24	28.67	20.71	24.58	0
32	Akasha Wira International Tbk	2020	13.94	20.86	23.045	19.34	0
32	Akasha Wira International Tbk	2021	17.19	25.93	26.14	23.38	0
32	Akasha Wira International Tbk	2022	10.68	15.79	19.95	15.3	0
33	Charoen pokphand Indonesia Tbk	2010	10.68	6.9	31.87	11.44	0
33	Charoen pokphand Indonesia Tbk	2011	10.68	9.09	32.13	12.5	0
33	Charoen pokphand Indonesia Tbk	2012	10.68	7.52	24.76	9.86	0
33	Charoen pokphand Indonesia Tbk	2013	10.68	6.83	21.52	8.7	0
33	Charoen pokphand Indonesia Tbk	2014	10.68	5.72	29.81	10.37	0
33	Charoen pokphand Indonesia Tbk	2015	10.68	5.56	28.51	9.96	0
33	Charoen pokphand Indonesia Tbk	2016	10.68	13.19	8.46	8.16	0
33	Charoen pokphand Indonesia Tbk	2017	10.68	13.22	17.7	10.59	0
33	Charoen pokphand Indonesia Tbk	2018	20.64	15.91	28.29	20.51	0
33	Charoen pokphand Indonesia Tbk	2019	19.62	16.05	36.59	22.44	0
33	Charoen pokphand Indonesia Tbk	2020	26.29	31.95	2.98	22.75	0
33	Charoen pokphand Indonesia Tbk	2021	28.21	32.16	27.52	29.81	0
33	Charoen pokphand Indonesia Tbk	2022	34.79	31.5	31.14	32.35	0
34	Garudafood Putra Putri Jaya Tbk	2020	55.77	34.3	40.44	42.07	0

No	NAME	Year	E	S	G	ESG	SESG
34	Garudafood Putra Putri Jaya Tbk	2021	57.94	33.12	41.59	42.46	0
34	Garudafood Putra Putri Jaya Tbk	2022	53.6	35.48	39.29	41.68	0
35	Indofood CBP Sukses Makmur Tbk	2013	0	20.63	38.18	19.29	0
35	Indofood CBP Sukses Makmur Tbk	2014	0.96	28.02	23.16	18.98	0
35	Indofood CBP Sukses Makmur Tbk	2015	9.04	30.95	39.88	26.98	0
35	Indofood CBP Sukses Makmur Tbk	2016	9.41	36	38.56	29.03	0
35	Indofood CBP Sukses Makmur Tbk	2017	40.37	36.64	42.62	39.27	0
35	Indofood CBP Sukses Makmur Tbk	2018	38.01	33.68	44.6	37.78	0
35	Indofood CBP Sukses Makmur Tbk	2019	37.15	32.92	38.62	35.63	0
35	Indofood CBP Sukses Makmur Tbk	2020	31.46	35.22	17.69	29.56	0
35	Indofood CBP Sukses Makmur Tbk	2021	50.92	58.14	44.78	52.58	0
35	Indofood CBP Sukses Makmur Tbk	2022	53.42	64.9	50.94	57.95	0
36	Indofood Sukses Makmur Tbk	2010	4.29	19.3	12.4	13.19	0
36	Indofood Sukses Makmur Tbk	2011	3.79	22.49	11.36	14.21	0
36	Indofood Sukses Makmur Tbk	2012	12.65	21.43	13.65	16.87	0
36	Indofood Sukses Makmur Tbk	2013	14.13	16.66	17.16	16.06	0
36	Indofood Sukses Makmur Tbk	2014	29.11	21.94	29.16	25.89	0
36	Indofood Sukses Makmur Tbk	2015	32.53	25.35	22.6	26.69	0
36	Indofood Sukses Makmur Tbk	2016	32.29	25.92	20.44	26.32	0
36	Indofood Sukses Makmur Tbk	2017	45.87	36.67	39.44	40.04	0
36	Indofood Sukses Makmur Tbk	2018	42.3	34.16	21.35	33.15	0
36	Indofood Sukses Makmur Tbk	2019	41.56	46.67	25.57	39.69	0
36	Indofood Sukses Makmur Tbk	2020	40.32	49.28	33.38	42.55	0
36	Indofood Sukses Makmur Tbk	2021	66.07	80.52	58.41	70.59	0
36	Indofood Sukses Makmur Tbk	2022	81.16	79.81	47.34	71.71	0
37	Unilever Indonesia Tbk	2009	41.42	63.21	50.63	54.5	0
37	Unilever Indonesia Tbk	2010	69.32	83.29	45.28	70.11	0
37	Unilever Indonesia Tbk	2011	77.03	85.34	54.23	75.35	0
37	Unilever Indonesia Tbk	2012	85.11	80.58	61.87	76.99	0
37	Unilever Indonesia Tbk	2013	88.61	80.84	54.55	76.14	0
37	Unilever Indonesia Tbk	2014	85.37	78.24	46.32	71.95	0
37	Unilever Indonesia Tbk	2015	70.04	84.79	45.81	71.17	0
37	Unilever Indonesia Tbk	2016	75.17	83.76	54.24	74.1	0
37	Unilever Indonesia Tbk	2017	77.8	77.86	57.51	72.69	0
37	Unilever Indonesia Tbk	2018	76.93	76.89	68.88	74.87	0
37	Unilever Indonesia Tbk	2019	82.88	78.24	59.33	74.62	0
37	Unilever Indonesia Tbk	2020	82.98	78.92	62.02	75.67	0
37	Unilever Indonesia Tbk	2021	88.78	77.61	89.19	83.38	0
37	Unilever Indonesia Tbk	2022	86.05	77.7	82.14	80.94	0
38	Japfa Comfeed Indonesia Tbk	2020	54.76	60.705	65.29	60.195	0
38	Japfa Comfeed Indonesia Tbk	2021	61.43	61.39	70.41	63.76	0
38	Japfa Comfeed Indonesia Tbk	2022	48.09	60.02	60.17	56.63	0
39	Bermaz Auto Bhd	2019	65.87	71.28	20.49	50.79	50.79
39	Bermaz Auto Bhd	2020	66.75	74.78	14.14	50.02	50.02
39	Bermaz Auto Bhd	2021	59.38	80.8	30.81	57.55	57.55

No	NAME	Year	E	S	G	ESG	SESG
39	Bermaz Auto Bhd	2022	57.83	79.05	25.85	54.62	54.62
40	CAB Cakaran Corporation Bhd	2020	6.29	32.34	26.41	23.3	23.3
40	CAB Cakaran Corporation Bhd	2021	2.3	33.02	33.9	24.42	24.42
40	CAB Cakaran Corporation Bhd	2022	10.27	31.65	18.91	22.18	22.18
41	Capital A Berhad	2010	3.36	23.98	62.96	28.54	28.54
41	Capital A Berhad	2011	4.26	24.11	70.01	30.84	30.84
41	Capital A Berhad	2012	8.4	45.39	75.28	42.37	42.37
41	Capital A Berhad	2013	8.05	44.28	56.24	36.47	36.47
41	Capital A Berhad	2014	9.63	47.17	57.36	38.46	38.46
41	Capital A Berhad	2015	13.44	41	42.17	32.84	32.84
41	Capital A Berhad	2016	14.67	40.82	36.85	31.66	31.66
41	Capital A Berhad	2017	16.26	40.38	18.28	26.77	26.77
41	Capital A Berhad	2018	28.54	53.59	25.08	37.9	37.9
41	Capital A Berhad	2019	44.86	68.92	42.91	54.23	54.23
41	Capital A Berhad	2020	46.75	67.94	67.8	61.38	61.38
41	Capital A Berhad	2021	49.14	68.62	79.4	65.64	65.64
41	Capital A Berhad	2022	56.7	71.09	87.69	71.3	71.3
42	DKSH Holdings (Malaysia) Bhd	2020	11.6	42.94	33.05	31.19	31.19
42	DKSH Holdings (Malaysia) Bhd	2021	5.89	34.18	23.3	23	23
42	DKSH Holdings (Malaysia) Bhd	2022	17.31	51.69	42.79	39.39	39.39
43	DRB-HICOM Bhd	2020	23.65	56.04	55.62	44.89	44.89
43	DRB-HICOM Bhd	2021	22.24	55.48	55.72	44.21	44.21
43	DRB-HICOM Bhd	2022	25.06	56.6	55.51	45.58	45.58
44	Farm fresh Bhd	2020	15.55	55.14	80.47	50.38	50.38
44	Farm fresh Bhd	2021	14.76	51.67	86.84	50.25	50.25
44	Farm fresh Bhd	2022	16.33	58.61	74.1	50.51	50.51
45	Formosa Prosonic Industries Bhd	2020	4.29	15.29	68.24	27.39	27.39
45	Formosa Prosonic Industries Bhd	2021	4.51	16.28	67.69	27.78	27.78
45	Formosa Prosonic Industries Bhd	2022	4.07	14.29	68.78	27	27
46	Fraser & Neave Holdings Bhd	2017	59.93	50.97	67.61	57.75	57.75
46	Fraser & Neave Holdings Bhd	2018	69.06	55.41	50.22	58.18	58.18
46	Fraser & Neave Holdings Bhd	2019	72.58	58.64	58.17	62.67	62.67
46	Fraser & Neave Holdings Bhd	2020	74.69	55.93	65.11	63.78	63.78
46	Fraser & Neave Holdings Bhd	2021	79.59	67.91	88.55	76.49	76.49
46	Fraser & Neave Holdings Bhd	2022	73.75	65.83	85.87	73.07	73.07
47	Frontken Corporation Bhd	2020	36.34	29.99	12.99	25.78	25.78
47	Frontken Corporation Bhd	2021	33.22	30.64	9.89	24.28	24.28
47	Frontken Corporation Bhd	2022	39.46	29.34	16.09	27.27	27.27
48	Guan Chong Bhd	2020	59.84	57.095	54.655	57.24	57.24
48	Guan Chong Bhd	2021	59.93	57.81	54.8	57.63	57.63
48	Guan Chong Bhd	2022	59.74	56.38	54.51	56.85	56.85
49	Homeritz Corporation Bhd	2020	1.57	18.57	83.3	29.53	29.53
49	Homeritz Corporation Bhd	2021	1.54	13.79	82.22	27.36	27.36
49	Homeritz Corporation Bhd	2022	1.6	23.35	84.38	31.7	31.7
50	Hup Seng Industries Bhd	2020	25.196	42.825	76.905	46.66	46.66

No	NAME	Year	E	S	G	ESG	SESG
50	Hup Seng Industries Bhd	2021	22.85	30.6	72.04	39.2	39.2
50	Hup Seng Industries Bhd	2022	27.54	55.05	81.77	54.12	54.12
51	Innature Bhd	2020	57.725	82.865	64.215	70.91	70.91
51	Innature Bhd	2021	50.37	80.04	65.94	68.96	68.96
51	Innature Bhd	2022	65.08	85.69	62.49	72.86	72.86
52	MSM Malaysia Holdings Bhd	2020	47.025	50.83	62.035	52.665	52.665
52	MSM Malaysia Holdings Bhd	2021	47.95	50.47	58.98	51.97	51.97
52	MSM Malaysia Holdings Bhd	2022	46.1	51.19	65.09	53.36	53.36
53	Nestle Malaysia Bhd	2016	89.5	96.35	64.1	85.96	85.96
53	Nestle Malaysia Bhd	2017	89.09	96.02	69.83	87.19	87.19
53	Nestle Malaysia Bhd	2018	88.77	96.36	61.37	85.04	85.04
53	Nestle Malaysia Bhd	2019	85.89	97.28	75.03	88.19	88.19
53	Nestle Malaysia Bhd	2020	90.81	97.47	77.03	90.21	90.21
53	Nestle Malaysia Bhd	2021	91.55	97.47	79.03	90.95	90.95
53	Nestle Malaysia Bhd	2022	89.54	95.05	78.68	89.19	89.19
54	NTPM Holdings Bhd	2020	5.14	19.36	32.6	19.11	19.11
54	NTPM Holdings Bhd	2021	5.14	19.36	32.6	19.11	19.11
54	NTPM Holdings Bhd	2022	5.14	19.36	32.6	19.11	19.11
55	One Glove Group Bhd	2020	7.49	32.39	25.38	25.7	25.7
55	One Glove Group Bhd	2021	7.49	32.39	25.38	25.7	25.7
55	One Glove Group Bhd	2022	7.49	32.39	25.38	25.7	25.7
56	PPB Group Bhd	2009	18.65	16.47	37.11	22.49	22.49
56	PPB Group Bhd	2010	16.41	13.94	16.64	15.36	15.36
56	PPB Group Bhd	2011	13.97	15.42	18.38	15.77	15.77
56	PPB Group Bhd	2012	11.08	11.74	9.88	11.06	11.06
56	PPB Group Bhd	2013	12.21	12.45	15.7	13.23	13.23
56	PPB Group Bhd	2014	0.96	11.67	8.05	7.65	7.65
56	PPB Group Bhd	2015	9.6	18.03	16.04	15.09	15.09
56	PPB Group Bhd	2016	15.9	19.61	20.48	18.77	18.77
56	PPB Group Bhd	2017	22.25	47.8	44.83	39.68	39.68
56	PPB Group Bhd	2018	27.47	43.45	38.74	37.63	37.63
56	PPB Group Bhd	2019	27.85	41.9	32.55	35.42	35.42
56	PPB Group Bhd	2020	41.91	43.19	25.6	38.28	38.28
56	PPB Group Bhd	2021	54.66	47.65	45.06	48.99	48.99
56	PPB Group Bhd	2022	44.66	58.02	55.02	53.4	53.4
57	Petronas Dagangan Bhd	2010	9.29	12.83	19.02	13.06	13.06
57	Petronas Dagangan Bhd	2011	8.17	13.72	64.32	23.71	23.71
57	Petronas Dagangan Bhd	2012	18.01	34.99	47.33	32.03	32.03
57	Petronas Dagangan Bhd	2013	22.93	36.71	24.64	29.12	29.12
57	Petronas Dagangan Bhd	2014	30.63	46	33.39	37.73	37.73
57	Petronas Dagangan Bhd	2015	51.83	76.81	48.54	61.54	61.54
57	Petronas Dagangan Bhd	2016	51.25	72.87	40.15	57.71	57.71
57	Petronas Dagangan Bhd	2017	69.32	88.08	56.06	74.07	74.07
57	Petronas Dagangan Bhd	2018	71.32	88.19	62.02	76.21	76.21
57	Petronas Dagangan Bhd	2019	60.99	88	40.18	67.43	67.43

No	NAME	Year	E	S	G	ESG	SESG
57	Petronas Dagangan Bhd	2020	60.89	87.22	75.45	75.36	75.36
57	Petronas Dagangan Bhd	2021	55.69	85.12	67.9	70.91	70.91
57	Petronas Dagangan Bhd	2022	55.96	87.71	78.27	74.53	74.53
58	Poh Huat Resources Holdings Bhd	2020	20.055	32.97	81.41	41.1	41.1
58	Poh Huat Resources Holdings Bhd	2021	15.36	31.76	82.28	39.22	39.22
58	Poh Huat Resources Holdings Bhd	2022	24.75	34.18	80.54	42.98	42.98
59	Parkson Holdings Bhd	2010	24.75	10.2	38.02	16.77	16.77
59	Parkson Holdings Bhd	2011	24.75	9.91	23.55	11.66	11.66
59	Parkson Holdings Bhd	2012	6.84	9.64	50.28	22.87	22.87
59	Parkson Holdings Bhd	2013	7.43	12.33	57.67	26.55	26.55
59	Parkson Holdings Bhd	2014	4	14.06	61.47	27.46	27.46
59	Parkson Holdings Bhd	2015	6.04	20.45	57.17	28.84	28.84
59	Parkson Holdings Bhd	2016	7.52	18.69	54.12	27.6	27.6
59	Parkson Holdings Bhd	2017	8.91	30.36	52.72	31.67	31.67
59	Parkson Holdings Bhd	2018	20.92	29.9	70.55	41.27	41.27
59	Parkson Holdings Bhd	2019	24.41	28.68	65.54	40.16	40.16
59	Parkson Holdings Bhd	2020	21.41	26.65	59.55	36.46	36.46
59	Parkson Holdings Bhd	2021	14.14	20.74	72.56	36.7	36.7
59	Parkson Holdings Bhd	2022	14.26	19.30083	55.26667	29.00083	
60	QL Resources Bhd	2019	12.45	35.52	17.98	24.31	24.31
60	QL Resources Bhd	2020	19.02	46.88	28.96	34.19	34.19
60	QL Resources Bhd	2021	42.35	53.61	36.94	46.02	46.02
60	QL Resources Bhd	2022	45.83	57.1	56.78	53.78	53.78
61	Signature International Bhd	2020	5.825	23.65	26.95	18.51	18.51
61	Signature International Bhd	2021	5.8	24.84	24.37	18.32	18.32
61	Signature International Bhd	2022	5.85	22.46	29.53	18.7	18.7
62	Sern Kou Resources Bhd	2020	8.84	25.93	74.68	32.69	32.69
62	Sern Kou Resources Bhd	2021	7.71	28.34	63.17	30.24	30.24
62	Sern Kou Resources Bhd	2022	9.97	23.52	86.19	35.14	35.14
63	Sime Darby Bhd	2009	3.36	27.88	58.39	26.55	26.55
63	Sime Darby Bhd	2010	8.62	24.09	69.37	29.61	29.61
63	Sime Darby Bhd	2011	21.89	37.57	65.92	38.88	38.88
63	Sime Darby Bhd	2012	44.72	66.78	68.46	59.29	59.29
63	Sime Darby Bhd	2013	41.27	73.77	53.59	57.2	57.2
63	Sime Darby Bhd	2014	38.31	71.7	42.73	52.66	52.66
63	Sime Darby Bhd	2015	33.84	73.2	75.33	59.62	59.62
63	Sime Darby Bhd	2016	32.54	75.71	63.32	57.22	57.22
63	Sime Darby Bhd	2017	38.48	63.27	75.06	52.27	52.27
63	Sime Darby Bhd	2018	23.82	65.81	56.78	48.56	48.56
63	Sime Darby Bhd	2019	29.55	61.87	72.69	52.93	52.93
63	Sime Darby Bhd	2020	32.39	59.56	84.45	55.91	55.91
63	Sime Darby Bhd	2021	35.3	59.8	95.14	59.66	59.66
63	Sime Darby Bhd	2022	39.64	57.18	94.1	59.91	59.91
64	ABM Investama Tbk	2020	42.735	58.04	55.84	51	51
64	ABM Investama Tbk	2021	44.2	58.38	57.38	52.17	52.17

No	NAME	Year	E	S	G	ESG	SESG
64	ABM Investama Tbk	2022	41.27	57.7	54.3	49.83	49.83
65	Bank BTPN Syariah Tbk	2020	16.355	60.135	67.355	56.43	56.43
65	Bank BTPN Syariah Tbk	2021	16.44	65.51	66.97	58.97	58.97
65	Bank BTPN Syariah Tbk	2022	16.27	54.76	67.74	53.89	53.89
66	Bank Panin Dubai Syariah	2020	3.19	21.035	68.125	35.415	35.415
66	Bank Panin Dubai Syariah	2021	3.1	11.48	66.82	30.19	30.19
66	Bank Panin Dubai Syariah	2022	3.28	30.59	69.43	40.64	40.64
67	Malaysia Building Society Bhd	2020	33.2	64.76	49.015	54.55	54.55
67	Malaysia Building Society Bhd	2021	29.86	60.78	50.38	52.59	52.59
67	Malaysia Building Society Bhd	2022	36.54	68.74	47.65	56.51	56.51
68	RCE Capital Bhd	2020	17.115	47.625	52.3	44.91	44.91
68	RCE Capital Bhd	2021	16	45.88	56.15	45.27	45.27
68	RCE Capital Bhd	2022	18.23	49.37	48.45	44.55	44.55
69	Syarikat Takaful Malaysia Keluarga Bhd	2020	9.405	34.745	76.79	48.185	48.185
69	Syarikat Takaful Malaysia Keluarga Bhd	2021	6.71	33.25	67.83	43.54	43.54
69	Syarikat Takaful Malaysia Keluarga Bhd	2022	12.1	36.24	85.75	52.83	52.83
70	Acset Indonusa Tbk	2020	34.475	50.135	33.66	39.97	39.97
70	Acset Indonusa Tbk	2021	34.3	48.84	34.75	39.72	39.72
70	Acset Indonusa Tbk	2022	34.65	51.43	32.57	40.22	40.22
71	XL Axiata Tbk	2010	11.16	30.29	75.12	38.29	38.29
71	XL Axiata Tbk	2011	10.26	26.6	63.62	33.1	33.1
71	XL Axiata Tbk	2012	12.9	33.44	49.96	33.64	33.64
71	XL Axiata Tbk	2013	32.89	57.24	58.53	52.63	52.63
71	XL Axiata Tbk	2014	31.44	51.63	78.98	54.78	54.78
71	XL Axiata Tbk	2015	28.88	51.3	85.76	55.88	55.88
71	XL Axiata Tbk	2016	21.73	46.4	84.68	51.54	51.54
71	XL Axiata Tbk	2017	24.71	58.34	82.17	57.82	57.82
71	XL Axiata Tbk	2018	49.06	73.38	57.33	64.18	64.18
71	XL Axiata Tbk	2019	42.41	75.17	95.21	71.18	71.18
71	XL Axiata Tbk	2020	38.53	71.9	72.93	65.39	65.39
71	XL Axiata Tbk	2021	37.93	53.52	82.04	57.91	57.91
71	XL Axiata Tbk	2022	43.04	48.66	77.51	55.17	55.17
72	Indosat Tbk	2010	11.68	39.07	68.68	41.35	41.35
72	Indosat Tbk	2011	9.33	42.96	72.07	43.84	43.84
72	Indosat Tbk	2012	17.31	53.43	72.38	51.12	51.12
72	Indosat Tbk	2013	22.07	60.55	71.38	55.6	55.6
72	Indosat Tbk	2014	21.64	69.34	70.58	59.97	59.97
72	Indosat Tbk	2015	18.63	66.79	67.41	57.17	57.17
72	Indosat Tbk	2016	16.56	64.82	51.97	51.6	51.6
72	Indosat Tbk	2017	16.71	66.48	45.69	50.85	50.85
72	Indosat Tbk	2018	11.39	61.24	43.93	46.52	46.52
72	Indosat Tbk	2019	11.5	64.41	40.51	47.32	47.32
72	Indosat Tbk	2020	11.67	61.22	54.63	49.4	49.4

No	NAME	Year	E	S	G	ESG	SESG
72	Indosat Tbk	2021	13.82	57.86	19.18	38.66	38.66
72	Indosat Tbk	2022	12.7	66.18	22.48	43.73	43.73
73	Cikarang Listrindo Tbk	2020	60.665	60.28	82.205	65.925	65.925
73	Cikarang Listrindo Tbk	2021	61.11	61.82	82.5	66.69	66.69
73	Cikarang Listrindo Tbk	2022	60.22	58.74	81.91	65.16	65.16
74	Telkom Indonesia Tbk	2009	11.35	78.62	36.59	53.81	53.81
74	Telkom Indonesia Tbk	2010	21.52	59.49	51.98	49.78	49.78
74	Telkom Indonesia Tbk	2011	38.77	54.72	38.39	47.15	47.15
74	Telkom Indonesia Tbk	2012	49.64	55.57	37.42	49.56	49.56
74	Telkom Indonesia Tbk	2013	26.63	57.92	45.77	48.34	48.34
74	Telkom Indonesia Tbk	2014	29.55	60.81	63.07	55.06	55.06
74	Telkom Indonesia Tbk	2015	36.24	69.32	64.84	61.43	61.43
74	Telkom Indonesia Tbk	2016	35.21	72.43	62.01	62.1	62.1
74	Telkom Indonesia Tbk	2017	32.27	71.7	50.03	57.94	57.94
74	Telkom Indonesia Tbk	2018	32.28	58.04	57.96	52.81	52.81
74	Telkom Indonesia Tbk	2019	24.01	58.07	33.56	44.65	44.65
74	Telkom Indonesia Tbk	2020	22.96	64.79	37.77	49.13	49.13
74	Telkom Indonesia Tbk	2021	33.09	73.7	35.03	55.19	55.19
74	Telkom Indonesia Tbk	2022	38.91	73.04	36.35	56.38	56.38
75	Petronas Gas Bhd	2010	10.71	43.03	36.98	29.83	29.83
75	Petronas Gas Bhd	2011	3.35	44.69	30.22	26.11	26.11
75	Petronas Gas Bhd	2012	8.29	44.12	28.4	27.21	27.21
75	Petronas Gas Bhd	2013	5.1	43.7	30.46	26.41	26.41
75	Petronas Gas Bhd	2014	24.7	59.39	40.95	42.21	42.21
75	Petronas Gas Bhd	2015	27.08	61.43	49.41	45.99	45.99
75	Petronas Gas Bhd	2016	14.7	71.46	35.82	41.97	41.97
75	Petronas Gas Bhd	2017	18.18	65.94	47.39	44.01	44.01
75	Petronas Gas Bhd	2018	26.18	75.04	51.31	51.4	51.4
75	Petronas Gas Bhd	2019	33.4	68.03	31	46.19	46.19
75	Petronas Gas Bhd	2020	49.9	67.77	32.79	52.49	52.49
75	Petronas Gas Bhd	2021	56.75	74.82	78.71	69.27	69.27
75	Petronas Gas Bhd	2022	56.09	69.36	81.25	67.56	67.56
76	Salcon Bhd	2020	50.16	78.295	63.765	64.02	64.02
76	Salcon Bhd	2021	52.44	79.03	55.33	62.9	62.9
76	Salcon Bhd	2022	47.88	77.56	72.2	65.14	65.14
77	Tenaga Nasional Bhd	2010	31.44	42.84	72.43	45.39	45.39
77	Tenaga Nasional Bhd	2011	25.14	49.85	77.38	46.23	46.23
77	Tenaga Nasional Bhd	2012	20.82	48.17	75.07	43.27	43.27
77	Tenaga Nasional Bhd	2013	34.53	46.05	69.18	46.94	46.94
77	Tenaga Nasional Bhd	2014	33.6	54.87	53.7	45.54	45.54
77	Tenaga Nasional Bhd	2015	38.01	73.81	60.19	55.19	55.19
77	Tenaga Nasional Bhd	2016	36.83	68.49	51.66	50.83	50.83
77	Tenaga Nasional Bhd	2017	34.16	65.01	48.17	47.69	47.69
77	Tenaga Nasional Bhd	2018	33.06	64.39	24.1	41	41
77	Tenaga Nasional Bhd	2019	33.5	63.2	26.84	41.49	41.49

No	NAME	Year	E	S	G	ESG	SESG
77	Tenaga Nasional Bhd	2020	39.45	58.16	40.98	45.91	45.91
77	Tenaga Nasional Bhd	2021	46.53	69.07	45.62	53.63	53.63
77	Tenaga Nasional Bhd	2022	33.9225	58.65917	53.77667	46.92583	46.92583
78	Taliworks Corporation Bhd	2020	34.135	37.63	64.82	43.07	43.07
78	Taliworks Corporation Bhd	2021	32.28	33.95	58.22	39.44	39.44
78	Taliworks Corporation Bhd	2022	35.99	41.31	71.42	46.7	46.7
79	Pakuwon Jati Tbk	2016	4.66	30.87	27.28	21.44	0
79	Pakuwon Jati Tbk	2017	2.4	39.09	15.16	19.72	0
79	Pakuwon Jati Tbk	2018	3.95	46.03	14.53	22.49	0
79	Pakuwon Jati Tbk	2019	18.73	45.23	15.15	27.07	0
79	Pakuwon Jati Tbk	2020	20	53.05	48.35	41.1	0
79	Pakuwon Jati Tbk	2021	52.39	62.95	41.61	52.66	0
79	Pakuwon Jati Tbk	2022	40.93	59.9	40.48	47.59	0
80	Bumi Serpong Damai Tbk	2014	7.03	42.66	46.16	32.57	0
80	Bumi Serpong Damai Tbk	2015	17.95	44.55	15.49	26.69	0
80	Bumi Serpong Damai Tbk	2016	8.82	43.13	12.81	22.43	0
80	Bumi Serpong Damai Tbk	2017	5.43	47.77	22.28	26.12	0
80	Bumi Serpong Damai Tbk	2018	8.74	43.25	32.02	28.71	0
80	Bumi Serpong Damai Tbk	2019	37.14	42.3	32.12	37.35	0
80	Bumi Serpong Damai Tbk	2020	45.25	44.94	30.94	40.47	0
80	Bumi Serpong Damai Tbk	2021	49.7	61.18	55.63	55.75	0
80	Bumi Serpong Damai Tbk	2022	22.5075	46.2225	30.93125	33.76125	0
81	Summarrecon Agung Tbk	2014	0	26.09	41.81	22.99	0
81	Summarrecon Agung Tbk	2015	0	23.87	58.07	27.5	0
81	Summarrecon Agung Tbk	2016	0	25.62	64.62	30.26	0
81	Summarrecon Agung Tbk	2017	0	18.89	69.84	29.55	0
81	Summarrecon Agung Tbk	2018	0	20.01	60.47	26.89	0
81	Summarrecon Agung Tbk	2019	5.47	24.9	61.88	30.84	0
81	Summarrecon Agung Tbk	2020	4.58	26.05	57.78	29.63	0
81	Summarrecon Agung Tbk	2021	27.15	33.99	72.79	44.49	0
81	Summarrecon Agung Tbk	2022	22.56	47.81	74.22	48.46	0
82	Eco World	2020	80.18	71.095	41.48	64.3	64.3
82	Eco World	2021	78.41	66.57	39.08	61.34	61.34
82	Eco World	2022	81.95	75.62	43.88	67.26	67.26
83	Eco Development Group Bhd	2020	72.015	75.345	59.985	69.285	69.285
83	Eco Development Group Bhd	2021	59.24	73.86	57.06	63.77	63.77
83	Eco Development Group Bhd	2022	84.79	76.83	62.91	74.8	74.8
84	Eastern & Oriental Bhd	2020	48.265	68.29	70	62.535	62.535
84	Eastern & Oriental Bhd	2021	45.68	61.59	79.48	62.41	62.41
84	Eastern & Oriental Bhd	2022	50.85	74.99	60.52	62.66	62.66
85	Engtex Group Bhd	2020	18.46	49.24	39.235	36.305	36.305
85	Engtex Group Bhd	2021	22.8	42.42	48.31	37.35	37.35
85	Engtex Group Bhd	2022	14.12	56.06	30.16	35.26	35.26
86	HCK Capital Group Bhd	2020	12.76	28.045	27.115	22.925	22.925
86	HCK Capital Group Bhd	2021	13.91	28.98	19.74	21.22	21.22

No	NAME	Year	E	S	G	ESG	SESG
86	HCK Capital Group Bhd	2022	11.61	27.11	34.49	24.63	24.63
87	I-Bhd	2020	7.565	40.81	35.835	28.71	28.71
87	I-Bhd	2021	6.74	41.07	47.94	32.49	32.49
87	I-Bhd	2022	8.39	40.55	23.73	24.93	24.93
88	Iskandar Waterfront City Bhd	2020	7.53	34.985	52.175	31.935	31.935
88	Iskandar Waterfront City Bhd	2021	1.12	28.29	47.48	25.98	25.98
88	Iskandar Waterfront City Bhd	2022	13.94	41.68	56.87	37.89	37.89
89	KSL Holdings Bhd	2020	31.32	51.275	43.32	42.39	42.39
89	KSL Holdings Bhd	2021	29.69	57.07	37.27	41.98	41.98
89	KSL Holdings Bhd	2022	32.95	45.48	49.37	42.8	42.8
90	LBS Bina Group Bhd	2020	39.37	57.965	34.38	44.42	44.42
90	LBS Bina Group Bhd	2021	36.61	57.27	38.04	44.49	44.49
90	LBS Bina Group Bhd	2022	42.13	58.66	30.72	44.35	44.35
91	Mah Sing Group Bhd	2020	66.465	67.84	41.725	58.89	58.89
91	Mah Sing Group Bhd	2021	63.5	63.77	42.63	56.79	56.79
91	Mah Sing Group Bhd	2022	69.43	71.91	40.82	60.99	60.99
92	Naim Holdings Bhd	2020	3.86	35.305	28.78	21.905	21.905
92	Naim Holdings Bhd	2021	4.28	34.9	24.67	20.81	20.81
92	Naim Holdings Bhd	2022	3.44	35.71	32.89	23	23
93	NCT Alliance Bhd	2020	23.135	47.66	28.17	33.575	33.575
93	NCT Alliance Bhd	2021	20.85	48.6	35.37	35.54	35.54
93	NCT Alliance Bhd	2022	25.42	46.72	20.97	31.61	31.61
94	Poh Kong Holdings Bhd	2020	6.405	20.285	20.335	17.775	17.775
94	Poh Kong Holdings Bhd	2021	5.37	19.3	21.12	17.29	17.29
94	Poh Kong Holdings Bhd	2022	7.44	21.27	19.55	18.26	18.26
95	Scientex Packaging (Ayer keroh) Bhd	2020	31.935	40.805	68.735	44.195	44.195
95	Scientex Packaging (Ayer keroh) Bhd	2021	29.13	35.52	63.13	39.73	39.73
95	Scientex Packaging (Ayer keroh) Bhd	2022	34.74	46.09	74.34	48.66	48.66
96	S P Setia Bhd	2010	4.02	24.12	28.49	19.21	19.21
96	S P Setia Bhd	2011	4.34	24.78	23.7	17.99	17.99
96	S P Setia Bhd	2012	20.3	28.02	11.13	20.08	20.08
96	S P Setia Bhd	2013	21.21	28.61	45.8	31.88	31.88
96	S P Setia Bhd	2014	21.54	29.53	38.4	29.9	29.9
96	S P Setia Bhd	2015	17.18	49.14	41.07	36.43	36.43
96	S P Setia Bhd	2016	32.84	53.34	36.53	41.4	41.4
96	S P Setia Bhd	2017	29.31	59.66	42.83	44.61	44.61
96	S P Setia Bhd	2018	30.32	65.54	25.3	41.32	41.32
96	S P Setia Bhd	2019	41.48	68.9	42.04	51.5	51.5
96	S P Setia Bhd	2020	44.69	81.25	76.85	68.29	68.29
96	S P Setia Bhd	2021	59.06	88.24	92.68	80.49	80.49
96	S P Setia Bhd	2022	65.57	87.58	87.14	80.5	80.5
97	Supermax Corporation Bhd	2020	7.36	35.82	40.63	32.78	32.78
97	Supermax Corporation Bhd	2021	17.97	33.5	41.71	33.84	33.84
97	Supermax Corporation Bhd	2022	14.62	49.3	65.73	49.39	49.39
98	Suria Capital Holdings Bhd	2020	15.48	30.87	70.045	37.425	37.425

No	NAME	Year	E	S	G	ESG	SESG
98	Suria Capital Holdings Bhd	2021	15.92	26.32	66.89	34.72	34.72
98	Suria Capital Holdings Bhd	2022	15.04	35.42	73.2	40.13	40.13
99	Symphony Life Bhd	2020	35.495	57.15	17.175	37.005	37.005
99	Symphony Life Bhd	2021	34.5	59.2	17.63	37.86	37.86
99	Symphony Life Bhd	2022	36.49	55.1	16.72	36.15	36.15
100	Tropicana Corporation Bhd	2020	34.63	56.545	33.555	42.14	42.14
100	Tropicana Corporation Bhd	2021	33.7	59.61	31.09	42.14	42.14
100	Tropicana Corporation Bhd	2022	35.56	53.48	36.02	42.14	42.14
101	UEM Sunrise Bhd	2010	59.7	73.05	26.64	53.71	53.71
101	UEM Sunrise Bhd	2011	58.63	76.1	52.17	62.79	62.79
101	UEM Sunrise Bhd	2012	66.68	77.4	50.56	65.27	65.27
101	UEM Sunrise Bhd	2013	57.03	72.46	56.04	62.24	62.24
101	UEM Sunrise Bhd	2014	52.22	76.91	74.47	68.33	68.33
101	UEM Sunrise Bhd	2015	55.93	74.47	85.92	72.36	72.36
101	UEM Sunrise Bhd	2016	64.64	71.14	78.15	71.37	71.37
101	UEM Sunrise Bhd	2017	48.5	69.83	67.61	62.38	62.38
101	UEM Sunrise Bhd	2018	51.65	64.29	71.42	62.63	62.63
101	UEM Sunrise Bhd	2019	65.21	70.4	69.49	68.47	68.47
101	UEM Sunrise Bhd	2020	84.01	88.16	90.57	87.64	87.64
101	UEM Sunrise Bhd	2021	83.34	83.8	89.41	85.48	85.48
101	UEM Sunrise Bhd	2022	87.84	83.02	92.12	87.51	87.51
102	Lippo Karawaci Tbk	2013	2.16	26.62	54.49	29.63	29.63
102	Lippo Karawaci Tbk	2014	1.74	34.43	52.48	30.01	30.01
102	Lippo Karawaci Tbk	2015	3.43	39.32	80.44	41.42	41.42
102	Lippo Karawaci Tbk	2016	3.48	46.86	77.86	43.29	43.29
102	Lippo Karawaci Tbk	2017	4.81	56.33	68.47	44.04	44.04
102	Lippo Karawaci Tbk	2018	11.16	60.74	50.09	41.64	41.64
102	Lippo Karawaci Tbk	2019	11.91	53.72	53.64	40.51	40.51
102	Lippo Karawaci Tbk	2020	12.11	49.97	41.08	35.14	35.14
102	Lippo Karawaci Tbk	2021	7.06	43.98	49.3	34.08	34.08
102	Lippo Karawaci Tbk	2022	27.87	63.95	56.25	50.07	50.07
103	Ekovest Bhd	2020	4.6	16.495	59.505	22.625	22.625
103	Ekovest Bhd	2021	4.6	14.62	48.56	18.19	18.19
103	Ekovest Bhd	2022	4.6	18.37	70.45	27.06	27.06
104	Gadang Holdings Bhd	2020	12.83	37.225	40.05	33.93	33.93
104	Gadang Holdings Bhd	2021	12.39	39.53	47.24	31.51	31.51
104	Gadang Holdings Bhd	2022	13.27	34.92	32.86	36.35	36.35
105	Gamuda Bhd	2010	0.79	1.24	40.29	14.39	14.39
105	Gamuda Bhd	2011	1.24	8	26.78	10.47	10.47
105	Gamuda Bhd	2012	0.84	16.3	38.4	16.42	16.42
105	Gamuda Bhd	2013	0.85	16.02	35.51	15.56	15.56
105	Gamuda Bhd	2014	1.16	20.05	59.22	23.42	23.42
105	Gamuda Bhd	2015	20.99	39.46	49.82	35.27	35.27
105	Gamuda Bhd	2016	39.43	39.68	59.61	44.78	44.78
105	Gamuda Bhd	2017	57.67	49.32	55.72	54.11	54.11

No	NAME	Year	E	S	G	ESG	SESG
105	Gamuda Bhd	2018	62.43	49.38	48.03	53.86	53.86
105	Gamuda Bhd	2019	73.33	52.68	52.26	60.22	60.22
105	Gamuda Bhd	2020	71.7	51.2	49.34	58.31	58.31
105	Gamuda Bhd	2021	79.3	65.12	79.21	74.1	74.1
105	Gamuda Bhd	2022	73.21	66.73	76.87	71.81	71.81
106	Gabungan AQRS Bhd	2020	37.88	63.555	29.235	44.955	44.955
106	Gabungan AQRS Bhd	2021	40.21	61.38	39.65	47.78	47.78
106	Gabungan AQRS Bhd	2022	35.55	65.73	18.82	42.13	42.13
107	IJM Corporation Bhd	2010	10.7	22.53	44.39	23.93	23.93
107	IJM Corporation Bhd	2011	10.63	19.73	54.21	25.49	25.49
107	IJM Corporation Bhd	2012	16.69	30.46	71.09	36.11	36.11
107	IJM Corporation Bhd	2013	17.66	26.58	78.99	37.15	37.15
107	IJM Corporation Bhd	2014	18.44	36.82	82.23	42.03	42.03
107	IJM Corporation Bhd	2015	27.6	38.56	83.9	46.36	46.36
107	IJM Corporation Bhd	2016	27.27	37.48	74.57	43.37	43.37
107	IJM Corporation Bhd	2017	38.98	53.04	75.72	53.83	53.83
107	IJM Corporation Bhd	2018	42.3	52.72	70.55	53.58	53.58
107	IJM Corporation Bhd	2019	51.02	61.71	55.76	56.17	56.17
107	IJM Corporation Bhd	2020	50.47	66.07	58.57	58.3	58.3
107	IJM Corporation Bhd	2021	50.19	59.97	54.89	55	55
107	IJM Corporation Bhd	2022	47.06	66.92	73.81	61.39	61.39
108	Jaks Resources Bhd	2020	19.825	32.74	25.61	26.07	26.07
108	Jaks Resources Bhd	2021	20.64	34.52	27.72	27.58	27.58
108	Jaks Resources Bhd	2022	19.01	30.96	23.5	24.56	24.56
109	Kerjaya Prospek Group Bhd	2020	23.495	41.83	57.415	39.16	39.16
109	Kerjaya Prospek Group Bhd	2021	20.98	38.51	50.02	35.06	35.06
109	Kerjaya Prospek Group Bhd	2022	26.01	45.15	64.81	43.26	43.26
110	MGB Bhd	2020	49.085	65.965	30.57	50.335	50.335
110	MGB Bhd	2021	50.41	68.15	39.66	54.03	54.03
110	MGB Bhd	2022	47.76	63.78	21.48	46.64	46.64
111	Mitrajaya Holdings Bhd	2020	11.835	27.76	33.905	23.485	23.485
111	Mitrajaya Holdings Bhd	2021	12.15	29.25	43.43	26.67	26.67
111	Mitrajaya Holdings Bhd	2022	11.52	26.27	24.38	20.3	20.3
112	Muhibbah Engineering (M) Bhd	2020	44.03	24.235	40.515	35.88	35.88
112	Muhibbah Engineering (M) Bhd	2021	43.99	24.83	37.51	35.29	35.29
112	Muhibbah Engineering (M) Bhd	2022	44.07	23.64	43.52	36.47	36.47
113	Pesona Metro Holdings Bhd	2020	27.565	56.955	64.96	48.185	48.185
113	Pesona Metro Holdings Bhd	2021	28.95	61	74.92	52.81	52.81
113	Pesona Metro Holdings Bhd	2022	26.18	52.91	55	43.56	43.56
114	Sunway Bhd	2020	64.445	87.16	44.89	67.55	67.55
114	Sunway Bhd	2021	53.28	84.71	48.68	63.52	63.52
114	Sunway Bhd	2022	75.61	89.61	41.1	71.58	71.58
115	Tafi Industries Bhd	2020	1.735	43.215	19.67	25.56	25.56
115	Tafi Industries Bhd	2021	1.63	43.59	18.37	25.26	25.26
115	Tafi Industries Bhd	2022	1.84	42.84	20.97	25.86	25.86

No	NAME	Year	E	S	G	ESG	SESG
116	TRC Synergy Bhd	2020	16.66	39.235	70.105	39.04	39.04
116	TRC Synergy Bhd	2021	8.73	37.1	68.93	35.01	35.01
116	TRC Synergy Bhd	2022	24.59	41.37	71.28	43.07	43.07
117	WCT Holdings Bhd	2020	47.625	48.06	16.2	39.46	39.46
117	WCT Holdings Bhd	2021	44.37	42.27	14.87	35.79	35.79
117	WCT Holdings Bhd	2022	50.88	53.85	17.53	43.13	43.13
118	ATA IMS Bhd	2020	8.195	37.685	49.03	29.675	29.675
118	ATA IMS Bhd	2021	3.31	38.56	50.52	28.61	28.61
118	ATA IMS Bhd	2022	13.08	36.81	47.54	30.74	30.74
119	Fajarbaru Builder Group Bhd	2020	27.56	29.195	14.755	24.765	24.765
119	Fajarbaru Builder Group Bhd	2021	29.58	30.01	13.38	25.45	25.45
119	Fajarbaru Builder Group Bhd	2022	25.54	28.38	16.13	24.08	24.08
120	GDB Holdings Bhd	2020	21.625	40.31	66.715	40.38	40.38
120	GDB Holdings Bhd	2021	13.71	35.44	63.35	34.78	34.78
120	GDB Holdings Bhd	2022	29.54	45.18	70.08	45.98	45.98
121	WCE Holdings Bhd	2020	48.675	34.45	47.22	42.185	42.185
121	WCE Holdings Bhd	2021	38.49	26.99	43.22	34.91	34.91
121	WCE Holdings Bhd	2022	58.86	41.91	51.22	49.46	49.46
122	Quantum clovera investama Tbk	2020	9.29	16.03	25.49	19.5	19.5
122	Quantum clovera investama Tbk	2021	14.29	20.2	40.65	28.91	28.91
122	Quantum clovera investama Tbk	2022	17.87	29.86	45.53	35.49	35.49
123	Media Nusantara Citra Tbk	2012	0	15.97	14.17	13.28	13.28
123	Media Nusantara Citra Tbk	2013	0	14.8	19.6	14.75	14.75
123	Media Nusantara Citra Tbk	2014	0	20.5	17.33	16.73	16.73
123	Media Nusantara Citra Tbk	2015	0	30.77	11.75	19.72	19.72
123	Media Nusantara Citra Tbk	2016	0	20.88	10.68	14.4	14.4
123	Media Nusantara Citra Tbk	2017	0	21.7	10.79	14.86	14.86
123	Media Nusantara Citra Tbk	2018	0	24.82	20.85	20.2	20.2
123	Media Nusantara Citra Tbk	2019	0.15	23.3	11.88	16.08	16.08
123	Media Nusantara Citra Tbk	2020	0.12	24.79	13.2	17.31	17.31
123	Media Nusantara Citra Tbk	2021	13.36	33.16	18.24	25.04	25.04
123	Media Nusantara Citra Tbk	2022	14.3	33.44	21.57	26.56	26.56
124	Metrodata Electronics Tbk	2020	10.76	18.62	16.32	16.47	16.47
124	Metrodata Electronics Tbk	2021	10.47	30.97	19.28	22.72	22.72
124	Metrodata Electronics Tbk	2022	11.13	28.61	17.72	21.15	21.15
125	Surya Citra Media Tbk	2013	0	34.84	33.74	30.04	30.04
125	Surya Citra Media Tbk	2014	0	33.66	48.38	34.98	34.98
125	Surya Citra Media Tbk	2015	0	48.96	16.14	30.42	30.42
125	Surya Citra Media Tbk	2016	0	55.64	59.67	50.16	50.16
125	Surya Citra Media Tbk	2017	0	57.55	51.43	48	48
125	Surya Citra Media Tbk	2018	0.17	57.27	67.66	54.01	54.01
125	Surya Citra Media Tbk	2019	2.17	29.42	65.16	39.48	39.48
125	Surya Citra Media Tbk	2020	30.03	31.73	58.09	41.46	41.46
125	Surya Citra Media Tbk	2021	33.1	55.48	75.42	60.19	60.19
125	Surya Citra Media Tbk	2022	30.51	60.9	83.66	65.67	65.67

No	NAME	Year	E	S	G	ESG	SESG
126	Able Global Bhd	2020	0	12.61	43.63	17.09	0
126	Able Global Bhd	2021	5.3	11.25	44.85	18.32	0
126	Able Global Bhd	2022	1.26	13.68	50.17	19.65	0
127	AwanBiru Technology Bhd	2020	39.65	65.635	81.51	69.375	0
127	AwanBiru Technology Bhd	2021	39.63	66.94	91.21	74.38	0
127	AwanBiru Technology Bhd	2022	39.67	64.33	71.81	64.37	0
128	Dataprep Holdings Bhd	2020	8.625	34.635	32.735	30.145	0
128	Dataprep Holdings Bhd	2021	9.39	34.72	14.36	21.78	0
128	Dataprep Holdings Bhd	2022	7.86	34.55	51.11	38.51	0
129	Dagang Nextchange Bhd	2020	26.395	63.875	62.835	58.19	0
129	Dagang Nextchange Bhd	2021	24.47	56.27	55.03	51.28	0
129	Dagang Nextchange Bhd	2022	28.32	71.48	70.64	65.1	0
130	D & O Green Technologies	2020	31.53	33.255	50.82	37.285	0
130	D & O Green Technologies	2021	35.05	34.94	57.93	40.95	0
130	D & O Green Technologies	2022	28.01	31.57	43.71	33.62	0
131	GHL Systems Bhd	2020	30	34.4	38.815	34.845	0
131	GHL Systems Bhd	2021	28.19	33.22	38.05	33.66	0
131	GHL Systems Bhd	2022	31.81	35.58	39.58	36.03	0
132	Greatech Technology Bhd	2020	28.295	58.1	74.225	52.505	0
132	Greatech Technology Bhd	2021	27.35	58.52	70.34	51.23	0
132	Greatech Technology Bhd	2022	29.24	57.68	78.11	53.78	0
133	Hong Seng Consolidated Bhd	2020	8.26	40.78	40.64	34.71	0
133	Hong Seng Consolidated Bhd	2021	1.68	31.69	42.08	29.98	0
133	Hong Seng Consolidated Bhd	2022	14.84	49.87	39.2	39.44	0
134	Inari Amertron Bhd	2020	57	83.06	38.91	63.475	0
134	Inari Amertron Bhd	2021	58.17	78.92	16.98	56.37	0
134	Inari Amertron Bhd	2022	55.83	87.2	60.84	70.58	0
135	JCY International	2020	1.935	15.95	42.56	20.075	0
135	JCY International	2021	1.79	17.08	50.89	22.9	0
135	JCY International	2022	2.08	14.82	34.23	17.25	0
136	JHM Consolidation Bhd	2020	1.05	16.75	59.32	22.91	0
136	JHM Consolidation Bhd	2021	0.79	19.04	62.63	24.67	0
136	JHM Consolidation Bhd	2022	1.31	14.46	56.01	21.15	0
137	My EG Services Bhd	2017	0	30.56	29.94	26.03	0
137	My EG Services Bhd	2018	0.3	34.39	30.87	28.03	0
137	My EG Services Bhd	2019	0.76	33.5	23.83	24.48	0
137	My EG Services Bhd	2020	23.81	69.84	35.65	47.63	0
137	My EG Services Bhd	2021	30.61	75.26	51.29	57.97	0
137	My EG Services Bhd	2022	33.62	69.97	52.16	56.68	0
138	Notion Vtec Bhd	2020	1.95	25.42	27.56	20.6	0
138	Notion Vtec Bhd	2021	3.07	23.22	46.81	25.1	0
138	Notion Vtec Bhd	2022	14.42	39.32	50	36.54	0
139	Omesti Bhd	2020	3.085	35.2	31.165	28.935	0
139	Omesti Bhd	2021	3.47	33.25	33.25	29.24	0
139	Omesti Bhd	2022	2.7	37.15	29.08	28.63	0

No	NAME	Year	E	S	G	ESG	SESG
140	Pertama Digital Bhd	2020	21.245	21.245	40.045	28.4	0
140	Pertama Digital Bhd	2021	11.03	11.03	42.9	25.61	0
140	Pertama Digital Bhd	2022	31.46	31.46	37.19	31.19	0
141	Pentamaster Corporation Bhd	2020	21.74	30.99	44.83	31.765	0
141	Pentamaster Corporation Bhd	2021	21.82	30.71	43.08	31.19	0
141	Pentamaster Corporation Bhd	2022	21.66	31.27	46.58	32.34	0
142	Star Media Group Bhd	2020	50.97	57.675	53.51	55.255	0
142	Star Media Group Bhd	2021	49.51	54.59	50.18	52.28	0
142	Star Media Group Bhd	2022	52.43	60.76	56.84	58.23	0
143	TDM Bhd	2020	51.86	75.165	16.41	49.09	0
143	TDM Bhd	2021	52.02	75.1	20.85	50.74	0
143	TDM Bhd	2022	51.7	75.23	11.97	47.44	0
144	Unisem Bhd	2020	29.835	72.725	26.01	47.225	0
144	Unisem Bhd	2021	21.79	72.86	24.02	44.26	0
144	Unisem Bhd	2022	37.88	72.59	28	50.19	0
145	UWC Bhd	2020	9.1	36.925	39.79	28.23	0
145	UWC Bhd	2021	15.94	38.89	41.19	31.7	0
145	UWC Bhd	2022	2.26	34.96	38.39	24.76	0
146	Vitrox Corporation Bhd	2020	40.075	52.935	74.235	54.46	0
146	Vitrox Corporation Bhd	2021	31.1	50.05	73.1	50.13	0
146	Vitrox Corporation Bhd	2022	49.05	55.82	75.37	58.79	0
147	VSTEC Bhd	2020	8.39	24.355	69.37	33.26	0
147	VSTEC Bhd	2021	8.05	25.33	69.75	33.63	0
147	VSTEC Bhd	2022	8.73	23.38	68.99	32.89	0
148	Kalbe Farma Tbk	2010	17.95	14.45	27.12	19.17	0
148	Kalbe Farma Tbk	2011	20.53	13.02	23.22	17.89	0
148	Kalbe Farma Tbk	2012	19.67	26.12	29.44	25.69	0
148	Kalbe Farma Tbk	2013	22.56	23.89	39.96	28.57	0
148	Kalbe Farma Tbk	2014	22.57	28.18	57.6	36.02	0
148	Kalbe Farma Tbk	2015	24.81	46.05	78.84	51.39	0
148	Kalbe Farma Tbk	2016	22.66	46.8	82.69	52.43	0
148	Kalbe Farma Tbk	2017	25.09	50.18	78.86	53.37	0
148	Kalbe Farma Tbk	2018	26.37	52.79	74.78	53.6	0
148	Kalbe Farma Tbk	2019	40	53.99	65.26	54.3	0
148	Kalbe Farma Tbk	2020	67.93	57.75	71.4	64.29	0
148	Kalbe Farma Tbk	2021	67.84	71.67	77.18	72.51	0
148	Kalbe Farma Tbk	2022	60.9	68.47	70.44	67.36	0
149	IHH Healthcare Bhd	2012	0	29.37	27.74	23.33	0
149	IHH Healthcare Bhd	2013	0	34.42	32.9	27.48	0
149	IHH Healthcare Bhd	2014	25.86	37.29	40.32	36.3	0
149	IHH Healthcare Bhd	2015	10.58	55.1	66.13	50.94	0
149	IHH Healthcare Bhd	2016	20.99	64.61	47.82	50.31	0
149	IHH Healthcare Bhd	2017	53.64	70.67	49.5	59.67	0
149	IHH Healthcare Bhd	2018	60.5	57.2	43.01	52.55	0
149	IHH Healthcare Bhd	2019	52.04	67.97	42.79	55.69	0

No	NAME	Year	E	S	G	ESG	SESG
149	IHH Healthcare Bhd	2020	50.74	70.42	72.55	67.56	0
149	IHH Healthcare Bhd	2021	30.73	66.33	81.46	65.34	0
149	IHH Healthcare Bhd	2022	64.05	73.56	85.72	76.3	0
150	KPJ Healthcare Bhd	2020	54.4	72.62	59.27	64.3	0
150	KPJ Healthcare Bhd	2021	59.27	72.84	79.33	72.73	0
150	KPJ Healthcare Bhd	2022	66.27	72.4	71.19	70.82	0
151	Kossan Rubber Industries Bhd	2019	7.68	43.27	26.4	31.24	0
151	Kossan Rubber Industries Bhd	2020	7.49	37.38	26.2	28.35	0
151	Kossan Rubber Industries Bhd	2021	18.29	56.41	30.76	40.8	0
151	Kossan Rubber Industries Bhd	2022	25.99	51.46	29.56	39.32	0
152	TMC Life Sciences Bhd	2020	17.74	61.86	50.455	49.47	0
152	TMC Life Sciences Bhd	2021	17.84	61.85	36.43	44.29	0
152	TMC Life Sciences Bhd	2022	17.64	61.87	64.48	54.65	0
153	Pharmaniaga Bhd	2020	52.26	78.62	53.26	64.77	0
153	Pharmaniaga Bhd	2021	54.14	74.24	69.72	68.27	0
153	Pharmaniaga Bhd	2022	50.38	83	36.8	61.27	0
154	Hartalega Holdings Bhd	2015	2.65	30.31	39.31	28.91	0
154	Hartalega Holdings Bhd	2016	2.01	33.96	27.39	26.25	0
154	Hartalega Holdings Bhd	2017	0.92	52.78	35.28	37.79	0
154	Hartalega Holdings Bhd	2018	9.99	49.9	40.38	39.79	0
154	Hartalega Holdings Bhd	2019	14.27	45.79	44.44	40.02	0
154	Hartalega Holdings Bhd	2020	23.1	55.67	53.79	49.53	0
154	Hartalega Holdings Bhd	2021	38.24	69.68	67.72	63.71	0
154	Hartalega Holdings Bhd	2022	41.71	71.83	72.33	66.96	0
155	Adaro Energy Tbk.	2010	72.65	41.05	46.87	55.98	55.98
155	Adaro Energy Tbk.	2011	69.33	55.47	36.24	55.38	55.38
155	Adaro Energy Tbk.	2012	45.92	49.6	35.44	43.76	43.76
155	Adaro Energy Tbk.	2013	46.03	37.57	29.78	38.72	38.72
155	Adaro Energy Tbk.	2014	16.25	29.59	30.19	24.22	24.22
155	Adaro Energy Tbk.	2015	45.55	30.41	47.09	41.79	41.79
155	Adaro Energy Tbk.	2016	26.62	22.29	45.73	31.24	31.24
155	Adaro Energy Tbk.	2017	33.29	21.17	34.13	30.16	30.16
155	Adaro Energy Tbk.	2018	49.82	32	30.66	39.01	39.01
155	Adaro Energy Tbk.	2019	63.42	55.51	34.53	52.41	52.41
155	Adaro Energy Tbk.	2020	62.32	52.78	69.38	61.81	61.81
155	Adaro Energy Tbk.	2021	68.36	51.75	68.66	63.81	63.81
155	Adaro Energy Tbk.	2022	69.12	59.04	48.74	60.1	60.1
156	AKR Corporindo Tbk.	2015	23.61	27.89	19.87	24.53	24.53
156	AKR Corporindo Tbk.	2016	20.51	23.27	26.54	23.13	23.13
156	AKR Corporindo Tbk.	2017	24.2	40.72	52.41	37.77	37.77
156	AKR Corporindo Tbk.	2018	31.09	44.64	49.2	41.04	41.04
156	AKR Corporindo Tbk.	2019	35.75	56.3	63.85	50.98	50.98
156	AKR Corporindo Tbk.	2020	25.1	61.53	70.31	51.02	51.02
156	AKR Corporindo Tbk.	2021	30.16	57.19	84.79	54.35	54.35
156	AKR Corporindo Tbk.	2022	54.16	64.56	78.51	64.25	64.25

No	NAME	Year	E	S	G	ESG	SESG
157	Bayan Resources Tbk	2020	57.675	68.815	63.415	62.535	62.535
157	Bayan Resources Tbk	2021	59.92	65.56	63.67	62.64	62.64
157	Bayan Resources Tbk	2022	55.43	72.07	63.16	62.43	62.43
158	Bumi Resources Tbk	2010	28.57	55.77	52.27	43.38	43.38
158	Bumi Resources Tbk	2011	26.96	51.43	43.77	38.91	38.91
158	Bumi Resources Tbk	2012	36.21	57.99	43.73	44.58	44.58
158	Bumi Resources Tbk	2013	38.89	56.51	45.57	45.84	45.84
158	Bumi Resources Tbk	2014	49.24	49.97	61.82	53.28	53.28
158	Bumi Resources Tbk	2015	34.95	59.77	27.02	39.46	39.46
158	Bumi Resources Tbk	2016	64.05	70.66	30.15	55.57	55.57
158	Bumi Resources Tbk	2017	66.54	81.56	43.57	63.74	63.74
158	Bumi Resources Tbk	2018	81.54	83.72	86.86	83.77	83.77
158	Bumi Resources Tbk	2019	81.69	79.48	90.32	83.7	83.7
158	Bumi Resources Tbk	2020	79.57	84.65	94.01	85.39	85.39
158	Bumi Resources Tbk	2021	81.08	83.92	92.84	84.45	84.45
158	Bumi Resources Tbk	2022	72.07	86.79	88.03	81.04	81.04
159	Perusahaan Gas Negara Tbk	2010	27.63	76.36	67.89	56.62	56.62
159	Perusahaan Gas Negara Tbk	2011	48.13	77.66	72.96	65.8	65.8
159	Perusahaan Gas Negara Tbk	2012	42.64	75.01	62.01	60.06	60.06
159	Perusahaan Gas Negara Tbk	2013	43.95	76.1	81.47	65.83	65.83
159	Perusahaan Gas Negara Tbk	2014	43.95	73.06	74.17	62.82	62.82
159	Perusahaan Gas Negara Tbk	2015	45.94	79.15	71.88	65.32	65.32
159	Perusahaan Gas Negara Tbk	2016	50.62	78	69.38	65.93	65.93
159	Perusahaan Gas Negara Tbk	2017	54.75	88.59	75.13	72.97	72.97
159	Perusahaan Gas Negara Tbk	2018	55.78	89.64	69.98	72.45	72.45
159	Perusahaan Gas Negara Tbk	2019	59.53	86.81	64.88	71.42	71.42
159	Perusahaan Gas Negara Tbk	2020	57.99	81.33	73	70.8	70.8
159	Perusahaan Gas Negara Tbk	2021	57.96	84.95	64.09	69.94	69.94
159	Perusahaan Gas Negara Tbk	2022	51.34	88.02	56	66.69	66.69
160	Bukit Asam Tbk	2012	90.92	93.15	85.56	89.64	89.64
160	Bukit Asam Tbk	2013	91.64	96.95	77.63	88.86	88.86
160	Bukit Asam Tbk	2014	89.99	90.74	51.88	78.59	78.59
160	Bukit Asam Tbk	2015	83.97	92.54	66.7	81.11	81.11
160	Bukit Asam Tbk	2016	64.67	91.42	45.82	66.4	66.4
160	Bukit Asam Tbk	2017	70.37	89.8	22.35	61.17	61.17
160	Bukit Asam Tbk	2018	74.92	88.74	18.95	61.73	61.73
160	Bukit Asam Tbk	2019	73.72	94.96	24.1	64.54	64.54
160	Bukit Asam Tbk	2020	72.96	95.75	27.97	65.62	65.62
160	Bukit Asam Tbk	2021	78.15	95.12	66.39	79.31	79.31
160	Bukit Asam Tbk	2022	79.131	92.917	48.735	73.697	73.697
161	Carimin Petroleum Bhd	2020	28.575	47.915	12.44	31.745	31.745
161	Carimin Petroleum Bhd	2021	26.48	47.36	12.84	30.96	30.96
161	Carimin Petroleum Bhd	2022	30.67	48.47	12.04	32.53	32.53
162	Dialog Group Bhd	2013	4.38	18.76	30.07	17.23	17.23
162	Dialog Group Bhd	2014	16.31	25.63	34.68	25.12	25.12

No	NAME	Year	E	S	G	ESG	SESG
162	Dialog Group Bhd	2015	17.75	26.17	23.27	22.63	22.63
162	Dialog Group Bhd	2016	15.71	30.53	18.73	22.42	22.42
162	Dialog Group Bhd	2017	16.34	32.33	24.17	24.86	24.86
162	Dialog Group Bhd	2018	51.33	31.43	17.43	34	34
162	Dialog Group Bhd	2019	38.45	42.65	14.3	33.38	33.38
162	Dialog Group Bhd	2020	65.43	49.45	13.92	44.74	44.74
162	Dialog Group Bhd	2021	71.75	61.02	55.98	63.1	63.1
162	Dialog Group Bhd	2022	61.32	67.44	61.13	63.69	63.69
163	Deleum Bhd	2020	50.745	65.03	60.53	59.13	59.13
163	Deleum Bhd	2021	51.7	63.61	40.81	53.38	53.38
163	Deleum Bhd	2022	49.79	66.45	80.25	64.88	64.88
164	Hengyuan Refining Company Bhd	2020	29.15	57.015	64.355	49.125	49.125
164	Hengyuan Refining Company Bhd	2021	25.28	58	62.51	47.77	47.77
164	Hengyuan Refining Company Bhd	2022	33.02	56.03	66.2	50.48	50.48
165	Hibiscus Petroleum Bhd	2020	27.04	41.785	40.765	36.455	36.455
165	Hibiscus Petroleum Bhd	2021	21.86	36.73	29.27	29.84	29.84
165	Hibiscus Petroleum Bhd	2022	32.22	46.84	52.26	43.07	43.07
167	Icon Offshore Bhd	2020	68.31	54.215	56.975	56.975	56.975
167	Icon Offshore Bhd	2021	66.92	58.69	56.08	56.08	56.08
167	Icon Offshore Bhd	2022	69.7	49.74	57.87	57.87	57.87
168	Malaysia Marine & Heavy Engineering Holdings Bhd	2012	23.96	19.85	58.81	24.25	24.25
168	Malaysia Marine & Heavy Engineering Holdings Bhd	2013	23.96	19.66	38.9	18.63	18.63
168	Malaysia Marine & Heavy Engineering Holdings Bhd	2014	23.96	18.55	65.88	25.71	25.71
168	Malaysia Marine & Heavy Engineering Holdings Bhd	2015	23.96	67.36	47.54	47.73	47.73
168	Malaysia Marine & Heavy Engineering Holdings Bhd	2016	27.17	63.57	42.33	45.82	45.82
168	Malaysia Marine & Heavy Engineering Holdings Bhd	2017	35.06	62.52	52.61	50.83	50.83
168	Malaysia Marine & Heavy Engineering Holdings Bhd	2018	60.25	61.08	37.1	54.13	54.13
168	Malaysia Marine & Heavy Engineering Holdings Bhd	2019	60.16	58.01	24.29	49.31	49.31
168	Malaysia Marine & Heavy Engineering Holdings Bhd	2020	62.66	76.92	23.65	57.44	57.44
168	Malaysia Marine & Heavy Engineering Holdings Bhd	2021	79.88	83.62	26.82	66.3	66.3
168	Malaysia Marine & Heavy Engineering Holdings Bhd	2022	80.32	83.93	39.54	70.39	70.39
169	Perdana Petroleum Bhd	2020	25.045	24.28	43.34	29.84	29.84
169	Perdana Petroleum Bhd	2021	25.98	28.71	49.74	33.68	33.68
169	Perdana Petroleum Bhd	2022	24.11	19.85	36.94	26	26
170	Sapura Energy Bhd	2014	3.53	14.34	19.68	11.17	11.17
170	Sapura Energy Bhd	2015	3.53	23.29	13.64	13.03	13.03
170	Sapura Energy Bhd	2016	3.53	20.36	16.41	12.64	12.64
170	Sapura Energy Bhd	2017	3.53	19.38	12.83	11.26	11.26
170	Sapura Energy Bhd	2018	3.53	23.26	10.44	13.27	13.27

No	NAME	Year	E	S	G	ESG	SESG
170	Sapura Energy Bhd	2019	3.25	31.06	29.46	21.57	21.57
170	Sapura Energy Bhd	2020	10.02	41.53	28.15	27.56	27.56
170	Sapura Energy Bhd	2021	9.27	45.93	39.28	32.16	32.16
170	Sapura Energy Bhd	2022	13.84	41.56	43.75	33.16	33.16
171	Serba Dinamik Holdings Bhd	2019	58.51	68.5	57.01	62.05	62.05
171	Serba Dinamik Holdings Bhd	2020	58.51	68.5	57.01	62.05	62.05
171	Serba Dinamik Holdings Bhd	2021	65.07	60.96	51.97	59.79	59.79
171	Serba Dinamik Holdings Bhd	2022	52.18	48.41	20.42	41.84	41.84
172	UZMA Bhd	2020	14.83	26.505	31.645	24.14	24.14
172	UZMA Bhd	2021	2.02	25.16	28.3	18.51	18.51
172	UZMA Bhd	2022	27.64	27.85	34.99	29.77	29.77
173	Velesto Energy Bhd	2020	69.925	79.85	70.185	73.93	73.93
173	Velesto Energy Bhd	2021	67.21	77.8	83.39	75.92	75.92
173	Velesto Energy Bhd	2022	72.64	81.9	56.98	71.94	71.94
174	Kim Loong Resources Bhd	2020	17.275	36.47	31.38	29.63	29.63
174	Kim Loong Resources Bhd	2021	11.28	38.81	22.07	26.53	26.53
174	Kim Loong Resources Bhd	2022	23.27	34.13	40.69	32.73	32.73
175	KNM Group Bhd	2020	15.16	15.99	40.4	22.52	22.52
175	KNM Group Bhd	2021	15.16	15.99	40.4	22.52	22.52
175	KNM Group Bhd	2022	27.45	15.79	31.31	23.9	23.9
176	Yinson Holdings Berhad	2020	75.44	90.73	70.9	80.235	80.235
176	Yinson Holdings Berhad	2021	65.69	87.74	70.86	75.87	75.87
176	Yinson Holdings Berhad	2022	85.19	93.72	70.94	84.6	84.6
177	Axiata Group Bhd	2009	7.67	8.33	60.43	20.45	20.45
177	Axiata Group Bhd	2010	7.67	5.67	60.29	20.56	20.56
177	Axiata Group Bhd	2011	7.43	5.21	50.99	17.79	17.79
177	Axiata Group Bhd	2012	23.23	35.92	75.97	43.96	43.96
177	Axiata Group Bhd	2013	26.47	23.61	85.97	40.72	40.72
177	Axiata Group Bhd	2014	23.58	47.45	85.69	52.74	52.74
177	Axiata Group Bhd	2015	9.63	47.92	84.48	49.83	49.83
177	Axiata Group Bhd	2016	37.95	70.6	71.93	64.31	64.31
177	Axiata Group Bhd	2017	37.01	63.37	72.28	60.37	60.37
177	Axiata Group Bhd	2018	34.17	64.07	77.32	61.51	61.51
177	Axiata Group Bhd	2019	44.25	67.76	81.28	66.56	66.56
177	Axiata Group Bhd	2020	51.17	67.91	80.76	67.91	67.91
177	Axiata Group Bhd	2021	70.18	70.18	73.25	75.76	75.76
177	Axiata Group Bhd	2022	67.06	68.27	75.82	70.03	70.03
178	Maxis Bhd	2010	9.01	34.51	65.37	37.51	37.51
178	Maxis Bhd	2011	22.69	54.8	91.24	57.94	57.94
178	Maxis Bhd	2012	25.18	59.56	88.67	60.29	60.29
178	Maxis Bhd	2013	30.62	49.87	76.63	53.05	53.05
178	Maxis Bhd	2014	16.55	32.74	90.04	44.64	44.64
178	Maxis Bhd	2015	13.35	30.61	74.46	38.73	38.73
178	Maxis Bhd	2016	19.35	36.98	73.24	43.01	43.01
178	Maxis Bhd	2017	19.2	44.74	47.06	40.16	40.16

No	NAME	Year	E	S	G	ESG	SESG
178	Maxis Bhd	2018	18.41	36.23	43.22	34.46	34.46
178	Maxis Bhd	2019	18.4	42.46	52.53	40.24	40.24
178	Maxis Bhd	2020	18.98	49.06	55.23	44.58	44.58
178	Maxis Bhd	2021	24.23	57.34	54.16	49.77	49.77
178	Maxis Bhd	2022	23.3	56.21	48.62	47.51	47.51
179	OCC Group Bhd	2020	16.575	31.17	35.39	29.32	29.32
179	OCC Group Bhd	2021	17.18	28.26	31.05	26.74	26.74
179	OCC Group Bhd	2022	15.97	34.08	39.73	31.9	31.9
180	Time DotCom Bhd	2020	8.715	51.045	68.205	46.99	46.99
180	Time DotCom Bhd	2021	7.6	51.05	68.99	46.97	46.97
180	Time DotCom Bhd	2022	9.83	51.04	67.42	47.01	47.01
181	Telekom Malaysia Bhd	2010	39.13	68.66	75.03	64.35	64.35
181	Telekom Malaysia Bhd	2011	43.15	67.32	53.73	58.81	58.81
181	Telekom Malaysia Bhd	2012	72.58	72.34	53.3	67.34	67.34
181	Telekom Malaysia Bhd	2013	72.7	65.88	63.84	66.72	66.72
181	Telekom Malaysia Bhd	2014	66.56	48.59	81.44	60.95	60.95
181	Telekom Malaysia Bhd	2015	44.1	55.09	63.63	55.12	55.12
181	Telekom Malaysia Bhd	2016	42.57	45.77	60.22	48.96	48.96
181	Telekom Malaysia Bhd	2017	42.83	47.4	61.61	50.24	50.24
181	Telekom Malaysia Bhd	2018	47.17	57.58	54.15	54.56	54.56
181	Telekom Malaysia Bhd	2019	52.34	65.42	46.79	57.82	57.82
181	Telekom Malaysia Bhd	2020	75.5	64.73	56.11	64.64	64.64
181	Telekom Malaysia Bhd	2021	74.51	63.22	77.95	69.42	69.42
181	Telekom Malaysia Bhd	2022	73.68	65.46	82.8	71.72	71.72

APPENDIX F

ESG DATA NON-SHARIAH COMPLIANT COMPANIES

No	Companies	Year	E	S	G	ESG	SESG
1	Gudang Garam Tbk	2010	4.29	4.44	14.53	7.04	0
1	Gudang Garam Tbk	2011	3.79	5.05	15.6	7.44	0
1	Gudang Garam Tbk	2012	0	6.44	31.67	11.18	0
1	Gudang Garam Tbk	2013	0	6.88	21.62	8.75	0
1	Gudang Garam Tbk	2014	0	4.55	23.62	8.22	0
1	Gudang Garam Tbk	2015	0	5.44	30.18	10.34	0
1	Gudang Garam Tbk	2016	0	6.88	21.03	8.6	0
1	Gudang Garam Tbk	2017	6.35	14.88	40.79	19.2	0
1	Gudang Garam Tbk	2018	4.94	12.97	24.11	13.57	0
1	Gudang Garam Tbk	2019	33.73	16.97	29.85	25.15	0
1	Gudang Garam Tbk	2020	33.4	24.09	23.84	26.7	0
1	Gudang Garam Tbk	2021	34.33	25.15	26.43	28.12	0
1	Gudang Garam Tbk	2022	30.01	23.9	25.5	26.07	0
2	Hanjaya Mandala Sampoerna Tbk	2015	6.12	37.27	25.7	25.3	0
2	Hanjaya Mandala Sampoerna Tbk	2016	5.96	40.41	20.43	25.29	0
2	Hanjaya Mandala Sampoerna Tbk	2017	42.95	55.81	64.05	54.27	0
2	Hanjaya Mandala Sampoerna Tbk	2018	57.09	52.76	61.23	56.22	0
2	Hanjaya Mandala Sampoerna Tbk	2019	72.46	73.86	76.5	74.15	0
2	Hanjaya Mandala Sampoerna Tbk	2020	73.34	74.29	58.32	69.84	0
2	Hanjaya Mandala Sampoerna Tbk	2021	74.1	76.58	71.92	74.65	0
2	Hanjaya Mandala Sampoerna Tbk	2022	75.8	78.94	68.26	75.25	0
3	Kawan Food Bhd	2020	28.21	37.56	41.8	35.98	35.98
3	Kawan Food Bhd	2021	25.59	32.65	45.01	33.85	33.85
3	Kawan Food Bhd	2022	30.83	42.47	38.59	38.11	38.11
4	Lay Hong Bhd	2020	21.89	24.42	24.065	23.6	23.6
4	Lay Hong Bhd	2021	23.04	26.31	27.09	25.57	25.57
4	Lay Hong Bhd	2022	20.74	22.53	21.04	21.63	21.63
5	Lii Hein Industries Bhd	2020	25.68	23.18	46.115	30.025	30.025
5	Lii Hein Industries Bhd	2021	21.2	24.71	49.18	29.87	29.87
5	Lii Hein Industries Bhd	2022	30.16	21.65	43.05	30.18	30.18
6	MBM Resources Bhd	2020	4.55	29.07	52	26.3	26.3
6	MBM Resources Bhd	2021	30.29	29.52	49.72	34.7	34.7
6	MBM Resources Bhd	2022	17.42	29.295	50.86	30.5	30.5
7	Malayan Flour Mills Bhd	2020	9.85	26.535	16.42	19.1	19.1
7	Malayan Flour Mills Bhd	2021	9.65	27.1	21.24	20.56	20.56
7	Malayan Flour Mills Bhd	2022	10.05	25.97	11.6	17.64	17.64
8	Milux Corporation Bhd	2020	16.005	39.035	39.55	31.17	31.17
8	Milux Corporation Bhd	2021	21.02	39.53	33.89	31.63	31.63
8	Milux Corporation Bhd	2022	10.99	38.54	45.21	30.71	30.71

No	Companies	Year	E	S	G	ESG	SESG
9	MR DIY Group (M) Bhd	2020	50.54	56.89	69.42	60.475	60.475
9	MR DIY Group (M) Bhd	2021	44.23	56.56	66.09	57.85	57.85
9	MR DIY Group (M) Bhd	2022	56.85	57.22	72.75	63.1	63.1
10	Beshom Holdings Bhd	2020	26.75	81.655	81.715	71.165	71.165
10	Beshom Holdings Bhd	2021	26.7	76.74	81.92	69.14	69.14
10	Beshom Holdings Bhd	2022	26.8	86.57	81.51	73.19	73.19
11	Genting Malaysia Bhd	2009	9.56	23.94	12.75	16.84	16.84
11	Genting Malaysia Bhd	2010	9.7	32.95	19.81	22.93	22.93
11	Genting Malaysia Bhd	2011	32.26	36.7	25.48	32.22	32.22
11	Genting Malaysia Bhd	2012	21.2	33.96	25.33	28.05	28.05
11	Genting Malaysia Bhd	2013	20.87	32.91	17.3	25.13	25.13
11	Genting Malaysia Bhd	2014	29.62	36.78	34.33	34.16	34.16
11	Genting Malaysia Bhd	2015	45.48	44.67	34.28	41.83	41.83
11	Genting Malaysia Bhd	2016	61.59	65.13	46.51	58.72	58.72
11	Genting Malaysia Bhd	2017	64.65	70.75	38.61	59.68	59.68
11	Genting Malaysia Bhd	2018	63.43	68.97	27.81	55.4	55.4
11	Genting Malaysia Bhd	2019	62.82	70.29	21.76	54.04	54.04
11	Genting Malaysia Bhd	2020	77.31	78.26	23.57	61.92	61.92
11	Genting Malaysia Bhd	2021	73.98	78.61	32.89	63.94	63.94
11	Genting Malaysia Bhd	2022	76.59	80.57	32.5	65.38	65.38
12	7-Eleven Malaysia Holdings Bhd	2020	34.87	74.28	64.865	62.22	62.22
12	7-Eleven Malaysia Holdings Bhd	2021	28.6	66.75	64.74	57.17	57.17
12	7-Eleven Malaysia Holdings Bhd	2022	41.14	81.81	64.99	67.27	67.27
13	Sports Toto Bhd	2010	1.29	7.39	4.05	4.45	4.45
13	Sports Toto Bhd	2011	1.29	5.45	5	3.88	3.88
13	Sports Toto Bhd	2012	1.29	5.08	9.57	5.06	5.06
13	Sports Toto Bhd	2013	1.29	4.04	5	3.25	3.25
13	Sports Toto Bhd	2014	1.29	4.53	19.81	7.83	7.83
13	Sports Toto Bhd	2015	1.29	4.51	19.69	7.78	7.78
13	Sports Toto Bhd	2016	1.29	2.41	31.03	10.19	10.19
13	Sports Toto Bhd	2017	1.29	10.55	25.28	12.43	12.43
13	Sports Toto Bhd	2018	1.63	17.52	26.72	16.02	16.02
13	Sports Toto Bhd	2019	16.24	51.79	25.25	34.58	34.58
13	Sports Toto Bhd	2020	34.29	55.39	31.3	42.72	42.72
13	Sports Toto Bhd	2021	34.57	52.99	28.95	41.04	41.04
13	Sports Toto Bhd	2022	44.53	71.88	31.05	52.63	52.63
14	Bank Central Asia Tbk	2009	18.96	33.03	52.62	35.69	35.69
14	Bank Central Asia Tbk	2010	22.47	31.34	44.13	32.21	32.21
14	Bank Central Asia Tbk	2011	21.86	32.92	34.27	29.41	29.41
14	Bank Central Asia Tbk	2012	20.11	42.38	65.91	45.45	45.45
14	Bank Central Asia Tbk	2013	27.68	49.41	70.79	51.78	51.78
14	Bank Central Asia Tbk	2014	27.34	64.39	62.97	56.32	56.32
14	Bank Central Asia Tbk	2015	34.88	66.99	59.69	57.11	57.11
14	Bank Central Asia Tbk	2016	67.15	75.77	57.31	63.04	63.04
14	Bank Central Asia Tbk	2017	31.55	75.52	83.04	71.9	71.9

No	Companies	Year	E	S	G	ESG	SESG
14	Bank Central Asia Tbk	2018	55.5	77.97	77.11	74.42	74.42
14	Bank Central Asia Tbk	2019	60.75	79.82	82.2	77.93	77.93
14	Bank Central Asia Tbk	2020	61.35	93.29	89.05	87.17	87.17
14	Bank Central Asia Tbk	2021	65.9	93.31	89.7	88.06	88.06
14	Bank Central Asia Tbk	2022	67.51	94.42	60.71	78.41	78.41
15	Bank Negara Indonesia Tbk	2009	51.19	40.29	29.21	34.68	34.68
15	Bank Negara Indonesia Tbk	2010	63.56	46.86	56.16	50.6	50.6
15	Bank Negara Indonesia Tbk	2011	75.58	66.82	47.89	60.65	60.65
15	Bank Negara Indonesia Tbk	2012	73.56	68.77	43.53	59.76	59.76
15	Bank Negara Indonesia Tbk	2013	74.6	70.76	54.4	64.86	64.86
15	Bank Negara Indonesia Tbk	2014	75.77	74.24	54.34	66.81	66.81
15	Bank Negara Indonesia Tbk	2015	75.93	73.09	57.47	67.3	67.3
15	Bank Negara Indonesia Tbk	2016	68.5	75.89	57.91	65.61	65.61
15	Bank Negara Indonesia Tbk	2017	49.02	83.46	50.95	66.8	66.8
15	Bank Negara Indonesia Tbk	2018	47.81	83.03	64.64	71.34	71.34
15	Bank Negara Indonesia Tbk	2019	51.43	85.59	57.6	70.6	70.6
15	Bank Negara Indonesia Tbk	2020	50.96	89.23	79.31	80.15	80.15
15	Bank Negara Indonesia Tbk	2021	58.79	88.27	79.1	80.72	80.72
15	Bank Negara Indonesia Tbk	2022	58.53	88.46	86.68	83.51	83.51
16	Bank Rakyat Indonesia Tbk	2009	19.69	31.78	33.1	28.13	28.13
16	Bank Rakyat Indonesia Tbk	2010	20.28	39.59	66.99	44.22	44.22
16	Bank Rakyat Indonesia Tbk	2011	19.77	40.65	64.42	43.8	43.8
16	Bank Rakyat Indonesia Tbk	2012	18.05	56.06	52.58	47.14	47.14
16	Bank Rakyat Indonesia Tbk	2013	18.09	55.39	59.98	49.47	49.47
16	Bank Rakyat Indonesia Tbk	2014	47.39	59.64	63.36	55.47	55.47
16	Bank Rakyat Indonesia Tbk	2015	53.59	61.4	58.47	54.45	54.45
16	Bank Rakyat Indonesia Tbk	2016	64.21	72.07	70.9	65.67	65.67
16	Bank Rakyat Indonesia Tbk	2017	55.45	75.04	73.65	71.72	71.72
16	Bank Rakyat Indonesia Tbk	2018	79.21	77.55	89.52	82.1	82.1
16	Bank Rakyat Indonesia Tbk	2019	79.11	78.49	82.13	79.89	79.89
16	Bank Rakyat Indonesia Tbk	2020	77.76	85.93	54.8	73.55	73.55
16	Bank Rakyat Indonesia Tbk	2021	79.26	88.98	63.64	78.46	78.46
16	Bank Rakyat Indonesia Tbk	2022	77.49	89.68	84.12	85.92	85.92
17	Bank Tabungan Negara Tbk	2017	17.53	79.94	66.14	65.98	65.98
17	Bank Tabungan Negara Tbk	2018	21.14	85.38	56.64	65.78	65.78
17	Bank Tabungan Negara Tbk	2019	32.07	85.54	56.64	64.4	64.4
17	Bank Tabungan Negara Tbk	2020	30.11	89.08	47.97	65.79	65.79
17	Bank Tabungan Negara Tbk	2021	37.54	81.14	73.76	72.2	72.2
17	Bank Tabungan Negara Tbk	2022	38.4	83.04	61.42	68.83	68.83
18	Bank Danamon Indonesia Tbk	2009	16.54	23.27	64.21	34.66	34.66
18	Bank Danamon Indonesia Tbk	2010	23.25	21.91	68.06	36.26	36.26
18	Bank Danamon Indonesia Tbk	2011	19.77	34.93	72.16	43.75	43.75
18	Bank Danamon Indonesia Tbk	2012	30.71	56.12	81.23	59.3	59.3
18	Bank Danamon Indonesia Tbk	2013	31.4	49.12	74.23	53.41	53.41
18	Bank Danamon Indonesia Tbk	2014	29.73	46.1	82.34	54.56	54.56

No	Companies	Year	E	S	G	ESG	SESG
18	Bank Danamon Indonesia Tbk	2015	35.32	35.11	86.07	50.85	50.85
18	Bank Danamon Indonesia Tbk	2016	35.57	37.31	75.72	47.84	47.84
18	Bank Danamon Indonesia Tbk	2017	19.28	36.42	73.23	47.2	47.2
18	Bank Danamon Indonesia Tbk	2018	19.28	36.42	73.23	44.7	44.7
18	Bank Danamon Indonesia Tbk	2019	60.76	60.1	79.26	60.76	60.76
18	Bank Danamon Indonesia Tbk	2020	17.51	55.5	90.38	62.59	62.59
18	Bank Danamon Indonesia Tbk	2021	16.06	54.48	80.34	58.26	58.26
18	Bank Danamon Indonesia Tbk	2022	17.02	49.21	69.16	51.76	51.76
19	Bank Mandiri Tbk	2009	16.54	42.86	84.68	51.57	51.57
19	Bank Mandiri Tbk	2010	17.06	43.82	77.25	49.54	49.54
19	Bank Mandiri Tbk	2011	19.38	48.79	86.56	55.75	55.75
19	Bank Mandiri Tbk	2012	20.12	46.15	75.56	50.79	50.79
19	Bank Mandiri Tbk	2013	23.19	51.4	74.23	53.36	53.36
19	Bank Mandiri Tbk	2014	24.58	49.5	72.59	52	52
19	Bank Mandiri Tbk	2015	28	57.86	62.77	52.7	52.7
19	Bank Mandiri Tbk	2016	32.01	61.15	72.44	57.97	57.97
19	Bank Mandiri Tbk	2017	10.78	71.55	58.39	58.06	58.06
19	Bank Mandiri Tbk	2018	15.86	76.18	70.33	65.39	65.39
19	Bank Mandiri Tbk	2019	29.68	90.68	65.49	72.83	72.83
19	Bank Mandiri Tbk	2020	30.65	87.3	85.84	78.62	78.62
19	Bank Mandiri Tbk	2021	59.95	87.2	90.68	84.53	84.53
19	Bank Mandiri Tbk	2022	61.45	82.22	89.75	81.94	81.94
20	Affin Bank Bhd	2020	19.01	33.525	26.635	28.955	28.955
20	Affin Bank Bhd	2021	18.08	35.97	30.62	31.47	31.47
20	Affin Bank Bhd	2022	19.94	31.08	22.65	26.44	26.44
21	Alliance bank Malaysia	2010	38.19	23.42	30.74	23.59	23.59
21	Alliance bank Malaysia	2011	36.77	23.19	80.8	41.39	41.39
21	Alliance bank Malaysia	2012	37.63	34.08	42.58	33.42	33.42
21	Alliance bank Malaysia	2013	20.39	23.52	31.18	23.63	23.63
21	Alliance bank Malaysia	2014	20.38	20.73	17.49	17.29	17.29
21	Alliance bank Malaysia	2015	23.24	37.74	28.96	29.86	29.86
21	Alliance bank Malaysia	2016	25.93	48.84	43.64	40.62	40.62
21	Alliance bank Malaysia	2017	4.14	53.61	22.06	35.13	35.13
21	Alliance bank Malaysia	2018	5.02	51.31	54.81	45.9	45.9
21	Alliance bank Malaysia	2019	5.09	53.55	42.12	42.46	42.46
21	Alliance bank Malaysia	2020	9.7	42.47	62.69	45.03	45.03
21	Alliance bank Malaysia	2021	9.26	52.75	72.88	53.73	53.73
21	Alliance bank Malaysia	2022	12.3	58.46	85.09	61.4	61.4
22	AMMB Holdings Bhd	2010	23.37	36.11	59.6	40.27	40.27
22	AMMB Holdings Bhd	2011	18.91	37.3	56.3	39.09	39.09
22	AMMB Holdings Bhd	2012	17.06	41	48.16	37.93	37.93
22	AMMB Holdings Bhd	2013	17.2	43.32	51.93	40.47	40.47
22	AMMB Holdings Bhd	2014	15.45	39.28	29.17	29.98	29.98
22	AMMB Holdings Bhd	2015	18.28	34.4	50	35.06	35.06
22	AMMB Holdings Bhd	2016	21.15	33.13	61.27	38.49	38.49

No	Companies	Year	E	S	G	ESG	SESG
22	AMMB Holdings Bhd	2017	21.81	54.82	72.61	56.47	56.47
22	AMMB Holdings Bhd	2018	31.3	57.88	71.2	58.85	58.85
22	AMMB Holdings Bhd	2019	35.71	83.33	79.63	75.14	75.14
22	AMMB Holdings Bhd	2020	36.78	84.85	79.61	76.04	76.04
22	AMMB Holdings Bhd	2021	43.95	85.59	83.66	78.9	78.9
22	AMMB Holdings Bhd	2022	44.04	81.86	80.08	76.03	76.03
23	Bursa Malaysia Bhd	2010	38.61	31.34	81.38	53.22	53.22
23	Bursa Malaysia Bhd	2011	38.95	40.26	90	60.96	60.96
23	Bursa Malaysia Bhd	2012	61.18	40.35	90.14	63.6	63.6
23	Bursa Malaysia Bhd	2013	61.27	45.61	87.51	64.29	64.29
23	Bursa Malaysia Bhd	2014	63.67	62.92	68.89	62.57	62.57
23	Bursa Malaysia Bhd	2015	40.34	73.65	62.13	61.12	61.12
23	Bursa Malaysia Bhd	2016	38.98	74.48	52.87	56.99	56.99
23	Bursa Malaysia Bhd	2017	22.57	70.19	51.61	54.86	54.86
23	Bursa Malaysia Bhd	2018	17.26	69.96	36.67	47.06	47.06
23	Bursa Malaysia Bhd	2019	30.52	81.48	37.92	54.04	54.04
23	Bursa Malaysia Bhd	2020	31.41	79.36	63.9	65.44	65.44
23	Bursa Malaysia Bhd	2021	65.58	76.98	80.66	77.1	77.1
23	Bursa Malaysia Bhd	2022	64.36	71.15	78.41	73.59	73.59
24	CIMB Group Holdings Bhd	2009	51.18	51.5	47.52	46.4	46.4
24	CIMB Group Holdings Bhd	2010	61.57	56.66	64.29	57.16	57.16
24	CIMB Group Holdings Bhd	2011	60.31	60.06	54.64	55.27	55.27
24	CIMB Group Holdings Bhd	2012	58.23	70.05	41.04	55.38	55.38
24	CIMB Group Holdings Bhd	2013	54.96	65.49	64.57	60.97	60.97
24	CIMB Group Holdings Bhd	2014	63.97	68.69	75.46	67.81	67.81
24	CIMB Group Holdings Bhd	2015	66.21	69.63	51.62	59.32	59.32
24	CIMB Group Holdings Bhd	2016	77.27	74.51	45.39	61.68	61.68
24	CIMB Group Holdings Bhd	2017	58	78.03	72.06	73	73
24	CIMB Group Holdings Bhd	2018	59.98	87.64	59.73	73.61	73.61
24	CIMB Group Holdings Bhd	2019	58.69	86.01	70.55	76.51	76.51
24	CIMB Group Holdings Bhd	2020	86.76	85.92	77.67	83.07	83.07
24	CIMB Group Holdings Bhd	2021	87.74	85.38	85.59	85.8	85.8
24	CIMB Group Holdings Bhd	2022	87.24	85.71	86.45	86.19	86.19
25	Hong Leong Bank Bhd	2010	17.06	15.44	66.59	31.63	31.63
25	Hong Leong Bank Bhd	2011	16.67	12.19	65	29.45	29.45
25	Hong Leong Bank Bhd	2012	15.26	14.13	67.73	31.39	31.39
25	Hong Leong Bank Bhd	2013	15.25	14.3	73	33.37	33.37
25	Hong Leong Bank Bhd	2014	15.45	22.88	67.87	35.78	35.78
25	Hong Leong Bank Bhd	2015	18.28	21.94	68.46	35.53	35.53
25	Hong Leong Bank Bhd	2016	24.18	8.74	65.82	28.47	28.47
25	Hong Leong Bank Bhd	2017	21.46	48.15	82.83	56.79	56.79
25	Hong Leong Bank Bhd	2018	51.97	54.51	76.56	62.08	62.08
25	Hong Leong Bank Bhd	2019	51.04	63.88	66.3	62.9	62.9
25	Hong Leong Bank Bhd	2020	54.62	76.14	83.53	75.7	75.7
25	Hong Leong Bank Bhd	2021	56.95	76.01	90.45	78.47	78.47

No	Companies	Year	E	S	G	ESG	SESG
25	Hong Leong Bank Bhd	2022	83.87	82.65	89.06	85.13	85.13
26	Hong Leong Financial Group Bhd	2010	17.06	12.17	77.28	33.86	33.86
26	Hong Leong Financial Group Bhd	2011	16.67	9.95	75.77	32.21	32.21
26	Hong Leong Financial Group Bhd	2012	16.1	12.12	73.7	32.66	32.66
26	Hong Leong Financial Group Bhd	2013	16.24	8.23	73.44	30.66	30.66
26	Hong Leong Financial Group Bhd	2014	22.38	44.85	75.24	50.33	50.33
26	Hong Leong Financial Group Bhd	2015	25.04	50.94	64.21	49.35	49.35
26	Hong Leong Financial Group Bhd	2016	30.58	48	70.12	50.41	50.41
26	Hong Leong Financial Group Bhd	2017	4.93	15.05	68.28	32.76	32.76
26	Hong Leong Financial Group Bhd	2018	5.72	20.93	70.44	36.56	36.56
26	Hong Leong Financial Group Bhd	2019	45.91	21.32	66.15	41	41
26	Hong Leong Financial Group Bhd	2020	50.22	30.34	63.68	45.2	45.2
26	Hong Leong Financial Group Bhd	2021	55.43	29.46	71.24	48.24	48.24
26	Hong Leong Financial Group Bhd	2022	58.22	30.49	68.76	48.26	48.26
27	Malayan Banking Bhd	2009	17.8	52.74	75.49	53.52	53.52
27	Malayan Banking Bhd	2010	69.46	64.72	88.6	71.98	71.98
27	Malayan Banking Bhd	2011	74.91	67.81	73.88	68.93	68.93
27	Malayan Banking Bhd	2012	71.02	68.14	72.88	68.3	68.3
27	Malayan Banking Bhd	2013	73.27	68.93	79.7	71.53	71.53
27	Malayan Banking Bhd	2014	73.1	66.13	73.62	67.89	67.89
27	Malayan Banking Bhd	2015	71.8	66	71.8	66.56	66.56
27	Malayan Banking Bhd	2016	74.53	72.58	75.89	71.3	71.3
27	Malayan Banking Bhd	2017	57.64	82.34	74.72	76.04	76.04
27	Malayan Banking Bhd	2018	56.06	86.36	91.64	83.9	83.9
27	Malayan Banking Bhd	2019	61.41	82.43	88.44	81.56	81.56
27	Malayan Banking Bhd	2020	78.98	79.01	88.2	82.31	82.31
27	Malayan Banking Bhd	2021	83.65	84.83	85	84.72	84.72
27	Malayan Banking Bhd	2022	82.47	85.13	95.13	88.35	88.35
28	Public Bank Bhd	2009	21.82	45.96	63.93	46.57	46.57
28	Public Bank Bhd	2010	24.74	54.83	60.21	49.98	49.98
28	Public Bank Bhd	2011	24.29	51.8	23.62	35.29	35.29
28	Public Bank Bhd	2012	26.3	55.37	26.59	38.62	38.62
28	Public Bank Bhd	2013	26.44	54.7	20.34	36.07	36.07
28	Public Bank Bhd	2014	59.27	59.47	19.92	42.17	42.17
28	Public Bank Bhd	2015	56.44	59.01	30.81	44.52	44.52
28	Public Bank Bhd	2016	59.59	59.89	32.25	45.05	45.05
28	Public Bank Bhd	2017	29.67	60.12	53.28	53.27	53.27
28	Public Bank Bhd	2018	70.74	67.79	52.4	62.68	62.68
28	Public Bank Bhd	2019	81.87	70.17	79.34	75.15	75.15
28	Public Bank Bhd	2020	78.7	75.3	76.45	76.2	76.2
28	Public Bank Bhd	2021	81.46	74.29	82.23	78.18	78.18
28	Public Bank Bhd	2022	90.54	73.9	80.07	78.52	78.52
29	RHB Bank Bhd	2010	21.89	29.85	45.21	31.78	31.78
29	RHB Bank Bhd	2011	21.13	32.57	35.95	29.74	29.74
29	RHB Bank Bhd	2012	19.45	30.74	31.16	27.07	27.07

No	Companies	Year	E	S	G	ESG	SESG
29	RHB Bank Bhd	2013	16.23	40.6	32.78	32.08	32.08
29	RHB Bank Bhd	2014	16.22	36.14	23.97	26.66	26.66
29	RHB Bank Bhd	2015	46.44	41.58	45.58	39.75	39.75
29	RHB Bank Bhd	2016	58.28	55.33	60.79	52.88	52.88
29	RHB Bank Bhd	2017	24.91	78.36	80.83	71.55	71.55
29	RHB Bank Bhd	2018	32.65	72.36	66.72	64.61	64.61
29	RHB Bank Bhd	2019	33	72.66	58.92	62	62
29	RHB Bank Bhd	2020	67.69	70.97	40.68	59.6	59.6
29	RHB Bank Bhd	2021	74.88	71.13	56.52	66.41	66.41
29	RHB Bank Bhd	2022	85.13	69.38	52.28	65.49	65.49
30	Tune Protect Group Bhd	2020	10.85	55.38	71.195	55.77	55.77
30	Tune Protect Group Bhd	2021	7.68	53.36	72.2	54.8	54.8
30	Tune Protect Group Bhd	2022	14.02	57.4	70.19	56.74	56.74
31	Jasa Marga Tbk	2012	16.79	61.52	20.95	37.07	37.07
31	Jasa Marga Tbk	2013	16.01	52.9	37.16	37.73	37.73
31	Jasa Marga Tbk	2014	17.86	65.82	26.31	40.73	40.73
31	Jasa Marga Tbk	2015	22.94	66.06	62.07	52.39	52.39
31	Jasa Marga Tbk	2016	42.48	75.03	64.72	62.65	62.65
31	Jasa Marga Tbk	2017	47.18	87.38	62.62	68.71	68.71
31	Jasa Marga Tbk	2018	68.58	80.29	44.55	66.81	66.81
31	Jasa Marga Tbk	2019	70.23	81.64	65.85	73.87	73.87
31	Jasa Marga Tbk	2020	72.61	79.35	61.23	72.28	72.28
31	Jasa Marga Tbk	2021	72.85	74.89	65.53	71.66	71.66
31	Jasa Marga Tbk	2022	42.19	71.72	66.12	61.55	61.55
32	Tower Bersama Infrastructure Tbk PT	2013	0	18.14	21.4	15.32	15.32
32	Tower Bersama Infrastructure Tbk PT	2014	0	19.47	21.26	15.99	15.99
32	Tower Bersama Infrastructure Tbk PT	2015	0	21.22	19.79	16.53	16.53
32	Tower Bersama Infrastructure Tbk PT	2016	0	20.04	19.67	15.87	15.87
32	Tower Bersama Infrastructure Tbk PT	2017	1.4	21.66	21.83	17.59	17.59
32	Tower Bersama Infrastructure Tbk PT	2018	9.54	21.11	17.05	17.68	17.68
32	Tower Bersama Infrastructure Tbk PT	2019	19.8	27.82	23.46	25.04	25.04
32	Tower Bersama Infrastructure Tbk PT	2020	23.04	27.68	33.69	28.33	28.33
32	Tower Bersama Infrastructure Tbk PT	2021	28.57	28.1	32.14	29.27	29.27
32	Tower Bersama Infrastructure Tbk PT	2022	33.84	46.87	29.62	39.65	39.65
33	Sarana Menara Nusantara Tbk	2019	4.87	37.76	39.35	31.5	31.5
33	Sarana Menara Nusantara Tbk	2020	9.9	32.96	53.13	33.62	33.62
33	Sarana Menara Nusantara Tbk	2021	24.54	40.43	69.43	44.89	44.89
33	Sarana Menara Nusantara Tbk	2022	19.66	37.48	85.04	46.46	46.46
34	Waskita Karya Tbk	2015	0	44.67	22.66	22.29	22.29
34	Waskita Karya Tbk	2016	13.28	48.35	19.24	27.65	27.65
34	Waskita Karya Tbk	2017	16.88	42.94	23.7	28.19	28.19
34	Waskita Karya Tbk	2018	23.09	51.14	36.02	36.75	36.75
34	Waskita Karya Tbk	2019	23.79	64.01	35.88	41.66	41.66
34	Waskita Karya Tbk	2020	24.01	62.81	48.94	44.76	44.76
34	Waskita Karya Tbk	2021	24.91	54.48	49.79	42.28	42.28

No	Companies	Year	E	S	G	ESG	SESG
34	Waskita Karya Tbk	2022	24.49	57.42	43.55	41.55	41.55
35	Mega First Corporation Bhd	2020	46.165	58.485	39.54	47.265	47.265
35	Mega First Corporation Bhd	2021	42.5	55.54	43.48	46.39	46.39
35	Mega First Corporation Bhd	2022	49.83	61.43	35.6	48.14	48.14
36	Malakaoff Corp Bhd	2020	19.44	35.44	65.415	36.135	36.135
36	Malakaoff Corp Bhd	2021	17.91	35.7	58.48	33.84	33.84
36	Malakaoff Corp Bhd	2022	20.97	35.18	72.35	38.43	38.43
37	Leon Fuat Bhd	2020	29.38	14.47	43.725	26.9	26.9
37	Leon Fuat Bhd	2021	30.12	15.88	55.75	30.68	30.68
37	Leon Fuat Bhd	2022	28.64	13.06	31.7	23.12	23.12
38	Luster Industries Bhd	2020	17.445	17.445	38.29	15.21	15.21
38	Luster Industries Bhd	2021	17.63	17.63	44.26	16.62	16.62
38	Luster Industries Bhd	2022	17.26	17.26	32.32	13.8	13.8
39	YTL Corporation Bhd	2010	24.08	15.79	59.89	29.73	29.73
39	YTL Corporation Bhd	2011	26.85	13.64	58.91	29.95	29.95
39	YTL Corporation Bhd	2012	44.35	20.69	66.7	41.62	41.62
39	YTL Corporation Bhd	2013	40.19	16.53	51.53	34.86	34.86
39	YTL Corporation Bhd	2014	44.85	15.45	43.64	34.61	34.61
39	YTL Corporation Bhd	2015	55.85	22.41	35.71	39.7	39.7
39	YTL Corporation Bhd	2016	63.87	29.69	29.79	44.25	44.25
39	YTL Corporation Bhd	2017	65.23	35.19	40.61	49.24	49.24
39	YTL Corporation Bhd	2018	75.52	37.06	40.82	54.3	54.3
39	YTL Corporation Bhd	2019	63.56	45.58	50.57	54.4	54.4
39	YTL Corporation Bhd	2020	69.32	56.2	48.98	60.07	60.07
39	YTL Corporation Bhd	2021	78.99	70.47	67.07	73.29	73.29
39	YTL Corporation Bhd	2022	68.33	56.72	51.56	60.44	60.44
40	Matrix COnccepts Holdings Bhd	2020	63.495	78.235	43.87	62.38	62.38
40	Matrix COnccepts Holdings Bhd	2021	59.83	78.46	45.47	61.83	61.83
40	Matrix COnccepts Holdings Bhd	2022	67.16	78.01	42.27	62.93	62.93
41	MKH Bhd	2020	4.855	28.42	19.15	17.97	17.97
41	MKH Bhd	2021	4.34	29.79	20.47	18.73	18.73
41	MKH Bhd	2022	5.37	27.05	17.83	17.21	17.21
42	Malton Bhd	2020	3.86	37.555	21.735	21.775	21.775
42	Malton Bhd	2021	0	37.59	24.82	21.58	21.58
42	Malton Bhd	2022	7.72	37.52	18.65	21.97	21.97
43	Malaysian Resources Corporation Bhd	2020	41.71	63.245	76.92	58.885	58.885
43	Malaysian Resources Corporation Bhd	2021	35.15	64.88	77.31	57.16	57.16
43	Malaysian Resources Corporation Bhd	2022	48.27	61.61	76.53	60.61	60.61
44	Land & General BHd	2020	22.35	52.215	57.325	44.465	44.465
44	Land & General BHd	2021	19.34	48.7	53.12	40.88	40.88
44	Land & General BHd	2022	25.36	55.73	61.53	48.05	48.05
45	MI Technovation Bhd	2020	25.815	40.42	74.645	44.755	0
45	MI Technovation Bhd	2021	26.85	38.02	76.02	44.41	0
45	MI Technovation Bhd	2022	24.78	42.82	73.27	45.1	0
46	Elsoft Research Bhd	2020	0.385	17.93	28.995	7.455	0

No	Companies	Year	E	S	G	ESG	SESG
46	Elsoft Research Bhd	2021	0.16	15.47	23.98	14.3	0
46	Elsoft Research Bhd	2022	0.61	20.39	34.01	0.61	0
47	DRB-Hicom Bhd	2020	23.64	55.95	55.44	44.81	0
47	DRB-Hicom Bhd	2021	22.24	55.48	55.74	44.21	0
47	DRB-Hicom Bhd	2022	25.04	56.42	55.14	45.41	0
48	Dufu Technology Corp Bhd	2020	15.865	80.3	62.72	53.275	0
48	Dufu Technology Corp Bhd	2021	14.13	78.17	64.14	52.29	0
48	Dufu Technology Corp Bhd	2022	17.6	82.43	61.3	54.26	0
49	Duopharma Biotech Bhs	2020	22.23	61.32	85.075	59.795	0
49	Duopharma Biotech Bhs	2021	21.41	62.04	78.71	57.97	0
49	Duopharma Biotech Bhs	2022	23.05	60.6	91.44	61.62	0
50	Excel Force Msc Bhd	2020	8.27	28.4	36.31	29.26	0
50	Excel Force Msc Bhd	2021	8.27	28.4	36.31	29.26	0
50	Excel Force Msc Bhd	2022	8.27	28.4	36.31	29.26	0
51	George Kent (Malaysia) Bhd	2020	32.305	67.01	60.965	52.55	0
51	George Kent (Malaysia) Bhd	2021	24.36	62.71	62.23	48.37	0
51	George Kent (Malaysia) Bhd	2022	40.25	71.31	59.7	56.73	0
52	Globetronics Technology Bhd	2020	25.04	32.065	34.2	30.43	0
52	Globetronics Technology Bhd	2021	26.7	33.46	34.99	31.75	0
52	Globetronics Technology Bhd	2022	23.38	30.67	33.41	29.11	0
53	Willowglen Msc Bhd	2020	10.41	39.27	47.675	39.155	0
53	Willowglen Msc Bhd	2021	9.47	39.82	48.08	39.43	0
53	Willowglen Msc Bhd	2022	11.35	38.72	47.27	38.88	0
54	Hartalega Holdings Bhd	2015	2.65	30.31	39.31	28.91	0
54	Hartalega Holdings Bhd	2016	2.01	33.96	27.39	26.25	0
54	Hartalega Holdings Bhd	2017	0.92	52.78	35.28	37.79	0
54	Hartalega Holdings Bhd	2018	9.99	49.9	40.38	39.79	0
54	Hartalega Holdings Bhd	2019	14.27	45.79	44.44	40.02	0
54	Hartalega Holdings Bhd	2020	23.1	55.67	53.79	49.53	0
54	Hartalega Holdings Bhd	2021	38.24	69.68	67.72	63.71	0
54	Hartalega Holdings Bhd	2022	41.17	71.83	72.33	66.96	0
55	Top Glove Corporation Bhd	2017	24.81	38.74	37.28	35.88	0
55	Top Glove Corporation Bhd	2018	29.28	37.2	24.64	31.36	0
55	Top Glove Corporation Bhd	2019	72.51	65.98	24.49	52.17	0
55	Top Glove Corporation Bhd	2020	73.07	59.35	28.4	50.53	0
55	Top Glove Corporation Bhd	2021	75.31	78.82	58.77	71.03	0
55	Top Glove Corporation Bhd	2022	73.13	80.44	50.17	68.34	0
56	YSP Southeast Asi Holdings Bhd	2020	0	21.47	48.22	24.88	0
56	YSP Southeast Asi Holdings Bhd	2021	12.25	49.35	69.52	47.17	0
56	YSP Southeast Asi Holdings Bhd	2022	13.61	45.62	62.67	43.63	0
57	Astro Malaysia Holdings Bhd	2013	20.23	49.08	84.31	58.75	58.75
57	Astro Malaysia Holdings Bhd	2014	20.62	49.4	84.39	58.98	58.98
57	Astro Malaysia Holdings Bhd	2015	14.93	52.12	77.34	56.96	56.96
57	Astro Malaysia Holdings Bhd	2016	15.98	53.91	81.92	59.71	59.71
57	Astro Malaysia Holdings Bhd	2017	15.13	52.21	73.28	55.49	55.49

No	Companies	Year	E	S	G	ESG	SESG
57	Astro Malaysia Holdings Bhd	2018	32.47	53.56	76.56	59.58	59.58
57	Astro Malaysia Holdings Bhd	2019	43.33	55.88	66.57	58.34	58.34
57	Astro Malaysia Holdings Bhd	2020	44.49	54.54	55.1	53.49	53.49
57	Astro Malaysia Holdings Bhd	2021	44.12	53.06	71.56	58.92	58.92
57	Astro Malaysia Holdings Bhd	2022	45.21	50.1	83.57	62.12	62.12
58	CelcomDigi Bhd	2009	49.21	61.52	34.55	51.87	51.87
58	CelcomDigi Bhd	2010	53.09	52.9	51.11	52.47	52.47
58	CelcomDigi Bhd	2011	58.81	80.28	62.72	71.26	71.26
58	CelcomDigi Bhd	2012	52	79.11	70.18	71.23	71.23
58	CelcomDigi Bhd	2013	50.43	76.63	62.1	67.45	67.45
58	CelcomDigi Bhd	2014	45.91	77.44	48.88	63.46	63.46
58	CelcomDigi Bhd	2015	44.72	76.51	38.59	60	60
58	CelcomDigi Bhd	2016	44.4	75.87	70.33	68.01	68.01
58	CelcomDigi Bhd	2017	43.9	75.45	54.83	63.57	63.57
58	CelcomDigi Bhd	2018	46.94	77.71	55.03	65.44	65.44
58	CelcomDigi Bhd	2019	46.5	73.51	73.14	67.92	67.92
58	CelcomDigi Bhd	2020	52.42	65.87	66.42	63.28	63.28
58	CelcomDigi Bhd	2021	51.5	71.88	69.93	67.22	67.22
58	CelcomDigi Bhd	2022	44.8	72.96	61.4	64.16	64.16
60	Media Prima Bhd	2009	8.36	45.14	74.44	51.57	51.57
60	Media Prima Bhd	2010	8.58	47.4	75.11	52.97	52.97
60	Media Prima Bhd	2011	9.23	62.82	66.4	57.43	57.43
60	Media Prima Bhd	2012	11.66	60.58	60.69	54.74	54.74
60	Media Prima Bhd	2013	17.07	55.88	70.09	56.36	56.36
60	Media Prima Bhd	2014	20.3	66.79	72.81	63.21	63.21
60	Media Prima Bhd	2015	32.85	78.79	73.04	70.84	70.84
60	Media Prima Bhd	2016	33.53	86.77	59.18	69.66	69.66
60	Media Prima Bhd	2017	16.65	80.21	57.5	63.64	63.64
60	Media Prima Bhd	2018	40.27	85	59.95	69.92	69.92
60	Media Prima Bhd	2019	57.22	90.29	56.33	73.31	73.31
60	Media Prima Bhd	2020	58.16	89.56	37.82	66.09	66.09
60	Media Prima Bhd	2021	57.85	89.28	55.88	72.72	72.72
60	Media Prima Bhd	2022	28.59	72.19	63.02	63.27	63.27

APPENDIX G

CORPORATE FINANCIAL PERFORMANCE OF SHARIAH-COMPLIANT COMPANIES

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
1	Astra Agro Lestari Tbk	2010	0.23	0.28	4.68	20.70	0.00	22	0.55	0.05	0.01	5.13	6.22
1	Astra Agro Lestari Tbk	2011	0.24	0.31	3.39	20.84	0.00	23	0.53	0.05	0.01	5.36	6.17
1	Astra Agro Lestari Tbk	2012	0.20	0.27	2.60	20.98	0.11	24	0.51	0.04	0.01	4.28	6.03
1	Astra Agro Lestari Tbk	2013	0.14	0.21	3.15	20.93	0.28	25	0.52	0.03	0.01	6.41	5.56
1	Astra Agro Lestari Tbk	2014	0.14	0.23	2.41	21.13	0.39	26	0.54	0.01	0.01	6.39	5.01
1	Astra Agro Lestari Tbk	2015	0.03	0.06	1.49	21.17	0.69	27	0.51	-0.01	0.01	6.36	4.88
1	Astra Agro Lestari Tbk	2016	0.08	0.12	1.52	21.32	0.24	28	0.39	-0.01	0.01	3.53	5.03
1	Astra Agro Lestari Tbk	2017	0.08	0.11	1.18	21.34	0.22	29	0.40	0.01	0.01	3.81	5.07
1	Astra Agro Lestari Tbk	2018	0.05	0.08	1.00	21.35	0.25	30	0.35	0.02	0.01	3.20	5.17
1	Astra Agro Lestari Tbk	2019	0.01	0.01	1.23	21.39	0.31	31	0.34	0.02	0.00	3.03	5.02
1	Astra Agro Lestari Tbk	2020	0.03	0.04	1.02	21.40	0.30	32	0.40	0.02	0.00	1.92	-2.07
1	Astra Agro Lestari Tbk	2021	0.06	0.10	0.78	21.48	0.28	33	0.31	0.02	0.00	1.56	3.70
1	Astra Agro Lestari Tbk	2022	0.06	0.08	0.69	21.35	0.19	34	0.29	0.02	0.00	4.21	5.31
2	FGV Holdings Bhd	2011	0.14	0.25	0.27	21.85	0.47	5	0.18	0.04	0.01	3.17	5.29
2	FGV Holdings Bhd	2012	0.05	0.13	1.17	22.41	0.40	6	0.18	0.04	0.01	1.66	5.47
2	FGV Holdings Bhd	2013	0.05	0.16	0.99	22.57	0.66	7	0.14	0.03	0.01	2.11	4.69
2	FGV Holdings Bhd	2014	0.02	0.05	0.61	22.50	0.74	8	0.15	0.02	0.01	3.14	6.01
2	FGV Holdings Bhd	2015	0.01	0.02	0.55	22.33	0.84	9	0.13	0.01	0.00	2.10	5.09
2	FGV Holdings Bhd	2016	0.00	0.01	0.54	22.27	0.96	10	0.13	0.01	0.00	2.09	4.45
2	FGV Holdings Bhd	2017	0.01	0.02	0.57	22.36	1.03	11	0.13	0.01	0.00	3.87	5.81

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
2	FGV Holdings Bhd	2018	-0.06	-0.25	0.43	22.25	1.28	12	0.13	0.00	0.00	0.88	4.84
2	FGV Holdings Bhd	2019	-0.01	-0.06	0.61	22.19	1.25	13	0.13	-0.01	0.00	0.66	4.41
2	FGV Holdings Bhd	2020	0.01	0.03	0.55	22.18	1.10	14	0.13	-0.01	0.00	-1.14	-5.46
2	FGV Holdings Bhd	2021	0.07	0.22	0.54	22.18	0.80	15	0.13	0.01	0.01	2.48	3.30
2	FGV Holdings Bhd	2022	0.07	0.21	0.61	8.32	0.54	16	0.13	-0.01	0.00	-1.14	-5.46
3	Genting Plantations Bhd	2010	0.09	0.11	1.76	20.86	0.09	31	0.21	0.04	0.01	1.62	7.42
3	Genting Plantations Bhd	2011	0.11	0.14	1.52	20.98	0.13	32	0.18	0.04	0.01	3.17	5.29
3	Genting Plantations Bhd	2012	0.07	0.09	1.44	21.16	0.21	33	0.18	0.04	0.01	1.66	5.47
3	Genting Plantations Bhd	2013	0.05	0.07	1.78	21.12	0.25	34	0.14	0.03	0.01	2.11	4.69
3	Genting Plantations Bhd	2014	0.01	0.10	0.14	23.50	0.26	35	0.15	0.02	0.01	3.14	6.01
3	Genting Plantations Bhd	2015	0.03	0.05	1.38	21.25	0.54	36	0.13	0.01	0.00	2.10	5.09
3	Genting Plantations Bhd	2016	0.05	0.09	1.38	21.23	0.55	37	0.13	0.01	0.00	2.09	4.45
3	Genting Plantations Bhd	2017	0.04	0.07	1.31	21.46	0.74	38	0.13	0.01	0.00	3.87	5.81
3	Genting Plantations Bhd	2018	0.02	0.04	1.32	21.36	0.68	39	0.13	0.00	0.00	0.88	4.84
3	Genting Plantations Bhd	2019	0.02	0.03	1.37	21.45	0.53	40	0.13	-0.01	0.00	0.66	4.41
3	Genting Plantations Bhd	2020	0.03	0.05	1.30	21.47	0.53	41	0.13	-0.01	0.00	-1.14	-5.46
3	Genting Plantations Bhd	2021	0.05	0.08	0.94	21.47	0.49	42	0.13	0.01	0.01	2.48	3.30
3	Genting Plantations Bhd	2022	0.05	0.09	0.91	21.42	0.47	43	0.13	0.03	0.01	3.38	8.65
4	IOI Corporation Bhd	2009	0.06	0.12	2.06	22.24	0.67	41	0.31	0.05	0.01	0.58	-1.51
4	IOI Corporation Bhd	2010	0.11	0.18	2.05	22.40	0.44	42	0.21	0.04	0.01	1.62	7.42
4	IOI Corporation Bhd	2011	0.11	0.18	1.59	22.60	0.45	43	0.18	0.04	0.01	3.17	5.29
4	IOI Corporation Bhd	2012	0.08	0.15	1.52	22.71	0.65	44	0.18	0.04	0.01	1.66	5.47
4	IOI Corporation Bhd	2013	0.08	0.15	1.49	22.75	0.54	45	0.14	0.03	0.01	2.11	4.69
4	IOI Corporation Bhd	2014	0.22	0.55	2.27	22.29	1.25	46	0.15	0.02	0.01	3.14	6.01
4	IOI Corporation Bhd	2015	0.01	0.04	2.31	21.99	1.31	47	0.13	0.01	0.00	2.10	5.09
4	IOI Corporation Bhd	2016	0.03	0.09	1.80	22.20	1.03	48	0.13	0.01	0.00	2.09	4.45

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
4	IOI Corporation Bhd	2017	0.04	0.10	2.05	22.16	0.98	49	0.13	0.01	0.00	3.87	5.81
4	IOI Corporation Bhd	2018	0.18	0.33	1.95	22.15	0.57	50	0.13	0.00	0.00	0.88	4.84
4	IOI Corporation Bhd	2019	0.04	0.07	2.07	22.11	0.53	51	0.13	-0.01	0.00	0.66	4.41
4	IOI Corporation Bhd	2020	0.04	0.07	2.05	22.09	0.54	52	0.13	-0.01	0.00	-1.14	-5.46
4	IOI Corporation Bhd	2021	0.08	0.14	1.60	22.17	0.50	53	0.13	0.01	0.01	2.48	3.30
4	IOI Corporation Bhd	2022	0.09	0.16	1.58	22.19	0.46	54	0.13	0.03	0.01	3.38	8.65
5	Jaya Tiasa Holdings Bhd	2020	-0.03	-0.07	0.45	6.21	0.72	34	0.13	-0.01	0.00	-1.14	-5.46
5	Jaya Tiasa Holdings Bhd	2021	0.02	0.03	0.64	19.96	0.57	35	0.13	0.01	0.01	2.48	3.30
5	Jaya Tiasa Holdings Bhd	2022	0.07	0.11	0.58	19.97	0.45	36	0.13	0.03	0.01	3.38	8.65
6	Kuala Lumpur Kepong bhd	2009	0.07	0.11	2.27	21.63	0.31	104	0.31	0.05	0.01	0.58	-1.51
6	Kuala Lumpur Kepong bhd	2010	0.10	0.16	2.76	21.81	0.28	105	0.21	0.04	0.01	1.62	7.42
6	Kuala Lumpur Kepong bhd	2011	0.15	0.23	2.41	21.96	0.30	106	0.18	0.04	0.01	3.17	5.29
6	Kuala Lumpur Kepong bhd	2012	0.10	0.17	2.47	22.04	0.35	107	0.18	0.04	0.01	1.66	5.47
6	Kuala Lumpur Kepong bhd	2013	0.08	0.13	2.44	22.01	0.31	108	0.14	0.03	0.01	2.11	4.69
6	Kuala Lumpur Kepong bhd	2014	0.08	0.13	1.99	22.09	0.38	109	0.15	0.02	0.01	3.14	6.01
6	Kuala Lumpur Kepong bhd	2015	0.06	0.11	1.71	22.09	0.48	110	0.13	0.01	0.00	2.10	5.09
6	Kuala Lumpur Kepong bhd	2016	0.09	0.15	1.53	22.21	0.43	111	0.13	0.01	0.00	2.09	4.45
6	Kuala Lumpur Kepong bhd	2017	0.05	0.09	1.67	22.24	0.39	112	0.13	0.01	0.00	3.87	5.81
6	Kuala Lumpur Kepong bhd	2018	0.03	0.06	1.63	22.24	0.38	113	0.13	0.00	0.00	0.88	4.84
6	Kuala Lumpur Kepong bhd	2019	0.03	0.06	1.65	22.31	0.63	114	0.13	-0.01	0.00	0.66	4.41
6	Kuala Lumpur Kepong bhd	2020	0.04	0.07	1.57	22.34	0.61	115	0.13	-0.01	0.00	-1.14	-5.46
6	Kuala Lumpur Kepong bhd	2021	0.08	0.19	1.16	22.63	0.75	116	0.13	0.01	0.01	2.48	3.30
6	Kuala Lumpur Kepong bhd	2022	0.08	0.16	1.16	22.60	0.67	117	0.13	0.03	0.01	3.38	8.65
7	PLS Plantations Bhd	2020	-0.02	-0.03	0.31	4.58	0.58	34	0.13	-0.01	0.00	-1.14	-5.46
7	PLS Plantations Bhd	2021	0.02	0.05	0.96	18.61	0.48	35	0.13	0.01	0.01	2.48	3.30
7	PLS Plantations Bhd	2022	0.05	0.10	0.90	18.59	0.36	36	0.13	0.03	0.01	3.38	8.65

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
8	Rimbunan Sawit Bhd	2020	-0.05	-0.11	0.48	5.42	1.05	33	0.13	-0.01	0.00	-1.14	-5.46
8	Rimbunan Sawit Bhd	2021	-0.01	-0.02	2.40	19.18	1.01	34	0.13	0.01	0.01	2.48	3.30
8	Rimbunan Sawit Bhd	2022	0.00	0.00	2.15	19.08	0.91	35	0.13	0.03	0.01	3.38	8.65
9	Sarawak Oil Palms Bhd	2020	0.05	0.08	0.68	6.97	0.47	53	0.13	-0.01	0.00	-1.14	-5.46
9	Sarawak Oil Palms Bhd	2021	0.11	0.18	0.65	20.84	0.36	54	0.13	0.01	0.01	2.48	3.30
9	Sarawak Oil Palms Bhd	2022	0.10	0.15	0.63	20.83	0.23	55	0.13	0.03	0.01	3.38	8.65
10	Sime Darby Plantation Bhd	2018	0.01	0.02	1.38	22.66	0.49	41	0.13	0.00	0.00	0.88	4.84
10	Sime Darby Plantation Bhd	2019	0.00	0.00	1.58	22.67	0.51	42	0.13	-0.01	0.00	0.66	4.41
10	Sime Darby Plantation Bhd	2020	0.04	0.08	1.45	22.68	0.43	43	0.13	-0.01	0.00	-1.14	-5.46
10	Sime Darby Plantation Bhd	2021	0.08	0.14	1.07	22.71	0.37	44	0.13	0.01	0.01	2.48	3.30
10	Sime Darby Plantation Bhd	2022	0.08	0.14	1.24	22.68	0.34	45	0.13	0.03	0.01	3.38	8.65
11	Sarawak Plantations Bhd	2020	0.07	0.10	1.26	5.39	0.18	24	0.13	-0.01	0.00	-1.14	-5.46
11	Sarawak Plantations Bhd	2021	0.13	0.19	3.03	19.27	0.10	25	0.13	0.01	0.01	2.48	3.30
11	Sarawak Plantations Bhd	2022	0.10	0.14	2.74	19.19	0.02	26	0.13	0.03	0.01	3.38	8.65
12	Ta Ann Holdings Bhd	2020	0.02	0.03	0.55	6.45	0.35	36	0.13	-0.01	0.00	-1.14	-5.46
12	Ta Ann Holdings Bhd	2021	0.12	0.20	0.71	20.31	0.24	37	0.13	0.01	0.01	2.48	3.30
12	Ta Ann Holdings Bhd	2022	0.11	0.18	0.70	20.27	0.17	38	0.13	0.03	0.01	3.38	8.65
13	TH Plantations Bhd	2020	0.00	0.02	0.49	6.50	2.14	49	0.13	-0.01	0.00	-1.14	-5.46
13	TH Plantations Bhd	2021	0.27	1.18	0.69	20.35	2.24	50	0.13	0.01	0.01	2.48	3.30
13	TH Plantations Bhd	2022	0.33	0.88	0.52	20.23	0.94	51	0.13	0.03	0.01	3.38	8.65
14	IOI Properties Group Bhd	2014	0.06	0.08	0.20	22.25	0.18	40	0.15	0.02	0.01	3.14	6.01
14	IOI Properties Group Bhd	2015	0.53	0.07	2.07	20.01	0.21	41	0.13	0.01	0.00	2.10	5.09
14	IOI Properties Group Bhd	2016	0.05	0.07	0.24	22.46	0.27	42	0.13	0.01	0.00	2.09	4.45
14	IOI Properties Group Bhd	2017	0.03	0.05	0.43	22.78	0.69	43	0.13	0.01	0.00	3.87	5.81
14	IOI Properties Group Bhd	2018	0.02	0.04	0.40	22.82	0.65	44	0.13	0.00	0.00	0.88	4.84
14	IOI Properties Group Bhd	2019	0.02	0.04	0.37	22.78	0.61	45	0.13	-0.01	0.00	0.66	4.41

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
14	IOI Properties Group Bhd	2020	0.02	0.03	0.36	22.76	0.58	46	0.13	-0.01	0.00	-1.14	-5.46
14	IOI Properties Group Bhd	2021	0.02	0.03	0.35	22.81	0.56	47	0.13	0.01	0.01	2.48	3.30
14	IOI Properties Group Bhd	2022	0.02	0.03	0.44	22.92	0.82	48	0.13	0.03	0.01	3.38	8.65
15	Kesm Industries Bhd	2020	0.00	0.00	2.04	4.58	0.07	43	0.13	-0.01	0.00	-1.14	-5.46
15	Kesm Industries Bhd	2021	0.02	0.02	1.84	18.41	0.04	44	0.13	0.01	0.01	2.48	3.30
15	Kesm Industries Bhd	2022	0.00	0.00	1.03	18.38	0.07	45	0.13	0.03	0.01	3.38	8.65
16	TSH Resources Bhd	2020	0.02	0.05	0.49	6.67	0.90	35	0.13	-0.01	0.00	-1.14	-5.46
16	TSH Resources Bhd	2021	0.05	0.10	0.73	20.49	0.68	36	0.13	0.01	0.01	2.48	3.30
16	TSH Resources Bhd	2022	0.15	0.24	0.66	20.33	0.30	37	0.13	0.03	0.01	3.38	8.65
17	Aneka Tambang Tbk	2010	0.14	0.17	1902.38	21.03	0.08	42	0.14	0.02	0.01	5.13	6.22
17	Aneka Tambang Tbk	2011	0.13	0.19	1027.80	21.24	0.28	43	0.13	0.02	0.01	5.36	6.17
17	Aneka Tambang Tbk	2012	0.16	0.24	625.90	21.44	0.36	44	0.14	0.02	0.01	4.28	6.03
17	Aneka Tambang Tbk	2013	0.02	0.04	535.05	21.31	0.53	45	0.14	0.02	0.01	6.41	5.56
17	Aneka Tambang Tbk	2014	-0.04	-0.06	487.04	21.30	0.67	46	0.14	0.01	0.00	6.39	5.01
17	Aneka Tambang Tbk	2015	-0.05	-0.08	242.42	21.52	0.55	47	0.15	0.01	0.01	6.36	4.88
17	Aneka Tambang Tbk	2016	0.00	0.00	732.47	21.52	0.54	48	0.15	-0.01	0.00	3.53	5.03
17	Aneka Tambang Tbk	2017	0.00	0.01	507.03	21.52	0.51	49	0.15	-0.01	0.01	3.81	5.07
17	Aneka Tambang Tbk	2018	0.05	0.09	558.25	21.54	0.54	50	0.15	0.01	0.01	3.20	5.17
17	Aneka Tambang Tbk	2019	0.01	0.01	652.33	21.50	0.47	51	0.14	0.02	0.00	3.03	5.02
17	Aneka Tambang Tbk	2020	0.04	0.06	1410.14	21.54	0.41	52	0.14	0.01	0.01	1.92	-2.07
17	Aneka Tambang Tbk	2021	0.06	0.09	1630.37	21.56	0.29	53	0.14	0.01	0.01	1.56	3.70
17	Aneka Tambang Tbk	2022	0.12	0.17	1495.22	21.49	0.13	54	0.14	0.01	0.01	4.21	5.31
18	Barito Pacific Tbk	2018	0.01	0.06	1.72	22.65	2.26	39	0.15	0.01	0.01	3.20	5.17
18	Barito Pacific Tbk	2019	0.01	0.04	1.33	22.68	2.16	40	0.14	0.02	0.00	3.03	5.02
18	Barito Pacific Tbk	2020	0.01	0.03	1.16	22.69	2.16	41	0.14	0.01	0.01	1.92	-2.07
18	Barito Pacific Tbk	2021	0.01	0.06	0.87	22.95	1.77	42	0.14	0.01	0.01	1.56	3.70

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
18	Barito Pacific Tbk	2022	0.00	0.00	1.11	22.95	2.51	43	0.14	0.01	0.01	4.21	5.31
19	Vale Indonesia Tbk	2010	0.20	0.26	2.51	21.51	0.08	90	0.14	0.02	0.01	5.13	6.22
19	Vale Indonesia Tbk	2011	0.14	0.19	1.57	21.61	0.15	91	0.13	0.02	0.01	5.36	6.17
19	Vale Indonesia Tbk	2012	0.03	0.04	1.16	21.57	0.15	92	0.14	0.02	0.01	4.28	6.03
19	Vale Indonesia Tbk	2013	0.02	0.02	1.16	21.55	0.13	93	0.14	0.02	0.01	6.41	5.56
19	Vale Indonesia Tbk	2014	0.07	0.10	1.40	21.57	0.10	94	0.14	0.01	0.00	6.39	5.01
19	Vale Indonesia Tbk	2015	0.02	0.03	0.57	21.55	0.08	95	0.15	0.01	0.01	6.36	4.88
19	Vale Indonesia Tbk	2016	0.00	0.00	1.00	21.52	0.06	96	0.15	-0.01	0.00	3.53	5.03
19	Vale Indonesia Tbk	2017	-0.01	-0.01	1.02	21.50	0.04	97	0.15	-0.01	0.01	3.81	5.07
19	Vale Indonesia Tbk	2018	0.03	0.03	1.02	21.51	0.02	98	0.15	0.01	0.01	3.20	5.17
19	Vale Indonesia Tbk	2019	0.03	0.03	1.14	21.52	0.00	99	0.14	0.02	0.00	3.03	5.02
19	Vale Indonesia Tbk	2020	0.04	0.04	1.50	21.56	0.00	100	0.14	0.01	0.01	1.92	-2.07
19	Vale Indonesia Tbk	2021	0.07	0.08	1.31	21.63	0.00	101	0.14	0.01	0.01	1.56	3.70
19	Vale Indonesia Tbk	2022	0.08	0.09	1.79	21.70	0.00	102	0.14	0.01	0.01	4.21	5.31
20	Indah Kiat Pulp & Paper Tbk	2017	0.05	0.13	0.82	22.76	1.25	83	0.15	-0.01	0.01	3.81	5.07
20	Indah Kiat Pulp & Paper Tbk	2018	0.07	0.16	0.99	22.89	1.16	84	0.15	0.01	0.01	3.20	5.17
20	Indah Kiat Pulp & Paper Tbk	2019	0.03	0.07	0.81	22.86	0.98	85	0.14	0.02	0.00	3.03	5.02
20	Indah Kiat Pulp & Paper Tbk	2020	0.03	0.07	0.89	22.86	0.86	86	0.14	0.01	0.01	1.92	-2.07
20	Indah Kiat Pulp & Paper Tbk	2021	0.06	0.11	0.73	22.92	0.75	87	0.14	0.01	0.01	1.56	3.70
20	Indah Kiat Pulp & Paper Tbk	2022	0.09	0.15	0.68	22.99	0.60	88	0.14	0.01	0.01	4.21	5.31
21	Indocement Tunggal Prakarsa	2010	0.21	0.24	3.84	21.26	0.03	35	0.14	0.02	0.01	5.13	6.22
21	Indocement Tunggal Prakarsa	2011	0.21	0.24	3.51	21.41	0.01	36	0.13	0.02	0.01	5.36	6.17
21	Indocement Tunggal Prakarsa	2012	0.30	0.35	3.68	21.58	0.01	37	0.14	0.02	0.01	4.28	6.03
21	Indocement Tunggal Prakarsa	2013	0.22	0.26	3.12	21.50	0.01	38	0.14	0.02	0.01	6.41	5.56
21	Indocement Tunggal Prakarsa	2014	0.19	0.22	3.36	21.57	0.01	39	0.14	0.01	0.00	6.39	5.01
21	Indocement Tunggal Prakarsa	2015	0.16	0.19	2.90	21.43	0.01	40	0.15	0.01	0.01	6.36	4.88

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
21	Indocement Tunggal Prakarsa	2016	0.13	0.15	1.92	21.53	0.00	41	0.15	-0.01	0.00	3.53	5.03
21	Indocement Tunggal Prakarsa	2017	0.07	0.08	2.84	21.48	0.00	42	0.15	-0.01	0.01	3.81	5.07
21	Indocement Tunggal Prakarsa	2018	0.04	0.05	2.39	21.39	0.00	43	0.15	0.01	0.01	3.20	5.17
21	Indocement Tunggal Prakarsa	2019	0.07	0.08	2.47	21.41	0.00	44	0.14	0.02	0.00	3.03	5.02
21	Indocement Tunggal Prakarsa	2020	0.06	0.08	1.89	21.39	0.02	45	0.14	0.01	0.01	1.92	-2.07
21	Indocement Tunggal Prakarsa	2021	0.07	0.09	1.70	21.33	0.01	46	0.14	0.01	0.01	1.56	3.70
21	Indocement Tunggal Prakarsa	2022	0.08	0.10	1.53	21.22	0.05	47	0.14	0.01	0.01	4.21	5.31
22	Indo Tambangraya Megah Tbk	2010	0.19	0.28	5.82	20.81	0.00	23	0.14	0.02	0.01	5.13	6.22
22	Indo Tambangraya Megah Tbk	2011	0.35	0.51	3.08	21.18	0.00	24	0.13	0.02	0.01	5.36	6.17
22	Indo Tambangraya Megah Tbk	2012	0.29	0.43	3.31	21.12	0.00	25	0.14	0.02	0.01	4.28	6.03
22	Indo Tambangraya Megah Tbk	2013	0.15	0.23	2.24	21.01	0.00	26	0.14	0.02	0.01	6.41	5.56
22	Indo Tambangraya Megah Tbk	2014	0.15	0.23	1.13	20.99	0.00	27	0.14	0.01	0.00	6.39	5.01
22	Indo Tambangraya Megah Tbk	2015	0.05	0.08	0.39	20.89	0.00	28	0.15	0.01	0.01	6.36	4.88
22	Indo Tambangraya Megah Tbk	2016	0.11	0.14	1.16	20.91	0.00	29	0.15	-0.01	0.00	3.53	5.03
22	Indo Tambangraya Megah Tbk	2017	0.19	0.26	1.25	21.03	0.00	30	0.15	-0.01	0.01	3.81	5.07
22	Indo Tambangraya Megah Tbk	2018	0.18	0.27	1.05	21.09	0.00	31	0.15	0.01	0.01	3.20	5.17
22	Indo Tambangraya Megah Tbk	2019	0.11	0.15	0.74	20.91	0.01	32	0.14	0.02	0.00	3.03	5.02
22	Indo Tambangraya Megah Tbk	2020	0.03	0.05	0.95	20.87	0.08	33	0.14	0.01	0.01	1.92	-2.07
22	Indo Tambangraya Megah Tbk	2021	0.29	0.39	0.96	21.23	0.04	34	0.14	0.01	0.01	1.56	3.70
22	Indo Tambangraya Megah Tbk	2022	0.45	0.61	1.11	21.69	0.03	35	0.14	0.01	0.01	4.21	5.31
23	Merdeka Copper Gold Tbk	2019	0.07	0.14	0.47	20.67	0.58	7	0.14	0.02	0.00	3.03	5.02
23	Merdeka Copper Gold Tbk	2020	0.04	0.01	0.68	20.65	0.05	8	0.14	0.01	0.01	1.92	-2.07
23	Merdeka Copper Gold Tbk	2021	0.03	0.05	5.14	20.97	0.50	9	0.14	0.01	0.01	1.56	3.70
23	Merdeka Copper Gold Tbk	2022	0.02	0.06	2.09	22.08	1.41	10	0.14	0.01	0.01	4.21	5.31
24	Semen Indonesia Tbk	2010	0.23	0.30	3.63	21.27	0.06	53	0.14	0.02	0.01	5.13	6.22
24	Semen Indonesia Tbk	2011	0.21	0.28	3.59	21.49	0.13	54	0.13	0.02	0.01	5.36	6.17

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
24	Semen Indonesia Tbk	2012	0.19	0.29	3.72	21.74	0.22	55	0.14	0.02	0.01	4.28	6.03
24	Semen Indonesia Tbk	2013	0.20	0.30	3.20	21.65	0.20	56	0.14	0.02	0.01	6.41	5.56
24	Semen Indonesia Tbk	2014	0.17	0.24	3.06	21.75	0.16	57	0.14	0.01	0.00	6.39	5.01
24	Semen Indonesia Tbk	2015	0.12	0.18	1.83	21.75	0.15	58	0.15	0.01	0.01	6.36	4.88
24	Semen Indonesia Tbk	2016	0.10	0.16	1.40	21.91	0.22	59	0.15	-0.01	0.00	3.53	5.03
24	Semen Indonesia Tbk	2017	0.03	0.06	1.42	22.01	0.35	60	0.15	-0.01	0.01	3.81	5.07
24	Semen Indonesia Tbk	2018	0.06	0.10	1.50	21.99	0.31	61	0.15	0.01	0.01	3.20	5.17
24	Semen Indonesia Tbk	2019	0.03	0.07	1.25	22.47	0.93	62	0.14	0.02	0.00	3.03	5.02
24	Semen Indonesia Tbk	2020	0.03	0.08	1.24	22.43	0.75	63	0.14	0.01	0.01	1.92	-2.07
24	Semen Indonesia Tbk	2021	0.03	0.05	0.77	22.47	0.53	64	0.14	0.01	0.01	1.56	3.70
24	Semen Indonesia Tbk	2022	0.03	0.06	0.77	22.39	0.39	65	0.14	0.01	0.01	4.21	5.31
25	Pabrik Kertas Tjiwi Kimia Tbk	2017	0.01	0.03	0.82	21.67	1.44	87	0.15	-0.01	0.01	3.81	5.07
25	Pabrik Kertas Tjiwi Kimia Tbk	2018	0.08	0.20	1.33	21.81	1.27	88	0.15	0.01	0.01	3.20	5.17
25	Pabrik Kertas Tjiwi Kimia Tbk	2019	0.05	0.12	1.22	21.84	1.07	89	0.14	0.02	0.00	3.03	5.02
25	Pabrik Kertas Tjiwi Kimia Tbk	2020	0.05	0.10	1.10	21.85	0.86	90	0.14	0.01	0.01	1.92	-2.07
25	Pabrik Kertas Tjiwi Kimia Tbk	2021	0.08	0.14	0.87	21.87	0.65	91	0.14	0.01	0.01	1.56	3.70
25	Pabrik Kertas Tjiwi Kimia Tbk	2022	0.13	0.21	0.71	21.99	0.46	92	0.14	0.01	0.01	4.21	5.31
26	Chandra Asri Petrochemical Tbk	2020	0.01	0.03	3.31	22.00	0.47	28	0.14	0.01	0.01	1.92	-2.07
26	Chandra Asri Petrochemical Tbk	2021	0.03	0.05	2.03	22.33	0.37	29	0.14	0.01	0.01	1.56	3.70
26	Chandra Asri Petrochemical Tbk	2022	-0.03	-0.05	3.34	22.32	0.52	30	0.14	0.01	0.01	4.21	5.31
27	Astra International Tbk	2010	0.13	0.29	2.23	23.25	0.64	54	0.58	0.04	0.01	5.13	6.22
27	Astra International Tbk	2011	0.12	0.30	2.27	23.55	0.74	55	0.55	0.05	0.01	5.36	6.17
27	Astra International Tbk	2012	0.11	0.28	2.02	23.67	0.80	56	0.56	0.04	0.01	4.28	6.03
27	Astra International Tbk	2013	0.11	0.27	1.75	23.59	0.77	57	0.58	0.03	0.01	6.41	5.56
27	Astra International Tbk	2014	0.08	0.21	1.64	23.67	0.73	58	0.58	0.01	0.01	6.39	5.01
27	Astra International Tbk	2015	0.06	0.15	1.25	23.61	0.69	59	0.58	-0.02	0.00	6.36	4.88

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
27	Astra International Tbk	2016	0.06	0.14	1.58	23.69	0.63	60	0.59	-0.02	0.00	3.53	5.03
27	Astra International Tbk	2017	0.06	0.15	1.40	23.81	0.61	61	0.56	-0.01	0.01	3.81	5.07
27	Astra International Tbk	2018	0.06	0.16	1.19	23.91	0.63	62	0.54	0.00	0.01	3.20	5.17
27	Astra International Tbk	2019	0.06	0.14	1.04	23.96	0.62	63	0.53	0.02	0.00	3.03	5.02
27	Astra International Tbk	2020	0.05	0.10	0.93	23.90	0.51	64	0.53	0.00	0.01	1.92	-2.07
27	Astra International Tbk	2021	0.05	0.12	0.82	23.97	0.42	65	0.55	0.00	0.01	1.56	3.70
27	Astra International Tbk	2022	0.07	0.16	0.76	24.00	0.37	66	0.53	0.01	0.01	4.21	5.31
28	United Tractors Tbk	2010	0.13	0.24	2.85	21.92	0.35	22	0.58	0.04	0.01	5.13	6.22
28	United Tractors Tbk	2011	1.19	2.10	2.24	22.35	0.18	23	0.55	0.05	0.01	5.36	6.17
28	United Tractors Tbk	2012	0.12	0.20	1.59	22.38	0.20	24	0.56	0.04	0.01	4.28	6.03
28	United Tractors Tbk	2013	0.10	0.17	1.48	22.27	0.15	25	0.58	0.03	0.01	6.41	5.56
28	United Tractors Tbk	2014	0.09	0.15	1.17	22.31	0.07	26	0.58	0.01	0.01	6.39	5.01
28	United Tractors Tbk	2015	0.06	0.10	1.03	22.23	0.06	27	0.58	-0.02	0.00	6.36	4.88
28	United Tractors Tbk	2016	0.08	0.12	1.28	22.28	0.03	28	0.59	-0.02	0.00	3.53	5.03
28	United Tractors Tbk	2017	0.09	0.17	1.68	22.53	0.10	29	0.56	-0.01	0.01	3.81	5.07
28	United Tractors Tbk	2018	0.10	0.21	0.95	22.82	0.19	30	0.54	0.00	0.01	3.20	5.17
28	United Tractors Tbk	2019	0.10	0.19	0.83	22.81	0.24	31	0.53	0.02	0.00	3.03	5.02
28	United Tractors Tbk	2020	0.06	0.10	1.08	22.68	0.21	32	0.53	0.00	0.01	1.92	-2.07
28	United Tractors Tbk	2021	0.09	0.15	0.81	22.79	0.13	33	0.55	0.00	0.01	1.56	3.70
28	United Tractors Tbk	2022	0.16	0.26	0.75	22.92	0.04	34	0.53	0.01	0.01	4.21	5.31
29	Global Mediacom Tbk	2012	0.07	0.13	1.87	21.46	0.33	32	0.56	0.04	0.01	4.28	6.03
29	Global Mediacom Tbk	2013	0.03	0.08	1.63	21.27	0.47	33	0.58	0.03	0.01	6.41	5.56
29	Global Mediacom Tbk	2014	0.03	0.06	831.95	21.44	0.64	34	0.58	0.01	0.01	6.39	5.01
29	Global Mediacom Tbk	2015	0.00	0.01	564.45	21.39	0.76	35	0.58	-0.02	0.00	6.36	4.88
29	Global Mediacom Tbk	2016	0.01	0.02	329.05	21.39	1.05	36	0.59	-0.02	0.00	3.53	5.03
29	Global Mediacom Tbk	2017	0.02	0.05	299.07	21.44	1.15	37	0.56	-0.01	0.01	3.81	5.07

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
29	Global Mediacom Tbk	2018	0.03	0.09	113.46	21.43	1.26	38	0.54	0.00	0.01	3.20	5.17
29	Global Mediacom Tbk	2019	0.05	0.13	168.94	21.50	0.91	39	0.53	0.02	0.00	3.03	5.02
29	Global Mediacom Tbk	2020	0.03	0.07	141.70	21.55	0.77	40	0.53	0.00	0.01	1.92	-2.07
29	Global Mediacom Tbk	2021	0.04	0.10	123.95	21.59	0.62	41	0.55	0.00	0.01	1.56	3.70
29	Global Mediacom Tbk	2022	0.03	0.08	133.68	21.56	0.52	42	0.53	0.01	0.01	4.21	5.31
30	Matahari Department Store Tbk	2013	0.46	-1.72	12.83	19.30	-2.04	56	0.58	0.03	0.01	6.41	5.56
30	Matahari Department Store Tbk	2014	0.43	9.24	13.72	19.44	4.33	57	0.58	0.01	0.01	6.39	5.01
30	Matahari Department Store Tbk	2015	0.47	1.65	12.86	19.46	0.00	58	0.58	-0.02	0.00	6.36	4.88
30	Matahari Department Store Tbk	2016	0.42	1.10	9.27	19.70	0.00	59	0.59	-0.02	0.00	3.53	5.03
30	Matahari Department Store Tbk	2017	0.36	0.83	5.44	19.81	0.00	60	0.56	-0.01	0.01	3.81	5.07
30	Matahari Department Store Tbk	2018	0.22	0.60	3.17	19.68	0.00	61	0.54	0.00	0.01	3.20	5.17
30	Matahari Department Store Tbk	2019	0.28	0.77	2.48	19.67	0.00	62	0.53	0.02	0.00	3.03	5.02
30	Matahari Department Store Tbk	2020	-0.13	-1.46	1.18	19.92	6.64	63	0.53	0.00	0.01	1.92	-2.07
30	Matahari Department Store Tbk	2021	0.16	0.91	2.53	19.83	2.78	64	0.55	0.00	0.01	1.56	3.70
30	Matahari Department Store Tbk	2022	0.25	2.50	3.05	19.72	5.06	65	0.53	0.01	0.01	4.21	5.31
31	Ace Hardware Indonesia Tbk	2019	0.15	0.22	3.88	19.99	0.17	34	0.13	0.00	0.01	3.03	5.02
31	Ace Hardware Indonesia Tbk	2020	0.10	0.14	4.01	20.06	0.16	34	0.13	-0.01	0.01	1.92	-2.07
31	Ace Hardware Indonesia Tbk	2021	0.10	0.12	3.15	20.03	0.15	34	0.13	0.01	0.00	1.56	3.70
31	Ace Hardware Indonesia Tbk	2022	0.10	0.12	1.32	19.96	0.12	34	0.13	0.01	0.00	4.21	5.31
32	Akasha Wira International Tbk	2020	0.14	0.19	0.08	4.22	0.01	36	0.13	-0.01	0.01	1.92	-2.07
32	Akasha Wira International Tbk	2021	0.20	0.27	1.48	18.33	0.00	37	0.13	0.01	0.00	1.56	3.70
32	Akasha Wira International Tbk	2022	0.23	0.29	2.68	18.47	0.00	38	0.13	0.01	0.00	4.21	5.31
33	Charoen pokphand Indonesia Tbk	2010	0.34	0.49	4.68	20.40	0.10	38	0.15	0.03	0.01	5.13	6.22
33	Charoen pokphand Indonesia Tbk	2011	0.28	0.40	4.15	20.70	0.17	39	0.15	0.04	0.01	5.36	6.17
33	Charoen pokphand Indonesia Tbk	2012	0.22	0.34	5.05	20.97	0.24	40	0.15	0.04	0.00	4.28	6.03
33	Charoen pokphand Indonesia Tbk	2013	0.19	0.30	4.14	20.98	0.29	41	0.15	0.03	0.00	6.41	5.56

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
33	Charoen pokphand Indonesia Tbk	2014	0.09	0.16	3.46	21.25	0.61	42	0.14	0.02	0.00	6.39	5.01
33	Charoen pokphand Indonesia Tbk	2015	0.08	0.15	2.02	21.31	0.66	43	0.14	0.01	0.00	6.36	4.88
33	Charoen pokphand Indonesia Tbk	2016	0.09	0.16	2.41	21.31	0.47	44	0.20	0.03	0.01	3.53	5.03
33	Charoen pokphand Indonesia Tbk	2017	0.10	0.16	2.27	21.32	0.38	45	0.13	0.02	0.02	3.81	5.07
33	Charoen pokphand Indonesia Tbk	2018	0.17	0.24	4.36	21.38	0.23	46	0.13	0.01	0.02	3.20	5.17
33	Charoen pokphand Indonesia Tbk	2019	0.12	0.17	3.74	21.46	0.24	47	0.13	0.00	0.01	3.03	5.02
33	Charoen pokphand Indonesia Tbk	2020	0.12	0.16	3.45	21.52	0.19	48	0.13	-0.01	0.01	1.92	-2.07
33	Charoen pokphand Indonesia Tbk	2021	0.10	0.14	2.91	21.63	0.25	49	0.13	0.01	0.00	1.56	3.70
33	Charoen pokphand Indonesia Tbk	2022	0.08	0.12	2.76	21.66	0.36	50	0.13	0.01	0.00	4.21	5.31
34	Garudafood Putra Putri Jaya Tbk	2020	0.04	0.10	0.37	6.16	0.92	31	0.13	-0.01	0.01	1.92	-2.07
34	Garudafood Putra Putri Jaya Tbk	2021	0.06	0.16	3.14	19.98	0.85	32	0.13	0.01	0.00	1.56	3.70
34	Garudafood Putra Putri Jaya Tbk	2022	0.06	0.16	3.08	19.97	0.81	33	0.13	0.01	0.00	4.21	5.31
35	Indofood CBP Sukses Makmur Tbk	2013	0.12	0.21	3144.88	21.28	0.20	5	0.15	0.03	0.00	6.41	5.56
35	Indofood CBP Sukses Makmur Tbk	2014	0.11	0.20	3213.19	21.43	0.25	6	0.14	0.02	0.00	6.39	5.01
35	Indofood CBP Sukses Makmur Tbk	2015	0.12	0.20	2881.52	21.39	0.19	7	0.14	0.01	0.00	6.36	4.88
35	Indofood CBP Sukses Makmur Tbk	2016	0.13	0.21	3531.36	21.48	0.12	8	0.20	0.03	0.01	3.53	5.03
35	Indofood CBP Sukses Makmur Tbk	2017	0.12	0.20	3324.08	21.57	0.12	9	0.13	0.02	0.02	3.81	5.07
35	Indofood CBP Sukses Makmur Tbk	2018	0.13	0.21	3465.01	21.60	0.10	10	0.13	0.01	0.02	3.20	5.17
35	Indofood CBP Sukses Makmur Tbk	2019	0.13	0.20	3276.35	21.75	0.09	11	0.13	0.00	0.01	3.03	5.02
35	Indofood CBP Sukses Makmur Tbk	2020	0.06	0.22	1037.35	22.72	1.08	12	0.13	-0.01	0.01	1.92	-2.07
35	Indofood CBP Sukses Makmur Tbk	2021	0.05	1.88	853.53	22.83	12.25	13	0.13	0.01	0.00	1.56	3.70

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
35	Indofood CBP Sukses Makmur Tbk	2022	0.04	1.32	1066.72	22.72	12.60	14	0.13	0.01	0.00	4.21	5.31
36	Indofood Sukses Makmur Tbk	2010	0.06	0.17	1.20	22.38	0.85	21	0.15	0.03	0.01	5.13	6.22
36	Indofood Sukses Makmur Tbk	2011	0.06	0.16	1.02	22.50	0.71	22	0.15	0.04	0.01	5.36	6.17
36	Indofood Sukses Makmur Tbk	2012	0.06	0.16	1.13	22.54	0.72	23	0.15	0.04	0.00	4.28	6.03
36	Indofood Sukses Makmur Tbk	2013	0.04	0.13	1.19	22.57	1.17	24	0.15	0.03	0.00	6.41	5.56
36	Indofood Sukses Makmur Tbk	2014	0.05	0.16	1.04	22.67	1.07	25	0.14	0.02	0.00	6.39	5.01
36	Indofood Sukses Makmur Tbk	2015	0.03	0.11	0.78	22.63	1.01	26	0.14	0.01	0.00	6.36	4.88
36	Indofood Sukses Makmur Tbk	2016	0.05	0.14	1.13	22.53	0.77	27	0.20	0.03	0.01	3.53	5.03
36	Indofood Sukses Makmur Tbk	2017	0.05	0.13	1.04	22.60	0.78	28	0.13	0.02	0.02	3.81	5.07
36	Indofood Sukses Makmur Tbk	2018	0.04	0.12	0.97	22.63	0.88	29	0.13	0.01	0.02	3.20	5.17
36	Indofood Sukses Makmur Tbk	2019	0.05	0.13	0.94	22.66	0.61	30	0.13	0.00	0.01	3.03	5.02
36	Indofood Sukses Makmur Tbk	2020	0.04	0.15	0.68	23.17	1.25	31	0.13	-0.01	0.01	1.92	-2.07
36	Indofood Sukses Makmur Tbk	2021	0.04	0.16	0.65	23.25	1.28	32	0.13	0.01	0.00	1.56	3.70
36	Indofood Sukses Makmur Tbk	2022	0.04	0.12	0.71	23.17	1.23	33	0.13	0.01	0.00	4.21	5.31
37	Unilever Indonesia Tbk	2009	0.37	0.74	11.37	20.49	0.00	81	0.16	0.02	0.00	4.39	4.63
37	Unilever Indonesia Tbk	2010	0.39	0.83	14.44	20.69	0.05	82	0.15	0.03	0.01	5.13	6.22
37	Unilever Indonesia Tbk	2011	0.41	1.17	13.92	20.87	0.19	83	0.15	0.04	0.01	5.36	6.17
37	Unilever Indonesia Tbk	2012	0.42	1.25	13.50	20.94	0.26	84	0.15	0.04	0.00	4.28	6.03
37	Unilever Indonesia Tbk	2013	0.49	1.47	17.64	20.76	0.23	85	0.15	0.03	0.00	6.41	5.56
37	Unilever Indonesia Tbk	2014	0.43	1.28	18.27	20.87	0.26	86	0.14	0.02	0.00	6.39	5.01
37	Unilever Indonesia Tbk	2015	0.38	1.25	17.59	20.86	0.35	87	0.14	0.01	0.00	6.36	4.88
37	Unilever Indonesia Tbk	2016	0.39	1.38	18.19	20.94	0.51	88	0.20	0.03	0.01	3.53	5.03
37	Unilever Indonesia Tbk	2017	0.36	1.42	21.99	21.11	0.92	89	0.13	0.02	0.02	3.81	5.07
37	Unilever Indonesia Tbk	2018	0.45	1.23	16.73	21.08	0.20	90	0.13	0.01	0.02	3.20	5.17
37	Unilever Indonesia Tbk	2019	0.35	1.38	15.33	21.12	0.75	91	0.13	0.00	0.01	3.03	5.02
37	Unilever Indonesia Tbk	2020	0.34	1.41	13.33	21.10	0.80	92	0.13	-0.01	0.01	1.92	-2.07

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
37	Unilever Indonesia Tbk	2021	0.30	1.33	8.30	21.01	0.63	93	0.13	0.01	0.00	1.56	3.70
37	Unilever Indonesia Tbk	2022	0.31	1.41	10.39	20.88	0.32	94	0.13	0.01	0.00	4.21	5.31
38	Japfa Comfeed Indonesia Tbk	2020	0.04	0.10	0.44	7.52	0.73	46	0.13	-0.01	0.01	1.92	-2.07
38	Japfa Comfeed Indonesia Tbk	2021	0.07	0.17	1.01	21.42	0.75	47	0.13	0.01	0.00	1.56	3.70
38	Japfa Comfeed Indonesia Tbk	2022	0.05	0.12	0.88	21.46	1.01	48	0.13	0.01	0.00	4.21	5.31
39	Bermaz Auto Bhd	2019	0.28	0.47	2.40	19.27	0.00	10	0.10	0.00	0.01	0.66	4.41
39	Bermaz Auto Bhd	2020	0.08	0.22	1.48	19.52	0.45	11	0.10	0.00	0.01	-1.14	-5.46
39	Bermaz Auto Bhd	2021	0.09	0.23	1.42	19.65	0.49	12	0.12	0.01	0.01	2.48	3.30
39	Bermaz Auto Bhd	2022	0.10	0.25	1.70	19.70	0.45	13	0.10	0.01	0.01	3.38	8.65
40	CAB Cakaran Corporation Bhd	2020	0.00	0.01	0.53	5.81	1.16	19	0.10	0.00	0.01	-1.14	-5.46
40	CAB Cakaran Corporation Bhd	2021	-0.02	-0.05	0.65	19.58	1.18	20	0.12	0.01	0.01	2.48	3.30
40	CAB Cakaran Corporation Bhd	2022	0.04	0.12	0.60	19.54	0.98	21	0.10	0.01	0.01	3.38	8.65
41	Capital A Berhad	2010	0.08	0.28	0.91	22.18	2.16	18	0.14	0.02	0.01	1.62	7.42
41	Capital A Berhad	2011	0.04	0.14	1.01	22.20	1.93	19	0.15	0.02	0.01	3.17	5.29
41	Capital A Berhad	2012	0.05	0.16	0.82	22.36	1.73	20	0.15	0.03	0.01	1.66	5.47
41	Capital A Berhad	2013	0.02	0.08	0.77	22.42	2.03	21	0.16	0.03	0.01	2.11	4.69
41	Capital A Berhad	2014	0.00	0.02	0.83	22.50	2.79	22	0.14	0.02	0.01	3.14	6.01
41	Capital A Berhad	2015	0.03	0.13	0.69	22.33	2.83	23	0.12	0.00	0.01	2.10	5.09
41	Capital A Berhad	2016	0.08	0.26	0.65	22.31	1.59	24	0.09	-0.02	0.00	2.09	4.45
41	Capital A Berhad	2017	0.07	0.19	0.74	22.40	1.16	25	0.09	-0.01	0.00	3.87	5.81
41	Capital A Berhad	2018	0.11	0.26	0.96	22.23	1.55	26	0.09	-0.01	0.01	0.88	4.84
41	Capital A Berhad	2019	-0.01	-0.07	0.62	22.56	2.87	27	0.10	0.00	0.01	0.66	4.41
41	Capital A Berhad	2020	-0.25	4.03	0.79	22.32	-10.82	28	0.10	0.00	0.01	-1.14	-5.46
41	Capital A Berhad	2021	-0.15	0.89	0.93	22.29	-4.84	29	0.12	0.01	0.01	2.48	3.30
41	Capital A Berhad	2022	-0.13	0.46	1.11	22.23	-3.14	30	0.10	0.01	0.01	3.38	8.65
42	DKSH Holdings (Malaysia) Bhd	2020	0.02	0.07	2.09	6.51	1.02	156	0.10	0.00	0.01	-1.14	-5.46

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
42	DKSH Holdings (Malaysia) Bhd	2021	0.03	0.12	0.49	20.28	0.80	157	0.12	0.01	0.01	2.48	3.30
42	DKSH Holdings (Malaysia) Bhd	2022	0.04	0.13	0.41	20.32	0.62	158	0.10	0.01	0.01	3.38	8.65
43	DRB-HICOM Bhd	2020	0.01	0.07	0.33	9.34	1.00	21	0.10	0.00	0.01	-1.14	-5.46
43	DRB-HICOM Bhd	2021	-0.01	-0.03	0.25	23.15	1.15	22	0.12	0.01	0.01	2.48	3.30
43	DRB-HICOM Bhd	2022	0.00	0.02	0.23	23.18	1.07	23	0.10	0.01	0.01	3.38	8.65
44	Farm fresh Bhd	2020	0.09	0.19	0.65	4.56	0.81	13	0.10	0.00	0.01	-1.14	-5.46
44	Farm fresh Bhd	2021	0.06	0.15	0.40	18.83	1.06	14	0.12	0.01	0.01	2.48	3.30
44	Farm fresh Bhd	2022	0.08	0.13	3.12	19.30	0.48	15	0.10	0.01	0.01	3.38	8.65
45	Formosa Prosonic Industries Bhd	2020	0.08	0.15	0.71	4.99	0.01	32	0.10	0.00	0.01	-1.14	-5.46
45	Formosa Prosonic Industries Bhd	2021	0.15	0.23	1.47	18.86	0.00	33	0.12	0.01	0.01	2.48	3.30
45	Formosa Prosonic Industries Bhd	2022	0.16	0.22	1.27	18.82	0.00	34	0.10	0.01	0.01	3.38	8.65
46	Fraser & Neave Holdings Bhd	2017	0.10	0.15	3.31	20.46	0.18	29	0.09	-0.01	0.00	3.87	5.81
46	Fraser & Neave Holdings Bhd	2018	0.12	0.17	3.78	20.51	0.15	30	0.09	-0.01	0.01	0.88	4.84
46	Fraser & Neave Holdings Bhd	2019	0.12	0.16	3.77	20.55	0.05	31	0.10	0.00	0.01	0.66	4.41
46	Fraser & Neave Holdings Bhd	2020	0.11	0.15	3.49	20.56	0.04	32	0.10	0.00	0.01	-1.14	-5.46
46	Fraser & Neave Holdings Bhd	2021	0.11	0.14	2.53	20.58	0.02	33	0.12	0.01	0.01	2.48	3.30
46	Fraser & Neave Holdings Bhd	2022	0.10	0.14	2.06	20.62	0.10	34	0.10	0.01	0.01	3.38	8.65
47	Frontken Corporation Bhd	2020	0.13	0.18	0.33	5.04	0.03	25	0.10	0.00	0.01	-1.14	-5.46
47	Frontken Corporation Bhd	2021	0.15	0.15	8.78	18.97	0.03	26	0.12	0.01	0.01	2.48	3.30
47	Frontken Corporation Bhd	2022	0.15	0.15	6.33	19.03	0.32	27	0.10	0.01	0.01	3.38	8.65
48	Guan Chong Bhd	2020	0.08	0.18	1.22	6.56	0.92	17	0.10	0.00	0.01	-1.14	-5.46
48	Guan Chong Bhd	2021	0.04	0.12	1.23	20.55	1.01	18	0.12	0.01	0.01	2.48	3.30
48	Guan Chong Bhd	2022	0.04	0.09	1.32	20.54	1.23	19	0.10	0.01	0.01	3.38	8.65
49	Homeritz Corporation Bhd	2020	0.12	0.13	0.13	3.87	0.00	24	0.10	0.00	0.01	-1.14	-5.46
49	Homeritz Corporation Bhd	2021	0.10	0.11	1.01	17.84	0.00	25	0.12	0.01	0.01	2.48	3.30
49	Homeritz Corporation Bhd	2022	0.15	0.17	0.90	17.97	0.00	26	0.10	0.01	0.01	3.38	8.65

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
50	Hup Seng Industries Bhd	2020	0.17	0.28	0.32	4.04	0.00	30	0.10	0.00	0.01	-1.14	-5.46
50	Hup Seng Industries Bhd	2021	0.13	0.20	3.38	17.72	0.00	31	0.12	0.01	0.01	2.48	3.30
50	Hup Seng Industries Bhd	2022	0.12	0.18	2.68	17.69	0.00	32	0.10	0.01	0.01	3.38	8.65
51	Innature Bhd	2020	0.10	0.14	0.23	3.85	0.17	37	0.10	0.00	0.01	-1.14	-5.46
51	Innature Bhd	2021	0.08	0.10	2.70	17.60	0.15	38	0.12	0.01	0.01	2.48	3.30
51	Innature Bhd	2022	0.12	0.14	2.38	17.54	0.14	39	0.10	0.01	0.01	3.38	8.65
52	MSM Malaysia Holdings Bhd	2020	-0.02	-0.04	0.45	6.54	0.61	62	0.10	0.00	0.01	-1.14	-5.46
52	MSM Malaysia Holdings Bhd	2021	0.04	0.07	0.59	20.35	0.47	63	0.12	0.01	0.01	2.48	3.30
52	MSM Malaysia Holdings Bhd	2022	-0.06	-0.12	0.53	20.28	0.59	64	0.10	0.01	0.01	3.38	8.65
53	Nestle Malaysia Bhd	2016	0.28	1.07	7.46	20.14	0.43	58	0.09	-0.02	0.00	2.09	4.45
53	Nestle Malaysia Bhd	2017	0.23	0.95	9.42	20.29	0.71	59	0.09	-0.01	0.00	3.87	5.81
53	Nestle Malaysia Bhd	2018	0.24	1.03	12.28	20.35	0.59	60	0.09	-0.01	0.01	0.88	4.84
53	Nestle Malaysia Bhd	2019	0.24	1.00	12.81	20.32	0.70	61	0.10	0.00	0.01	0.66	4.41
53	Nestle Malaysia Bhd	2020	0.18	0.95	11.58	20.38	0.99	62	0.10	0.00	0.01	-1.14	-5.46
53	Nestle Malaysia Bhd	2021	0.19	0.98	10.72	20.39	0.88	63	0.12	0.01	0.01	2.48	3.30
53	Nestle Malaysia Bhd	2022	0.17	0.99	9.50	20.51	1.49	64	0.10	0.01	0.01	3.38	8.65
54	NTPM Holdings Bhd	2020	0.01	0.01	0.57	5.48	0.97	46	0.10	0.00	0.01	-1.14	-5.46
54	NTPM Holdings Bhd	2021	0.06	0.13	0.89	19.30	0.71	47	0.12	0.01	0.01	2.48	3.30
54	NTPM Holdings Bhd	2022	0.03	0.06	0.84	19.31	0.69	48	0.10	0.01	0.01	3.38	8.65
55	One Glove Group Bhd	2020	-0.19	-0.89	0.44	3.12	1.53	11	0.10	0.00	0.01	-1.14	-5.46
55	One Glove Group Bhd	2021	-0.05	-0.17	1.56	18.07	1.08	12	0.12	0.01	0.01	2.48	3.30
55	One Glove Group Bhd	2022	0.00	0.00	0.00	0.00	0.00	13	0.10	0.01	0.01	3.38	8.65
56	PPB Group Bhd	2009	0.10	0.11	1.25	22.21	0.01	42	0.15	0.03	0.01	0.58	-1.51
56	PPB Group Bhd	2010	0.13	0.14	1.46	22.23	0.01	43	0.14	0.02	0.01	1.62	7.42
56	PPB Group Bhd	2011	0.07	0.07	1.34	22.29	0.02	44	0.15	0.02	0.01	3.17	5.29
56	PPB Group Bhd	2012	0.05	0.06	0.90	22.35	0.03	45	0.15	0.03	0.01	1.66	5.47

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
56	PPB Group Bhd	2013	0.06	0.07	1.14	22.37	0.03	46	0.16	0.03	0.01	2.11	4.69
56	PPB Group Bhd	2014	0.05	0.06	0.93	22.40	0.03	47	0.14	0.02	0.01	3.14	6.01
56	PPB Group Bhd	2015	0.05	0.06	0.88	22.35	0.04	48	0.12	0.00	0.01	2.10	5.09
56	PPB Group Bhd	2016	0.05	0.05	0.84	22.35	0.03	49	0.09	-0.02	0.00	2.09	4.45
56	PPB Group Bhd	2017	0.05	0.05	0.93	22.46	0.05	50	0.09	-0.01	0.00	3.87	5.81
56	PPB Group Bhd	2018	0.05	0.05	1.10	22.45	0.04	51	0.09	-0.01	0.01	0.88	4.84
56	PPB Group Bhd	2019	0.05	0.05	1.15	22.48	0.03	52	0.10	0.00	0.01	0.66	4.41
56	PPB Group Bhd	2020	0.05	0.06	1.08	22.55	0.03	53	0.10	0.00	0.01	-1.14	-5.46
56	PPB Group Bhd	2021	0.05	0.06	0.94	22.61	0.06	54	0.12	0.01	0.01	2.48	3.30
56	PPB Group Bhd	2022	0.08	0.09	0.92	22.61	0.07	55	0.10	0.01	0.01	3.38	8.65
57	Petronas Dagangan Bhd	2010	0.09	0.16	1.51	21.61	0.00	30	0.14	0.02	0.01	1.62	7.42
57	Petronas Dagangan Bhd	2011	0.07	0.14	1.85	21.85	0.22	31	0.15	0.02	0.01	3.17	5.29
57	Petronas Dagangan Bhd	2012	0.08	0.17	2.32	21.90	0.10	32	0.15	0.03	0.01	1.66	5.47
57	Petronas Dagangan Bhd	2013	0.08	0.18	3.03	21.86	0.12	33	0.16	0.03	0.01	2.11	4.69
57	Petronas Dagangan Bhd	2014	0.06	0.11	1.77	21.73	0.10	34	0.14	0.02	0.01	3.14	6.01
57	Petronas Dagangan Bhd	2015	0.11	0.17	3.02	21.36	0.04	35	0.12	0.00	0.01	2.10	5.09
57	Petronas Dagangan Bhd	2016	0.11	0.19	2.48	21.46	0.02	36	0.09	-0.02	0.00	2.09	4.45
57	Petronas Dagangan Bhd	2017	0.15	0.24	2.42	21.60	0.01	37	0.09	-0.01	0.00	3.87	5.81
57	Petronas Dagangan Bhd	2018	0.10	0.15	2.84	21.52	0.01	38	0.09	-0.01	0.01	0.88	4.84
57	Petronas Dagangan Bhd	2019	0.82	0.14	22.96	19.32	0.06	39	0.10	0.00	0.01	0.66	4.41
57	Petronas Dagangan Bhd	2020	0.03	0.05	2.55	21.46	0.03	40	0.10	0.00	0.01	-1.14	-5.46
57	Petronas Dagangan Bhd	2021	0.06	0.10	2.13	21.56	0.02	41	0.12	0.01	0.01	2.48	3.30
57	Petronas Dagangan Bhd	2022	0.07	0.14	2.18	21.66	0.32	42	0.10	0.01	0.01	3.38	8.65
58	Poh Huat Resources Holdings Bhd	2020	0.09	0.12	0.53	4.92	0.05	24	0.10	0.00	0.01	-1.14	-5.46
58	Poh Huat Resources Holdings Bhd	2021	0.06	0.07	0.69	18.72	0.06	25	0.12	0.01	0.01	2.48	3.30
58	Poh Huat Resources Holdings Bhd	2022	0.15	0.17	0.66	18.69	0.04	26	0.10	0.01	0.01	3.38	8.65

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
59	Parkson Holdings Bhd	2010	0.04	0.15	0.96	21.45	1.06	29	0.14	0.02	0.01	1.62	7.42
59	Parkson Holdings Bhd	2011	0.05	0.15	0.98	21.60	0.86	30	0.15	0.02	0.01	3.17	5.29
59	Parkson Holdings Bhd	2012	0.05	0.15	0.91	21.62	0.46	31	0.15	0.03	0.01	1.66	5.47
59	Parkson Holdings Bhd	2013	0.03	0.09	0.51	21.72	0.57	32	0.16	0.03	0.01	2.11	4.69
59	Parkson Holdings Bhd	2014	0.02	0.05	0.50	21.69	0.67	33	0.14	0.02	0.01	3.14	6.01
59	Parkson Holdings Bhd	2015	0.01	0.02	0.33	21.68	0.94	34	0.12	0.00	0.01	2.10	5.09
59	Parkson Holdings Bhd	2016	-0.01	-0.04	0.34	21.58	1.04	35	0.09	-0.02	0.00	2.09	4.45
59	Parkson Holdings Bhd	2017	-0.01	-0.05	0.34	21.54	1.13	36	0.09	-0.01	0.00	3.87	5.81
59	Parkson Holdings Bhd	2018	-0.01	-0.04	0.31	21.52	1.12	37	0.09	-0.01	0.01	0.88	4.84
59	Parkson Holdings Bhd	2019	-0.02	-0.06	0.32	21.45	1.22	38	0.10	0.00	0.01	0.66	4.41
59	Parkson Holdings Bhd	2020	-0.04	-0.28	0.59	21.62	3.77	39	0.10	0.00	0.01	-1.14	-5.46
59	Parkson Holdings Bhd	2021	-0.01	-0.06	0.51	21.55	2.73	40	0.12	0.01	0.01	2.48	3.30
59	Parkson Holdings Bhd	2022	-0.04	-0.28	0.59	7.80	3.77	41	0.10	0.00	0.01	-1.14	-5.46
60	QL Resources Bhd	2019	0.06	0.11	3.91	20.62	0.61	33	0.10	0.00	0.01	0.66	4.41
60	QL Resources Bhd	2020	0.06	0.12	4.07	20.66	0.72	34	0.10	0.00	0.01	-1.14	-5.46
60	QL Resources Bhd	2021	0.06	0.13	2.62	20.88	0.67	35	0.12	0.01	0.01	2.48	3.30
60	QL Resources Bhd	2022	0.04	0.09	2.89	20.89	0.62	36	0.10	0.01	0.01	3.38	8.65
61	Signature International Bhd	2020	0.12	0.20	0.18	4.22	0.27	27	0.10	0.00	0.01	-1.14	-5.46
61	Signature International Bhd	2021	0.03	0.04	1.37	18.16	0.19	28	0.12	0.01	0.01	2.48	3.30
61	Signature International Bhd	2022	0.06	0.14	1.43	18.79	0.94	29	0.10	0.01	0.01	3.38	8.65
62	Sern Kou Resources Bhd	2020	0.08	0.15	0.54	3.95	0.63	28	0.10	0.00	0.01	-1.14	-5.46
62	Sern Kou Resources Bhd	2021	0.06	0.09	2.16	18.07	0.37	29	0.12	0.01	0.01	2.48	3.30
62	Sern Kou Resources Bhd	2022	0.03	0.05	2.08	18.11	0.37	30	0.10	0.01	0.01	3.38	8.65
63	Sime Darby Bhd	2009	0.06	0.11	0.61	23.03	0.26	100	0.15	0.03	0.01	0.58	-1.51
63	Sime Darby Bhd	2010	0.02	0.03	0.63	23.17	0.37	101	0.14	0.02	0.01	1.62	7.42
63	Sime Darby Bhd	2011	0.08	0.15	0.52	23.38	0.29	102	0.15	0.02	0.01	3.17	5.29

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
63	Sime Darby Bhd	2012	0.09	0.16	0.57	23.44	0.38	103	0.15	0.03	0.01	1.66	5.47
63	Sime Darby Bhd	2013	0.08	0.14	0.55	23.45	0.38	104	0.16	0.03	0.01	2.11	4.69
63	Sime Darby Bhd	2014	0.07	0.12	0.52	23.49	0.40	105	0.14	0.02	0.01	3.14	6.01
63	Sime Darby Bhd	2015	0.04	0.09	0.49	23.53	0.60	106	0.12	0.00	0.01	2.10	5.09
63	Sime Darby Bhd	2016	0.04	0.07	0.45	23.50	0.46	107	0.09	-0.02	0.00	2.09	4.45
63	Sime Darby Bhd	2017	0.04	0.06	0.26	23.48	0.08	108	0.09	-0.01	0.00	3.87	5.81
63	Sime Darby Bhd	2018	0.08	0.14	0.70	22.54	0.20	109	0.09	-0.01	0.01	0.88	4.84
63	Sime Darby Bhd	2019	0.04	0.06	0.65	22.54	0.17	110	0.10	0.00	0.01	0.66	4.41
63	Sime Darby Bhd	2020	0.05	0.06	1.31	22.01	0.27	111	0.10	0.00	0.01	-1.14	-5.46
63	Sime Darby Bhd	2021	0.05	0.09	0.69	22.65	0.24	112	0.12	0.01	0.01	2.48	3.30
63	Sime Darby Bhd	2022	0.04	0.07	0.68	22.65	0.31	113	0.10	0.01	0.01	3.38	8.65
64	ABM Investama Tbk	2020	-0.04	-0.19	0.56	6.72	2.34	15	0.21	-0.01	0.01	1.92	-2.07
64	ABM Investama Tbk	2021	0.14	0.43	0.39	20.76	0.02	16	0.22	0.01	0.00	1.56	3.70
64	ABM Investama Tbk	2022	0.14	0.14	0.49	21.41	0.02	17	0.22	0.02	0.00	4.21	5.31
65	Bank BTPN Syariah Tbk	2020	0.05	0.14	0.07	7.06	0.05	30	0.21	-0.01	0.01	1.92	-2.07
65	Bank BTPN Syariah Tbk	2021	0.08	0.21	1.48	20.98	0.01	31	0.22	0.01	0.00	1.56	3.70
65	Bank BTPN Syariah Tbk	2022	0.09	0.22	1.08	21.03	0.02	32	0.22	0.02	0.00	4.21	5.31
66	Bank Panin Dubai Syariah	2020	0.00	0.00	0.00	6.69	0.00	12	0.21	-0.01	0.01	1.92	-2.07
66	Bank Panin Dubai Syariah	2021	-0.06	-0.36	0.23	20.73	0.00	13	0.22	0.01	0.00	1.56	3.70
66	Bank Panin Dubai Syariah	2022	0.02	0.10	0.20	20.67	0.18	14	0.22	0.02	0.00	4.21	5.31
67	Malaysia Building Society Bhd	2020	0.01	0.03	0.11	9.40	0.56	51	0.14	0.00	0.00	-1.14	-5.46
67	Malaysia Building Society Bhd	2021	0.01	0.05	0.23	23.22	0.88	52	0.13	0.01	0.00	2.48	3.30
67	Malaysia Building Society Bhd	2022	0.01	0.05	0.24	23.25	0.99	53	0.13	0.01	0.00	3.38	8.65
68	RCE Capital Bhd	2020	0.05	0.17	0.74	6.33	2.56	68	0.14	0.00	0.00	-1.14	-5.46
68	RCE Capital Bhd	2021	0.05	0.16	1.17	20.21	2.17	69	0.13	0.01	0.00	2.48	3.30
68	RCE Capital Bhd	2022	0.05	0.15	1.10	20.29	2.07	70	0.13	0.01	0.00	3.38	8.65

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
69	Syarikat Takaful Malaysia Keluarga Bhd	2020	0.03	0.23	0.21	7.98	0.01	37	0.14	0.00	0.00	-1.14	-5.46
69	Syarikat Takaful Malaysia Keluarga Bhd	2021	0.03	0.23	0.24	21.84	0.00	38	0.13	0.01	0.00	2.48	3.30
69	Syarikat Takaful Malaysia Keluarga Bhd	2022	0.02	0.23	0.22	21.83	0.00	39	0.13	0.01	0.00	3.38	8.65
70	Acset Indonusa Tbk	2020	-0.42	-4.68	0.37	5.38	3.94	26	0.28	0.00	0.01	1.92	-2.07
70	Acset Indonusa Tbk	2021	-0.31	-0.35	0.00	17.95	0.00	27	0.28	-0.01	0.00	1.56	3.70
70	Acset Indonusa Tbk	2022	-0.08	-0.09	0.00	18.67	0.00	28	0.29	-0.01	0.00	4.21	5.31
71	XL Axiata Tbk	2010	0.11	0.24	1.37	21.83	0.87	22	0.27	0.03	0.01	5.13	6.22
71	XL Axiata Tbk	2011	0.09	0.21	1.59	21.96	0.78	23	0.26	0.02	0.01	5.36	6.17
71	XL Axiata Tbk	2012	0.08	0.19	1.77	22.03	0.88	24	0.24	0.02	0.00	4.28	6.03
71	XL Axiata Tbk	2013	0.03	0.08	1.68	21.92	1.16	25	0.24	0.02	0.00	6.41	5.56
71	XL Axiata Tbk	2014	-0.01	-0.07	1.19	22.36	2.26	26	0.30	0.01	0.01	6.39	5.01
71	XL Axiata Tbk	2015	0.00	0.00	1.01	22.18	2.08	27	0.26	0.01	0.01	6.36	4.88
71	XL Axiata Tbk	2016	0.01	0.02	0.79	22.13	0.87	28	0.25	0.01	0.01	3.53	5.03
71	XL Axiata Tbk	2017	0.01	0.02	0.91	22.15	0.90	29	0.21	0.02	0.01	3.81	5.07
71	XL Axiata Tbk	2018	-0.06	-0.18	0.76	22.12	1.26	30	0.21	0.02	0.00	3.20	5.17
71	XL Axiata Tbk	2019	0.01	0.04	0.95	22.23	1.41	31	0.23	0.01	0.01	3.03	5.02
71	XL Axiata Tbk	2020	0.01	0.02	0.91	22.29	1.76	32	0.28	0.00	0.01	1.92	-2.07
71	XL Axiata Tbk	2021	0.02	0.06	0.95	22.35	1.77	33	0.28	-0.01	0.00	1.56	3.70
71	XL Axiata Tbk	2022	0.01	0.05	0.84	22.44	1.71	34	0.29	-0.01	0.00	4.21	5.31
72	Indosat Tbk	2010	0.01	0.04	1.01	22.50	1.36	44	0.27	0.03	0.01	5.13	6.22
72	Indosat Tbk	2011	0.02	0.05	1.04	22.49	1.31	45	0.26	0.02	0.01	5.36	6.17
72	Indosat Tbk	2012	0.01	0.02	1.10	22.47	1.35	46	0.24	0.02	0.00	4.28	6.03
72	Indosat Tbk	2013	-0.06	-0.20	0.98	22.22	1.75	47	0.24	0.02	0.00	6.41	5.56
72	Indosat Tbk	2014	-0.04	-0.15	0.95	22.19	2.00	48	0.30	0.01	0.01	6.39	5.01
72	Indosat Tbk	2015	-0.02	-0.11	1.02	22.12	2.21	49	0.26	0.01	0.01	6.36	4.88

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
72	Indosat Tbk	2016	0.02	0.08	1.17	22.05	1.77	50	0.25	0.01	0.01	3.53	5.03
72	Indosat Tbk	2017	0.02	0.08	0.97	22.04	1.62	51	0.21	0.02	0.01	3.81	5.07
72	Indosat Tbk	2018	-0.05	-0.22	0.64	22.04	2.23	52	0.21	0.02	0.00	3.20	5.17
72	Indosat Tbk	2019	0.02	0.12	0.72	22.23	2.37	53	0.23	0.01	0.01	3.03	5.02
72	Indosat Tbk	2020	0.01	0.06	0.86	22.22	2.34	54	0.28	0.00	0.01	1.92	-2.07
72	Indosat Tbk	2021	0.11	0.74	1.06	22.21	3.69	55	0.28	-0.01	0.00	1.56	3.70
72	Indosat Tbk	2022	0.04	0.17	3.60	22.71	1.98	56	0.29	-0.01	0.00	4.21	5.31
73	Cikarang Listrindo Tbk	2020	0.06	0.11	0.42	7.20	0.81	31	0.28	0.00	0.01	1.92	-2.07
73	Cikarang Listrindo Tbk	2021	0.07	0.13	0.90	21.03	0.78	32	0.28	-0.01	0.00	1.56	3.70
73	Cikarang Listrindo Tbk	2022	0.05	0.10	0.92	21.03	0.78	33	0.29	-0.01	0.00	4.21	5.31
74	Telkom Indonesia Tbk	2009	0.11	0.27	2.15	23.06	0.58	49	0.31	0.03	0.01	4.39	4.63
74	Telkom Indonesia Tbk	2010	0.11	0.26	1.77	23.14	0.50	50	0.27	0.03	0.01	5.13	6.22
74	Telkom Indonesia Tbk	2011	0.11	0.24	0.33	23.15	0.38	51	0.26	0.02	0.01	5.36	6.17
74	Telkom Indonesia Tbk	2012	0.12	0.26	1.75	23.17	0.37	52	0.24	0.02	0.00	4.28	6.03
74	Telkom Indonesia Tbk	2013	0.13	0.27	1.99	23.07	0.33	53	0.24	0.02	0.00	6.41	5.56
74	Telkom Indonesia Tbk	2014	0.11	0.22	2.25	23.16	0.35	54	0.30	0.01	0.01	6.39	5.01
74	Telkom Indonesia Tbk	2015	0.10	0.21	1.99	23.22	0.46	55	0.26	0.01	0.01	6.36	4.88
74	Telkom Indonesia Tbk	2016	0.11	0.23	2.42	23.31	0.38	56	0.25	0.01	0.01	3.53	5.03
74	Telkom Indonesia Tbk	2017	0.11	0.24	2.42	23.41	0.38	57	0.21	0.02	0.01	3.81	5.07
74	Telkom Indonesia Tbk	2018	0.09	0.18	1.97	23.39	0.45	58	0.21	0.02	0.00	3.20	5.17
74	Telkom Indonesia Tbk	2019	0.08	0.18	1.97	23.49	0.52	59	0.23	0.01	0.01	3.03	5.02
74	Telkom Indonesia Tbk	2020	0.08	0.20	1.54	23.59	0.64	60	0.28	0.00	0.01	1.92	-2.07
74	Telkom Indonesia Tbk	2021	0.09	0.20	1.68	23.69	0.57	61	0.28	-0.01	0.00	1.56	3.70
74	Telkom Indonesia Tbk	2022	0.08	0.17	1.65	23.59	0.49	62	0.29	-0.01	0.00	4.21	5.31
75	Petronas Gas Bhd	2010	0.09	0.11	2.30	21.83	0.05	45	0.23	0.03	0.00	1.62	7.42
75	Petronas Gas Bhd	2011	0.14	0.17	2.72	21.94	0.05	46	0.23	0.03	0.00	3.17	5.29

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
75	Petronas Gas Bhd	2012	0.11	0.15	3.08	22.13	0.15	47	0.24	0.03	0.00	1.66	5.47
75	Petronas Gas Bhd	2013	0.16	0.21	3.54	22.12	0.08	48	0.25	0.02	0.00	2.11	4.69
75	Petronas Gas Bhd	2014	0.15	0.19	3.23	22.06	0.08	49	0.26	0.01	0.00	3.14	6.01
75	Petronas Gas Bhd	2015	0.15	0.19	3.06	21.93	0.09	50	0.27	0.00	0.00	2.10	5.09
75	Petronas Gas Bhd	2016	0.11	0.16	2.57	22.03	0.19	51	0.26	-0.01	0.00	2.09	4.45
75	Petronas Gas Bhd	2017	0.10	0.14	2.07	22.19	0.25	52	0.25	-0.02	0.00	3.87	5.81
75	Petronas Gas Bhd	2018	0.10	0.14	2.17	22.21	0.26	53	0.26	-0.01	0.01	0.88	4.84
75	Petronas Gas Bhd	2019	0.10	0.14	1.81	22.29	0.29	54	0.26	0.00	0.01	0.66	4.41
75	Petronas Gas Bhd	2020	0.10	0.15	2.02	22.24	0.26	55	0.24	0.01	0.01	-1.14	-5.46
75	Petronas Gas Bhd	2021	0.10	0.15	2.03	22.25	0.26	56	0.25	0.01	0.01	2.48	3.30
75	Petronas Gas Bhd	2022	0.08	0.13	1.92	22.22	0.29	57	0.22	0.00	0.00	3.38	8.65
76	Salcon Bhd	2020	-0.01	-0.01	0.13	5.00	0.08	47	0.24	0.01	0.01	-1.14	-5.46
76	Salcon Bhd	2021	0.02	0.03	0.44	18.88	0.09	48	0.25	0.01	0.01	2.48	3.30
76	Salcon Bhd	2022	-0.04	-0.06	0.44	18.72	0.06	49	0.22	0.00	0.00	3.38	8.65
77	Tenaga Nasional Bhd	2010	0.04	0.10	0.73	23.91	0.71	21	0.23	0.03	0.00	1.62	7.42
77	Tenaga Nasional Bhd	2011	0.01	0.03	0.61	24.00	0.64	22	0.23	0.03	0.00	3.17	5.29
77	Tenaga Nasional Bhd	2012	0.05	0.13	0.68	24.07	0.70	23	0.24	0.03	0.00	1.66	5.47
77	Tenaga Nasional Bhd	2013	0.05	0.14	0.90	24.13	0.84	24	0.25	0.02	0.00	2.11	4.69
77	Tenaga Nasional Bhd	2014	0.06	0.15	0.88	24.28	0.75	25	0.26	0.01	0.00	3.14	6.01
77	Tenaga Nasional Bhd	2015	0.06	0.15	0.85	24.05	0.67	26	0.27	0.00	0.00	2.10	5.09
77	Tenaga Nasional Bhd	2016	0.05	0.14	0.80	24.21	0.77	27	0.26	-0.01	0.00	2.09	4.45
77	Tenaga Nasional Bhd	2017	0.02	0.05	0.88	24.30	0.82	28	0.25	-0.02	0.00	3.87	5.81
77	Tenaga Nasional Bhd	2018	0.02	0.07	0.81	24.34	0.91	29	0.26	-0.01	0.01	0.88	4.84
77	Tenaga Nasional Bhd	2019	0.03	0.08	0.82	24.50	1.32	30	0.26	0.00	0.01	0.66	4.41
77	Tenaga Nasional Bhd	2020	0.02	0.06	0.75	24.53	1.40	31	0.24	0.01	0.01	-1.14	-5.46
77	Tenaga Nasional Bhd	2021	0.02	0.07	0.74	24.50	1.43	32	0.25	0.01	0.01	2.48	3.30

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
77	Tenaga Nasional Bhd	2022	0.02	0.06	541.54	10.75	1.66	33	0.22	0.00	0.00	3.38	8.65
78	Taliworks Corporation Bhd	2020	0.03	0.06	0.23	6.25	0.42	34	0.24	0.01	0.01	-1.14	-5.46
78	Taliworks Corporation Bhd	2021	0.04	0.09	1.09	19.96	0.41	35	0.25	0.01	0.01	2.48	3.30
78	Taliworks Corporation Bhd	2022	0.03	0.07	1.14	19.86	0.46	36	0.22	0.00	0.00	3.38	8.65
79	Pakuwon Jati Tbk	2016	0.08	0.19	1.60	21.15	0.60	34	0.15	0.01	0.00	3.53	5.03
79	Pakuwon Jati Tbk	2017	0.08	0.18	1.66	21.27	0.53	35	0.15	0.01	0.00	3.81	5.07
79	Pakuwon Jati Tbk	2018	0.10	0.20	1.39	21.28	0.44	36	0.15	0.00	0.01	3.20	5.17
79	Pakuwon Jati Tbk	2019	0.10	0.18	1.21	21.35	0.32	37	0.15	0.00	0.00	3.03	5.02
79	Pakuwon Jati Tbk	2020	0.03	0.06	1.04	21.35	0.27	38	0.17	-0.01	0.01	1.92	-2.07
79	Pakuwon Jati Tbk	2021	0.05	0.09	0.97	21.43	0.36	39	0.18	0.00	0.01	1.56	3.70
79	Pakuwon Jati Tbk	2022	0.05	0.09	0.96	21.40	0.36	40	0.15	0.01	0.01	4.21	5.31
80	Bumi Serpong Damai Tbk	2014	0.14	0.26	1238.74	21.55	0.28	7	0.14	0.02	0.00	6.39	5.01
80	Bumi Serpong Damai Tbk	2015	0.06	0.12	932.17	21.70	0.42	8	0.14	0.01	0.00	6.36	4.88
80	Bumi Serpong Damai Tbk	2016	0.05	0.09	894.76	21.77	0.37	9	0.20	0.03	0.01	3.53	5.03
80	Bumi Serpong Damai Tbk	2017	0.11	0.20	721.23	21.95	0.36	10	0.13	0.02	0.02	3.81	5.07
80	Bumi Serpong Damai Tbk	2018	0.02	0.05	453.27	22.02	0.53	11	0.13	0.01	0.02	3.20	5.17
80	Bumi Serpong Damai Tbk	2019	0.05	0.05	426.40	22.09	0.25	12	0.13	0.00	0.01	3.03	5.02
80	Bumi Serpong Damai Tbk	2020	0.00	0.00	405.23	22.19	0.28	13	0.13	-0.01	0.01	1.92	-2.07
80	Bumi Serpong Damai Tbk	2021	0.02	0.02	341.21	22.18	0.20	14	0.13	0.01	0.00	1.56	3.70
80	Bumi Serpong Damai Tbk	2022	0.04	0.08	312.27	22.15	0.36	15	0.13	0.01	0.00	4.21	5.31
81	Summarrecon Agung Tbk	2014	0.09	0.26	1.79	20.94	0.80	40	0.14	0.02	0.00	6.39	5.01
81	Summarrecon Agung Tbk	2015	0.05	0.15	1.57	21.04	1.03	41	0.14	0.01	0.00	6.36	4.88
81	Summarrecon Agung Tbk	2016	0.02	0.05	1.29	21.16	1.19	42	0.20	0.03	0.01	3.53	5.03
81	Summarrecon Agung Tbk	2017	0.02	0.06	1.01	21.20	1.23	43	0.13	0.02	0.02	3.81	5.07
81	Summarrecon Agung Tbk	2018	0.02	0.06	0.86	21.21	1.25	44	0.13	0.01	0.02	3.20	5.17
81	Summarrecon Agung Tbk	2019	0.02	0.07	0.95	21.29	1.22	45	0.13	0.00	0.01	3.03	5.02

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
81	Summarrecon Agung Tbk	2020	0.01	0.03	0.83	21.29	1.38	46	0.13	-0.01	0.01	1.92	-2.07
81	Summarrecon Agung Tbk	2021	0.01	0.04	0.80	21.32	0.81	47	0.13	0.01	0.00	1.56	3.70
81	Summarrecon Agung Tbk	2022	0.02	0.07	0.58	21.32	0.64	48	0.13	0.01	0.00	4.21	5.31
82	Eco World	2020	0.02	0.03	0.32	6.89	0.45	47	0.10	0.00	0.00	-1.14	-5.46
82	Eco World	2021	0.00	0.00	0.52	20.62	0.32	48	0.09	-0.01	0.00	2.48	3.30
82	Eco World	2022	-0.09	-0.10	0.51	20.25	0.20	49	0.10	0.00	0.01	3.38	8.65
83	Eco Development Group Bhd	2020	0.01	0.03	0.35	7.82	0.72	47	0.10	0.00	0.00	-1.14	-5.46
83	Eco Development Group Bhd	2021	0.02	0.04	0.55	21.58	0.61	48	0.09	-0.01	0.00	2.48	3.30
83	Eco Development Group Bhd	2022	0.02	0.04	0.52	21.41	0.59	49	0.10	0.00	0.01	3.38	8.65
84	Eastern & Oriental Bhd	2020	-0.06	-0.11	0.35	6.67	0.63	136	0.10	0.00	0.00	-1.14	-5.46
84	Eastern & Oriental Bhd	2021	-0.02	-0.04	0.61	20.59	0.80	137	0.09	-0.01	0.00	2.48	3.30
84	Eastern & Oriental Bhd	2022	0.02	0.04	0.54	20.50	0.70	138	0.10	0.00	0.01	3.38	8.65
85	Engtex Group Bhd	2020	0.01	0.02	0.51	5.81	0.75	38	0.10	0.00	0.00	-1.14	-5.46
85	Engtex Group Bhd	2021	0.06	0.10	0.52	19.65	0.65	39	0.09	-0.01	0.00	2.48	3.30
85	Engtex Group Bhd	2022	0.02	0.04	0.57	19.67	0.74	40	0.10	0.00	0.01	3.38	8.65
86	HCK Capital Group Bhd	2020	0.00	0.02	0.44	5.25	1.44	22	0.10	0.00	0.00	-1.14	-5.46
86	HCK Capital Group Bhd	2021	0.00	0.01	1.62	19.09	1.45	23	0.09	-0.01	0.00	2.48	3.30
86	HCK Capital Group Bhd	2022	0.01	0.04	1.54	19.08	1.37	24	0.10	0.00	0.01	3.38	8.65
87	I-Bhd	2020	0.00	0.00	0.14	6.17	0.24	54	0.10	0.00	0.00	-1.14	-5.46
87	I-Bhd	2021	0.00	0.00	0.33	19.94	0.28	55	0.09	-0.01	0.00	2.48	3.30
87	I-Bhd	2022	0.01	0.02	0.37	19.89	0.27	56	0.10	0.00	0.01	3.38	8.65
88	Iskandar Waterfront City Bhd	2020	0.00	0.00	0.13	5.97	0.24	53	0.10	0.00	0.00	-1.14	-5.46
88	Iskandar Waterfront City Bhd	2021	-0.02	-0.04	0.30	19.74	0.22	54	0.09	-0.01	0.00	2.48	3.30
88	Iskandar Waterfront City Bhd	2022	-0.02	-0.04	0.26	19.62	0.18	55	0.10	0.00	0.01	3.38	8.65
89	KSL Holdings Bhd	2020	-0.02	-0.02	0.05	6.71	0.03	21	0.10	0.00	0.00	-1.14	-5.46
89	KSL Holdings Bhd	2021	0.03	0.04	0.23	20.52	0.03	22	0.09	-0.01	0.00	2.48	3.30

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
89	KSL Holdings Bhd	2022	0.05	0.05	0.24	20.52	0.02	23	0.10	0.00	0.01	3.38	8.65
90	LBS Bina Group Bhd	2020	0.01	0.03	0.30	6.93	0.78	61	0.10	0.00	0.00	-1.14	-5.46
90	LBS Bina Group Bhd	2021	0.02	0.06	0.43	20.78	0.71	62	0.09	-0.01	0.00	2.48	3.30
90	LBS Bina Group Bhd	2022	0.03	0.08	0.38	20.67	0.57	63	0.10	0.00	0.01	3.38	8.65
91	Mah Sing Group Bhd	2020	0.01	0.02	0.22	7.44	0.29	56	0.10	0.00	0.00	-1.14	-5.46
91	Mah Sing Group Bhd	2021	0.02	0.04	0.46	21.25	0.38	57	0.09	-0.01	0.00	2.48	3.30
91	Mah Sing Group Bhd	2022	0.03	0.05	0.44	21.10	0.40	58	0.10	0.00	0.01	3.38	8.65
92	Naim Holdings Bhd	2020	0.02	0.04	0.37	6.24	0.23	26	0.10	0.00	0.00	-1.14	-5.46
92	Naim Holdings Bhd	2021	-0.04	-0.06	0.31	19.90	0.22	27	0.09	-0.01	0.00	0.66	3.30
92	Naim Holdings Bhd	2022	0.01	0.02	0.27	19.83	0.18	28	0.10	0.00	0.01	-1.14	8.65
93	NCT Alliance Bhd	2020	0.03	0.05	0.05	3.77	0.02	18	0.10	0.00	0.00	-1.14	-5.46
93	NCT Alliance Bhd	2021	0.04	0.08	0.89	19.07	0.59	19	0.09	-0.01	0.00	2.48	3.30
93	NCT Alliance Bhd	2022	0.05	0.09	0.69	19.06	0.42	20	0.10	0.00	0.01	3.38	8.65
94	Poh Kong Holdings Bhd	2020	0.03	0.04	0.42	5.23	0.31	45	0.10	0.00	0.00	-1.14	-5.46
94	Poh Kong Holdings Bhd	2021	0.05	0.06	0.61	19.07	0.26	46	0.09	-0.01	0.00	2.48	3.30
94	Poh Kong Holdings Bhd	2022	0.11	0.14	0.54	19.11	0.20	47	0.10	0.00	0.01	3.38	8.65
95	Scientex Packaging (Ayer keroh) Bhd	2020	0.10	0.19	1.01	4.74	0.33	53	0.10	0.00	0.00	-1.14	-5.46
95	Scientex Packaging (Ayer keroh) Bhd	2021	0.09	0.17	1.68	18.64	0.30	54	0.09	-0.01	0.00	2.48	3.30
95	Scientex Packaging (Ayer keroh) Bhd	2022	0.07	0.12	1.45	18.78	0.21	55	0.10	0.00	0.01	3.38	8.65
96	S P Setia Bhd	2010	0.05	0.10	1.77	21.07	0.75	37	0.10	0.01	0.01	1.62	7.42
96	S P Setia Bhd	2011	0.04	0.06	1.46	21.32	0.39	38	0.10	0.02	0.01	3.17	5.29
96	S P Setia Bhd	2012	0.04	0.10	1.08	21.85	0.96	39	0.10	0.03	0.01	1.66	5.47
96	S P Setia Bhd	2013	0.04	0.08	0.94	22.06	0.74	40	0.10	0.05	0.01	2.11	4.69
96	S P Setia Bhd	2014	0.03	0.06	0.88	22.17	0.65	41	0.10	0.05	0.00	3.14	6.01
96	S P Setia Bhd	2015	0.07	0.13	0.83	22.07	0.66	42	0.14	0.04	0.00	2.10	5.09

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
96	S P Setia Bhd	2016	0.04	0.11	0.61	22.40	0.60	43	0.11	0.02	0.01	2.09	4.45
96	S P Setia Bhd	2017	0.03	0.07	0.75	22.65	0.52	44	0.09	0.01	0.00	3.87	5.81
96	S P Setia Bhd	2018	0.02	0.05	0.67	22.68	0.75	45	0.08	0.00	0.00	0.88	4.84
96	S P Setia Bhd	2019	0.01	0.02	0.59	22.72	0.78	46	0.09	0.00	0.00	0.66	4.41
96	S P Setia Bhd	2020	-0.01	-0.02	0.53	22.74	0.86	47	0.10	0.00	0.00	-1.14	-5.46
96	S P Setia Bhd	2021	0.01	0.02	0.57	22.74	0.89	48	0.09	-0.01	0.00	2.48	3.30
96	S P Setia Bhd	2022	0.01	0.02	0.47	22.64	0.81	49	0.10	0.00	0.01	3.38	8.65
97	Supermax Corporation Bhd	2020	0.17	0.35	4.96	20.44	0.22	47	0.10	0.00	0.00	-1.14	-5.46
97	Supermax Corporation Bhd	2021	0.52	0.81	0.57	21.30	0.06	48	0.09	-0.01	0.00	2.48	3.30
97	Supermax Corporation Bhd	2022	0.13	0.15	0.43	21.02	0.05	49	0.10	0.00	0.01	3.38	8.65
98	Suria Capital Holdings Bhd	2020	0.02	0.03	0.06	5.84	0.02	38	0.10	0.00	0.00	-1.14	-5.46
98	Suria Capital Holdings Bhd	2021	0.03	0.03	0.30	19.63	0.01	39	0.09	-0.01	0.00	2.48	3.30
98	Suria Capital Holdings Bhd	2022	0.04	0.05	0.31	19.63	0.06	40	0.10	0.00	0.01	3.38	8.65
99	Symphony Life Bhd	2020	0.04	0.07	0.30	5.82	0.46	57	0.10	0.00	0.00	-1.14	-5.46
99	Symphony Life Bhd	2021	0.04	0.07	0.48	19.71	0.45	58	0.09	-0.01	0.00	2.48	3.30
99	Symphony Life Bhd	2022	0.03	0.04	0.39	19.59	0.24	59	0.10	0.00	0.01	3.38	8.65
100	Tropicana Corporation Bhd	2020	0.01	0.02	0.34	7.98	0.76	42	0.10	0.00	0.00	-1.14	-5.46
100	Tropicana Corporation Bhd	2021	0.00	-0.01	0.46	21.81	0.79	43	0.09	-0.01	0.00	2.48	3.30
100	Tropicana Corporation Bhd	2022	-0.04	-0.09	0.52	21.75	0.78	44	0.10	0.00	0.01	3.38	8.65
101	UEM Sunrise Bhd	2010	0.05	0.07	2.34	20.98	0.15	45	0.10	0.01	0.01	1.62	7.42
101	UEM Sunrise Bhd	2011	0.04	0.06	1.49	21.62	0.24	46	0.10	0.02	0.01	3.17	5.29
101	UEM Sunrise Bhd	2012	0.05	0.08	1.24	21.81	0.32	47	0.10	0.03	0.01	1.66	5.47
101	UEM Sunrise Bhd	2013	0.06	0.10	1.29	21.82	0.32	48	0.10	0.05	0.01	2.11	4.69
101	UEM Sunrise Bhd	2014	0.05	0.08	0.78	21.88	0.37	49	0.10	0.05	0.00	3.14	6.01
101	UEM Sunrise Bhd	2015	0.02	0.04	0.66	21.74	0.40	50	0.14	0.04	0.00	2.10	5.09
101	UEM Sunrise Bhd	2016	0.01	0.02	0.65	21.78	0.54	51	0.11	0.02	0.01	2.09	4.45

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
101	UEM Sunrise Bhd	2017	0.02	0.04	0.66	21.94	0.61	52	0.09	0.01	0.00	3.87	5.81
101	UEM Sunrise Bhd	2018	0.02	0.04	0.54	21.95	0.66	53	0.08	0.00	0.00	0.88	4.84
101	UEM Sunrise Bhd	2019	0.02	0.03	0.49	21.91	0.47	54	0.09	0.00	0.00	0.66	4.41
101	UEM Sunrise Bhd	2020	-0.02	-0.04	0.49	21.93	0.60	55	0.10	0.00	0.00	-1.14	-5.46
101	UEM Sunrise Bhd	2021	-0.02	-0.03	0.46	21.86	0.63	56	0.09	-0.01	0.00	2.48	3.30
101	UEM Sunrise Bhd	2022	0.01	0.01	0.44	21.81	0.64	57	0.10	0.00	0.01	3.38	8.65
102	Lippo Karawaci Tbk	2013	0.05	0.11	1.00	21.67	0.61	24	0.14	0.01	0.01	2.11	4.69
102	Lippo Karawaci Tbk	2014	0.07	0.17	0.91	21.84	0.64	25	0.16	0.02	0.01	3.14	6.01
102	Lippo Karawaci Tbk	2015	0.01	0.03	0.85	21.83	0.75	26	0.15	0.02	0.01	2.10	5.09
102	Lippo Karawaci Tbk	2016	0.02	0.05	0.67	21.94	0.74	27	0.11	0.00	0.00	2.09	4.45
102	Lippo Karawaci Tbk	2017	0.01	0.03	0.49	22.06	0.77	28	0.11	0.00	0.00	3.87	5.81
102	Lippo Karawaci Tbk	2018	0.01	0.04	0.42	21.96	0.84	29	0.11	0.00	0.01	0.88	4.84
102	Lippo Karawaci Tbk	2019	-0.04	-0.07	0.35	22.10	0.43	30	0.11	0.01	0.00	0.66	4.41
102	Lippo Karawaci Tbk	2020	-0.17	-0.44	0.46	22.03	0.92	31	0.14	0.00	0.00	-1.14	-5.46
102	Lippo Karawaci Tbk	2021	-0.03	-0.09	0.46	22.02	1.06	32	0.12	-0.01	0.00	2.48	3.30
102	Lippo Karawaci Tbk	2022	-0.06	-0.18	0.47	21.88	1.38	33	0.12	-0.01	0.00	3.38	8.65
103	Ekovest Bhd	2020	0.00	0.02	0.64	7.80	2.63	36	0.14	0.00	0.00	-1.14	-5.46
103	Ekovest Bhd	2021	0.00	0.02	0.71	21.72	2.69	37	0.12	-0.01	0.00	2.48	3.30
103	Ekovest Bhd	2022	-0.01	-0.05	0.69	21.66	2.85	38	0.12	-0.01	0.00	3.38	8.65
104	Gadang Holdings Bhd	2020	0.02	0.05	0.21	6.01	0.35	28	0.14	0.00	0.00	-1.14	-5.46
104	Gadang Holdings Bhd	2021	0.01	0.02	0.39	19.85	0.52	29	0.12	-0.01	0.00	2.48	3.30
104	Gadang Holdings Bhd	2022	0.03	0.05	0.34	19.69	0.36	30	0.12	-0.01	0.00	3.38	8.65
105	Gamuda Bhd	2010	0.05	0.09	1.31	21.47	0.52	35	0.15	0.03	0.02	1.62	7.42
105	Gamuda Bhd	2011	0.09	0.11	1.68	21.16	0.53	36	0.16	0.00	0.02	3.17	5.29
105	Gamuda Bhd	2012	0.06	0.14	1.06	21.72	0.54	37	0.15	0.00	0.01	1.66	5.47
105	Gamuda Bhd	2013	0.07	0.12	1.36	21.68	0.40	38	0.14	0.01	0.01	2.11	4.69

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
105	Gamuda Bhd	2014	0.07	0.13	1.16	21.90	0.46	39	0.16	0.02	0.01	3.14	6.01
105	Gamuda Bhd	2015	0.06	0.12	0.97	21.97	0.65	40	0.15	0.02	0.01	2.10	5.09
105	Gamuda Bhd	2016	0.04	0.09	1.01	21.97	0.70	41	0.11	0.00	0.00	2.09	4.45
105	Gamuda Bhd	2017	0.04	0.08	1.07	22.03	0.70	42	0.11	0.00	0.00	3.87	5.81
105	Gamuda Bhd	2018	0.03	0.07	0.65	22.13	0.76	43	0.11	0.00	0.01	0.88	4.84
105	Gamuda Bhd	2019	0.04	0.09	0.81	22.15	0.64	44	0.11	0.01	0.00	0.66	4.41
105	Gamuda Bhd	2020	0.02	0.04	0.80	22.20	0.64	45	0.14	0.00	0.00	-1.14	-5.46
105	Gamuda Bhd	2021	0.03	0.07	0.65	22.20	0.57	46	0.12	-0.01	0.00	2.48	3.30
105	Gamuda Bhd	2022	0.04	0.09	0.71	22.24	0.48	47	0.12	-0.01	0.00	3.38	8.65
106	Gabungan AQRS Bhd	2020	-0.04	-0.12	0.22	5.80	0.61	11	0.14	0.00	0.00	-1.14	-5.46
106	Gabungan AQRS Bhd	2021	0.01	0.03	0.39	19.59	0.58	12	0.12	-0.01	0.00	2.48	3.30
106	Gabungan AQRS Bhd	2022	0.01	0.04	0.33	19.55	0.61	13	0.12	-0.01	0.00	3.38	8.65
107	IJM Corporation Bhd	2010	0.03	0.07	0.55	22.07	0.75	11	0.15	0.03	0.02	1.62	7.42
107	IJM Corporation Bhd	2011	0.05	0.12	0.54	22.15	0.76	12	0.16	0.00	0.02	3.17	5.29
107	IJM Corporation Bhd	2012	0.03	0.08	0.76	22.24	0.85	13	0.15	0.00	0.01	1.66	5.47
107	IJM Corporation Bhd	2013	0.03	0.08	0.78	22.31	0.90	14	0.14	0.01	0.01	2.11	4.69
107	IJM Corporation Bhd	2014	0.05	0.13	0.73	22.45	0.83	15	0.16	0.02	0.01	3.14	6.01
107	IJM Corporation Bhd	2015	0.03	0.06	0.71	22.40	0.72	16	0.15	0.02	0.01	2.10	5.09
107	IJM Corporation Bhd	2016	0.04	0.09	0.75	22.35	0.71	17	0.11	0.00	0.00	2.09	4.45
107	IJM Corporation Bhd	2017	0.03	0.06	0.81	22.27	0.55	18	0.11	0.00	0.00	3.87	5.81
107	IJM Corporation Bhd	2018	0.02	0.03	0.51	22.43	0.63	19	0.11	0.00	0.01	0.88	4.84
107	IJM Corporation Bhd	2019	0.02	0.04	0.60	22.45	0.65	20	0.11	0.01	0.00	0.66	4.41
107	IJM Corporation Bhd	2020	0.01	0.03	0.56	22.42	0.67	21	0.14	0.00	0.00	-1.14	-5.46
107	IJM Corporation Bhd	2021	0.02	0.04	0.52	22.46	0.63	22	0.12	-0.01	0.00	2.48	3.30
107	IJM Corporation Bhd	2022	0.04	0.08	0.52	22.33	0.52	23	0.12	-0.01	0.00	3.38	8.65
108	Jaks Resources Bhd	2020	-0.04	-0.07	0.20	6.27	0.34	29	0.14	0.00	0.00	-1.14	-5.46

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
108	Jaks Resources Bhd	2021	0.02	0.04	0.54	20.08	0.28	30	0.12	-0.01	0.00	2.48	3.30
108	Jaks Resources Bhd	2022	0.02	0.04	0.42	20.11	0.36	31	0.12	-0.01	0.00	3.38	8.65
109	Kerjaya Prospek Group Bhd	2020	0.06	0.08	0.19	5.91	0.07	31	0.14	0.00	0.00	-1.14	-5.46
109	Kerjaya Prospek Group Bhd	2021	0.07	0.10	1.09	19.62	0.00	32	0.12	-0.01	0.00	2.48	3.30
109	Kerjaya Prospek Group Bhd	2022	0.08	0.10	1.04	19.59	0.00	33	0.12	-0.01	0.00	3.38	8.65
110	MGB Bhd	2020	0.01	0.03	0.27	5.48	0.37	14	0.14	0.00	0.00	-1.14	-5.46
110	MGB Bhd	2021	0.03	0.05	0.55	19.23	0.17	15	0.12	-0.01	0.00	2.48	3.30
110	MGB Bhd	2022	0.02	0.03	0.46	19.15	0.22	16	0.12	-0.01	0.00	3.38	8.65
111	Mitrajaya Holdings Bhd	2020	0.01	0.01	0.12	5.63	0.16	36	0.14	0.00	0.00	-1.14	-5.46
111	Mitrajaya Holdings Bhd	2021	-0.01	-0.02	0.27	19.34	0.12	37	0.12	-0.01	0.00	2.48	3.30
111	Mitrajaya Holdings Bhd	2022	0.01	0.01	0.26	19.27	0.14	38	0.12	-0.01	0.00	3.38	8.65
112	Muhibbah Engineering (M) Bhd	2020	-0.03	-0.11	0.40	6.82	1.10	49	0.14	0.00	0.00	-1.14	-5.46
112	Muhibbah Engineering (M) Bhd	2021	0.00	0.00	0.42	20.51	0.92	50	0.12	-0.01	0.00	2.48	3.30
112	Muhibbah Engineering (M) Bhd	2022	-0.01	-0.01	0.36	20.45	0.67	51	0.12	-0.01	0.00	3.38	8.65
113	Pesona Metro Holdings Bhd	2020	-0.02	-0.10	0.36	5.17	1.33	25	0.14	0.00	0.00	-1.14	-5.46
113	Pesona Metro Holdings Bhd	2021	-0.01	-0.04	0.54	18.89	1.25	26	0.12	-0.01	0.00	2.48	3.30
113	Pesona Metro Holdings Bhd	2022	-0.01	-0.04	0.57	18.68	1.12	27	0.12	-0.01	0.00	3.38	8.65
114	Sunway Bhd	2020	0.02	0.04	0.44	8.57	0.83	47	0.14	0.00	0.00	-1.14	-5.46
114	Sunway Bhd	2021	0.11	0.22	0.69	22.52	0.73	48	0.12	-0.01	0.00	2.48	3.30
114	Sunway Bhd	2022	0.03	0.05	0.66	22.50	0.73	49	0.12	-0.01	0.00	3.38	8.65
115	Tafi Industries Bhd	2020	-0.21	-0.29	0.05	2.38	0.04	29	0.14	0.00	0.00	-1.14	-5.46
115	Tafi Industries Bhd	2021	0.07	0.09	2.75	16.72	0.07	30	0.12	-0.01	0.00	2.48	3.30
115	Tafi Industries Bhd	2022	0.09	0.13	2.50	17.03	0.10	31	0.12	-0.01	0.00	3.38	8.65
116	TRC Synergy Bhd	2020	0.02	0.06	0.26	5.68	0.56	37	0.14	0.00	0.00	-1.14	-5.46
116	TRC Synergy Bhd	2021	0.02	0.05	0.27	19.45	0.36	38	0.12	-0.01	0.00	2.48	3.30
116	TRC Synergy Bhd	2022	0.05	0.11	0.27	19.36	0.32	39	0.12	-0.01	0.00	3.38	8.65

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
117	WCT Holdings Bhd	2020	0.11	0.14	0.55	6.33	0.01	40	0.14	0.00	0.00	-1.14	-5.46
117	WCT Holdings Bhd	2021	0.02	0.04	0.47	21.40	0.82	41	0.12	-0.01	0.00	2.48	3.30
117	WCT Holdings Bhd	2022	0.02	0.04	0.44	21.36	0.77	42	0.12	-0.01	0.00	3.38	8.65
118	ATA IMS Bhd	2020	0.04	0.12	1.33	6.09	0.71	32	0.14	0.00	0.00	-1.14	-5.46
118	ATA IMS Bhd	2021	0.06	0.19	4.53	20.15	0.71	33	0.12	-0.01	0.00	2.48	3.30
118	ATA IMS Bhd	2022	-0.01	-0.02	1.26	19.67	0.35	34	0.12	-0.01	0.00	3.38	8.65
119	Fajarbaru Builder Group Bhd	2020	0.07	0.11	0.11	4.64	0.10	45	0.14	0.00	0.00	-1.14	-5.46
119	Fajarbaru Builder Group Bhd	2021	0.05	0.07	0.13	18.61	0.14	46	0.12	-0.01	0.00	2.48	3.30
119	Fajarbaru Builder Group Bhd	2022	0.02	0.02	0.16	18.66	0.19	47	0.12	-0.01	0.00	3.38	8.65
120	GDB Holdings Bhd	2020	0.09	0.18	0.18	4.19	0.00	8	0.14	0.00	0.00	-1.14	-5.46
120	GDB Holdings Bhd	2021	0.08	0.19	0.13	18.21	0.00	9	0.12	-0.01	0.00	2.48	3.30
120	GDB Holdings Bhd	2022	0.05	0.11	0.07	18.24	0.00	10	0.12	-0.01	0.00	3.38	8.65
121	WCE Holdings Bhd	2020	-0.01	-0.03	0.57	7.17	2.71	21	0.14	0.00	0.00	-1.14	-5.46
121	WCE Holdings Bhd	2021	-0.01	-0.08	0.58	21.11	3.25	22	0.12	-0.01	0.00	2.48	3.30
121	WCE Holdings Bhd	2022	-0.02	-0.12	0.60	21.15	3.78	23	0.12	-0.01	0.00	3.38	8.65
122	Quantum clovera investama Tbk	2020	-0.09	-0.29	0.50	19.28	0.18	22	0.14	0.04	0.01	1.92	-2.07
122	Quantum clovera investama Tbk	2021	-0.15	-0.79	0.60	19.21	0.27	23	0.14	0.03	0.01	1.56	3.70
122	Quantum clovera investama Tbk	2022	-0.04	-0.31	0.38	19.03	0.36	24	0.13	0.01	0.00	4.21	5.31
123	Media Nusantara Citra Tbk	2012	0.19	0.24	3.94	20.65	0.10	14	0.15	0.04	0.01	4.28	6.03
123	Media Nusantara Citra Tbk	2013	0.21	0.27	4.34	20.49	0.07	15	0.17	0.04	0.01	6.41	5.56
123	Media Nusantara Citra Tbk	2014	0.13	0.21	3.01	20.82	0.36	16	0.19	0.02	0.01	6.39	5.01
123	Media Nusantara Citra Tbk	2015	0.08	0.14	2.01	20.78	0.42	17	0.20	0.00	0.00	6.36	4.88
123	Media Nusantara Citra Tbk	2016	0.10	0.16	1.96	20.78	0.43	18	0.19	0.00	0.00	3.53	5.03
123	Media Nusantara Citra Tbk	2017	0.10	0.16	1.38	20.83	0.42	19	0.16	0.01	0.01	3.81	5.07
123	Media Nusantara Citra Tbk	2018	0.09	0.16	0.80	20.86	0.47	20	0.12	0.03	0.01	3.20	5.17
123	Media Nusantara Citra Tbk	2019	0.12	0.19	1.36	20.97	0.39	21	0.13	0.05	0.01	3.03	5.02

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
123	Media Nusantara Citra Tbk	2020	0.09	0.12	0.98	21.02	0.28	22	0.14	0.04	0.01	1.92	-2.07
123	Media Nusantara Citra Tbk	2021	0.12	0.14	0.70	21.10	0.16	23	0.14	0.03	0.01	1.56	3.70
123	Media Nusantara Citra Tbk	2022	0.10	0.11	0.52	21.08	0.07	24	0.13	0.01	0.00	4.21	5.31
124	Metrodata Electronics Tbk	2020	0.06	0.15	0.64	19.84	0.00	38	0.14	0.04	0.01	1.92	-2.07
124	Metrodata Electronics Tbk	2021	0.07	0.18	1.23	20.09	0.00	39	0.14	0.03	0.01	1.56	3.70
124	Metrodata Electronics Tbk	2022	0.07	0.19	0.87	20.12	0.00	40	0.13	0.01	0.00	4.21	5.31
125	Surya Citra Media Tbk	2013	0.38	0.56	10.89	19.61	0.18	15	0.17	0.04	0.01	6.41	5.56
125	Surya Citra Media Tbk	2014	0.32	0.44	11.45	19.77	0.13	16	0.19	0.02	0.01	6.39	5.01
125	Surya Citra Media Tbk	2015	0.34	0.50	9.75	19.62	0.11	17	0.20	0.00	0.00	6.36	4.88
125	Surya Citra Media Tbk	2016	0.32	0.44	8.71	19.69	0.06	18	0.19	0.00	0.00	3.53	5.03
125	Surya Citra Media Tbk	2017	0.25	0.35	6.83	19.80	0.02	19	0.16	0.01	0.01	3.81	5.07
125	Surya Citra Media Tbk	2018	0.23	0.31	4.36	19.88	0.00	20	0.12	0.03	0.01	3.20	5.17
125	Surya Citra Media Tbk	2019	0.15	0.20	3.02	20.00	0.00	21	0.13	0.05	0.01	3.03	5.02
125	Surya Citra Media Tbk	2020	0.16	0.34	4.31	19.99	0.40	22	0.14	0.04	0.01	1.92	-2.07
125	Surya Citra Media Tbk	2021	0.14	0.21	2.12	20.36	0.10	23	0.14	0.03	0.01	1.56	3.70
125	Surya Citra Media Tbk	2022	0.08	0.12	1.28	20.37	0.04	24	0.13	0.01	0.00	4.21	5.31
126	Able Global Bhd	2020	0.08	0.11	1.41	18.58	0.13	48	0.08	0.00	0.00	-1.14	-5.46
126	Able Global Bhd	2021	0.07	0.10	1.10	18.66	0.24	49	0.08	0.01	0.01	2.48	3.30
126	Able Global Bhd	2022	0.05	0.08	0.93	18.91	0.64	50	0.07	0.02	0.01	3.38	8.65
127	AwanBiru Technology Bhd	2020	-0.06	-0.18	0.34	4.26	0.61	18	0.08	0.00	0.00	-1.14	-5.46
127	AwanBiru Technology Bhd	2021	0.05	0.17	3.40	18.06	1.62	19	0.08	0.01	0.01	2.48	3.30
127	AwanBiru Technology Bhd	2022	0.05	0.11	1.79	18.40	0.57	20	0.07	0.02	0.01	3.38	8.65
128	Dataprep Holdings Bhd	2020	-0.22	-0.31	0.18	2.35	0.20	32	0.08	0.00	0.00	-1.14	-5.46
128	Dataprep Holdings Bhd	2021	-0.11	-0.13	22.77	16.99	0.07	33	0.08	0.01	0.01	2.48	3.30
128	Dataprep Holdings Bhd	2022	-0.20	-0.27	7.62	16.82	0.16	34	0.07	0.02	0.01	3.38	8.65
129	Dagang Nextchange Bhd	2020	0.05	0.06	0.14	5.04	0.15	51	0.08	0.00	0.00	-1.14	-5.46

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
129	Dagang Nextchange Bhd	2021	0.05	0.12	1.00	20.08	0.10	52	0.08	0.01	0.01	2.48	3.30
129	Dagang Nextchange Bhd	2022	0.12	0.31	0.42	20.77	0.18	53	0.07	0.02	0.01	3.38	8.65
130	D & O Green Technologies	2020	0.06	0.11	0.55	5.26	0.27	17	0.08	0.00	0.00	-1.14	-5.46
130	D & O Green Technologies	2021	0.09	0.15	5.80	19.55	0.24	18	0.08	0.01	0.01	2.48	3.30
130	D & O Green Technologies	2022	0.05	0.09	3.58	19.71	0.52	19	0.07	0.02	0.01	3.38	8.65
131	GHL Systems Bhd	2020	0.02	0.03	0.27	5.14	0.07	27	0.08	0.00	0.00	-1.14	-5.46
131	GHL Systems Bhd	2021	0.04	0.06	2.65	19.04	0.11	28	0.08	0.01	0.01	2.48	3.30
131	GHL Systems Bhd	2022	0.04	0.06	1.28	18.99	0.04	29	0.07	0.02	0.01	3.38	8.65
132	Greatech Technology Bhd	2020	0.18	0.29	0.67	4.73	0.07	23	0.08	0.00	0.00	-1.14	-5.46
132	Greatech Technology Bhd	2021	0.23	0.33	13.87	18.80	0.05	24	0.08	0.01	0.01	2.48	3.30
132	Greatech Technology Bhd	2022	0.14	0.22	6.42	19.19	0.03	25	0.07	0.02	0.01	3.38	8.65
133	Hong Seng Consolidated Bhd	2020	-0.12	-0.13	0.03	2.72	0.03	20	0.08	0.00	0.00	-1.14	-5.46
133	Hong Seng Consolidated Bhd	2021	0.14	0.17	20.55	18.20	0.06	21	0.08	0.01	0.01	2.48	3.30
133	Hong Seng Consolidated Bhd	2022	0.24	0.27	2.77	18.35	0.04	22	0.07	0.02	0.01	3.38	8.65
134	Inari Amertron Bhd	2020	0.11	0.13	0.51	5.83	0.01	15	0.08	0.00	0.00	-1.14	-5.46
134	Inari Amertron Bhd	2021	0.18	0.24	7.33	19.90	0.00	16	0.08	0.01	0.01	2.48	3.30
134	Inari Amertron Bhd	2022	0.14	0.16	3.35	20.30	0.01	17	0.07	0.02	0.01	3.38	8.65
135	JCY International	2020	0.02	0.03	0.18	5.63	0.07	27	0.08	0.00	0.00	-1.14	-5.46
135	JCY International	2021	-0.03	-0.04	0.67	19.44	0.12	28	0.08	0.01	0.01	2.48	3.30
135	JCY International	2022	-0.10	-0.12	0.42	19.14	0.09	29	0.07	0.02	0.01	3.38	8.65
136	JHM Consolidation Bhd	2020	0.06	0.09	0.51	4.42	0.27	16	0.08	0.00	0.00	-1.14	-5.46
136	JHM Consolidation Bhd	2021	0.08	0.14	2.55	18.41	0.32	17	0.08	0.01	0.01	2.48	3.30
136	JHM Consolidation Bhd	2022	0.04	0.07	1.09	18.53	0.29	18	0.07	0.02	0.01	3.38	8.65
137	My EG Services Bhd	2017	0.23	0.36	9.94	19.12	0.25	13	0.08	0.00	0.00	3.81	5.81
137	My EG Services Bhd	2018	0.15	0.23	4.09	19.18	0.22	14	0.07	0.00	0.00	3.20	4.84
137	My EG Services Bhd	2019	0.29	0.42	3.93	19.34	0.26	15	0.07	0.00	0.00	3.03	4.41

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
137	My EG Services Bhd	2020	0.18	0.22	4.76	19.68	0.15	16	0.08	0.00	0.00	1.92	-5.46
137	My EG Services Bhd	2021	0.17	0.21	4.15	19.93	0.11	17	0.08	0.01	0.01	1.56	3.30
137	My EG Services Bhd	2022	0.16	0.21	2.71	20.17	0.26	18	0.07	0.02	0.01	4.21	8.65
138	Notion Vtec Bhd	2020	0.01	0.01	0.87	18.73	0.15	16	0.08	0.00	0.00	-1.14	-5.46
138	Notion Vtec Bhd	2021	-0.01	-0.02	0.44	18.70	0.17	17	0.08	0.01	0.01	2.48	3.30
138	Notion Vtec Bhd	2022	0.02	0.02	0.49	18.59	0.13	18	0.07	0.02	0.01	3.38	8.65
139	Omesti Bhd	2020	0.06	0.13	0.26	4.57	0.40	21	0.08	0.00	0.00	-1.14	-5.46
139	Omesti Bhd	2021	0.00	-0.01	0.74	18.77	1.02	22	0.08	0.01	0.01	2.48	3.30
139	Omesti Bhd	2022	-0.03	-0.10	0.73	18.90	1.49	23	0.07	0.02	0.01	3.38	8.65
140	Pertama Digital Bhd	2020	0.01	0.02	0.04	3.70	0.06	37	0.08	0.00	0.00	-1.14	-5.46
140	Pertama Digital Bhd	2021	-0.07	-0.10	1.37	17.63	0.06	38	0.08	0.01	0.01	2.48	3.30
140	Pertama Digital Bhd	2022	-0.24	-2.52	4.85	17.40	0.54	39	0.07	0.02	0.01	3.38	8.65
141	Pentamaster Corporation Bhd	2020	0.08	0.13	0.61	5.33	0.01	30	0.08	0.00	0.00	-1.14	-5.46
141	Pentamaster Corporation Bhd	2021	0.07	0.13	4.02	19.28	0.00	31	0.08	0.01	0.01	2.48	3.30
141	Pentamaster Corporation Bhd	2022	0.07	0.13	2.72	19.39	0.00	32	0.07	0.02	0.01	3.38	8.65
142	Star Media Group Bhd	2020	-0.02	-0.02	0.04	5.44	0.02	50	0.08	0.00	0.00	-1.14	-5.46
142	Star Media Group Bhd	2021	-0.17	-0.21	0.32	19.03	0.03	51	0.08	0.01	0.01	2.48	3.30
142	Star Media Group Bhd	2022	0.01	0.01	0.30	18.99	0.02	52	0.07	0.02	0.01	3.38	8.65
143	TDM Bhd	2020	-0.01	-0.01	0.32	6.15	0.73	56	0.08	0.00	0.00	-1.14	-5.46
143	TDM Bhd	2021	-0.02	-0.04	0.54	19.85	0.76	57	0.08	0.01	0.01	2.48	3.30
143	TDM Bhd	2022	-0.02	-0.04	0.53	19.75	0.81	58	0.07	0.02	0.01	3.38	8.65
144	Unisem Bhd	2020	0.06	0.08	0.51	6.34	0.12	32	0.08	0.00	0.00	-1.14	-5.46
144	Unisem Bhd	2021	0.07	0.09	2.43	20.32	0.08	33	0.08	0.01	0.01	2.48	3.30
144	Unisem Bhd	2022	0.13	0.16	1.54	20.35	0.08	34	0.07	0.02	0.01	3.38	8.65
145	UWC Bhd	2020	0.21	0.26	0.98	4.19	0.03	31	0.08	0.00	0.00	-1.14	-5.46
145	UWC Bhd	2021	0.26	0.31	19.28	18.26	0.02	32	0.08	0.01	0.01	2.48	3.30

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
145	UWC Bhd	2022	0.24	0.28	9.80	18.45	0.02	33	0.07	0.02	0.01	3.38	8.65
146	Vitrox Corporation Bhd	2020	0.13	0.18	1.14	5.24	0.07	21	0.08	0.00	0.00	-1.14	-5.46
146	Vitrox Corporation Bhd	2021	0.18	0.24	19.91	19.24	0.05	22	0.08	0.01	0.01	2.48	3.30
146	Vitrox Corporation Bhd	2022	0.18	0.23	6.41	19.37	0.08	23	0.07	0.02	0.01	3.38	8.65
147	VSTEC Bhd	2020	0.06	0.11	0.87	4.94	0.02	36	0.08	0.00	0.00	-1.14	-5.46
147	VSTEC Bhd	2021	0.08	0.15	0.65	18.92	0.01	37	0.08	0.01	0.01	2.48	3.30
147	VSTEC Bhd	2022	0.08	0.15	0.61	18.90	0.04	38	0.07	0.02	0.01	3.38	8.65
148	Kalbe Farma Tbk	2010	0.18	0.24	4.32	20.48	0.00	45	0.73	0.02	0.00	5.13	6.22
148	Kalbe Farma Tbk	2011	0.19	0.25	3.92	20.63	0.02	46	0.71	0.02	0.00	5.36	6.17
148	Kalbe Farma Tbk	2012	0.19	0.25	5.35	20.70	0.03	47	0.76	0.03	0.00	4.28	6.03
148	Kalbe Farma Tbk	2013	0.20	0.28	5.87	20.65	0.07	48	0.79	0.02	0.00	6.41	5.56
148	Kalbe Farma Tbk	2014	0.17	0.23	7.29	20.73	0.03	49	0.79	0.01	0.00	6.39	5.01
148	Kalbe Farma Tbk	2015	0.15	0.20	4.43	20.72	0.04	50	0.66	0.00	0.00	6.36	4.88
148	Kalbe Farma Tbk	2016	0.15	0.20	4.78	20.84	0.02	51	0.65	0.00	0.00	3.53	5.03
148	Kalbe Farma Tbk	2017	0.15	0.18	4.85	20.93	0.02	52	0.64	0.01	0.00	3.81	5.07
148	Kalbe Farma Tbk	2018	0.14	0.17	3.86	20.96	0.02	53	0.62	0.01	0.00	3.20	5.17
148	Kalbe Farma Tbk	2019	0.12	0.16	3.70	21.10	0.05	54	0.61	0.01	0.00	3.03	5.02
148	Kalbe Farma Tbk	2020	0.12	0.15	3.01	21.19	0.07	55	0.58	0.01	0.00	1.92	-2.07
148	Kalbe Farma Tbk	2021	0.12	0.16	2.95	21.31	0.03	56	0.51	0.02	0.00	1.56	3.70
148	Kalbe Farma Tbk	2022	0.13	0.17	3.83	21.28	0.06	57	0.61	0.02	0.00	4.21	5.31
149	IHH Healthcare Bhd	2012	0.03	0.04	1.20	22.85	0.24	3	0.17	0.04	0.00	1.66	5.47
149	IHH Healthcare Bhd	2013	0.02	0.04	1.28	22.84	0.22	4	0.16	0.03	0.00	2.11	4.69
149	IHH Healthcare Bhd	2014	0.03	0.04	1.57	22.83	0.31	5	0.16	0.02	0.00	3.14	6.01
149	IHH Healthcare Bhd	2015	0.03	0.05	1.71	22.84	0.33	6	0.16	0.01	0.01	2.10	5.09
149	IHH Healthcare Bhd	2016	0.02	0.03	1.61	22.84	0.39	7	0.17	0.00	0.00	2.09	4.45
149	IHH Healthcare Bhd	2017	0.02	0.04	1.40	22.99	0.29	8	0.17	0.00	0.00	3.87	5.81

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
149	IHH Healthcare Bhd	2018	0.01	0.03	1.26	23.11	0.44	9	0.16	0.01	0.00	0.88	4.84
149	IHH Healthcare Bhd	2019	0.01	0.02	1.30	23.12	0.45	10	0.19	0.02	0.00	0.66	4.41
149	IHH Healthcare Bhd	2020	0.01	0.01	1.33	23.13	0.49	11	0.16	0.02	0.00	-1.14	-5.46
149	IHH Healthcare Bhd	2021	0.04	0.08	1.63	23.11	0.44	12	0.15	0.04	0.01	2.48	3.30
149	IHH Healthcare Bhd	2022	0.03	0.06	1.33	23.12	0.41	13	0.17	0.03	0.02	3.38	8.65
150	KPJ Healthcare Bhd	2020	0.02	0.05	1.21	21.15	1.54	40	0.16	0.02	0.00	-1.14	-5.46
150	KPJ Healthcare Bhd	2021	0.01	0.02	1.29	21.12	1.47	41	0.15	0.04	0.01	2.48	3.30
150	KPJ Healthcare Bhd	2022	0.02	0.08	1.16	21.19	1.68	42	0.17	0.03	0.02	3.38	8.65
151	Kossan Rubber Industries Bhd	2019	0.09	0.16	2.46	20.17	0.41	41	0.19	0.02	0.00	0.66	4.41
151	Kossan Rubber Industries Bhd	2020	0.29	0.44	3.25	20.62	0.24	42	0.16	0.02	0.00	-1.14	-5.46
151	Kossan Rubber Industries Bhd	2021	0.56	0.71	1.01	20.92	0.06	43	0.15	0.04	0.01	2.48	3.30
151	Kossan Rubber Industries Bhd	2022	0.04	0.04	0.67	20.71	0.02	44	0.17	0.03	0.02	3.38	8.65
152	TMC Life Sciences Bhd	2020	0.01	0.02	0.12	5.40	0.11	27	0.16	0.02	0.00	-1.14	-5.46
152	TMC Life Sciences Bhd	2021	0.02	0.03	1.03	19.36	0.22	28	0.15	0.04	0.01	2.48	3.30
152	TMC Life Sciences Bhd	2022	0.04	0.05	1.15	19.36	0.25	29	0.17	0.03	0.02	3.38	8.65
153	Pharmaniaga Bhd	2020	0.02	0.08	0.84	5.97	1.99	27	0.16	0.02	0.00	-1.14	-5.46
153	Pharmaniaga Bhd	2021	0.08	0.38	0.81	20.11	1.90	28	0.15	0.04	0.01	2.48	3.30
153	Pharmaniaga Bhd	2022	-0.33	2.44	1.04	19.84	-4.70	29	0.17	0.03	0.02	3.38	8.65
154	Hartalega Holdings Bhd	2015	0.16	0.18	0.60	19.79	0.00	28	0.16	0.01	0.01	2.10	5.09
154	Hartalega Holdings Bhd	2016	0.13	0.17	0.52	20.04	0.17	29	0.17	0.00	0.00	2.09	4.45
154	Hartalega Holdings Bhd	2017	0.13	0.18	1.24	20.06	0.18	30	0.17	0.00	0.00	3.87	5.81
154	Hartalega Holdings Bhd	2018	0.15	0.20	1.38	20.34	0.16	31	0.16	0.01	0.00	0.88	4.84
154	Hartalega Holdings Bhd	2019	0.15	0.20	1.38	20.41	0.15	32	0.19	0.02	0.00	0.66	4.41
154	Hartalega Holdings Bhd	2020	0.14	0.18	2.85	20.46	0.11	33	0.16	0.02	0.00	-1.14	-5.46
154	Hartalega Holdings Bhd	2021	0.42	0.58	1.39	21.23	0.07	34	0.15	0.04	0.01	2.48	3.30
154	Hartalega Holdings Bhd	2022	0.51	0.64	0.53	21.14	0.05	35	0.17	0.03	0.02	3.38	8.65

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
155	Adaro Energy Tbk.	2010	0.06	0.13	2.35	22.23	0.77	41	0.19	0.05	0.00	5.13	6.22
155	Adaro Energy Tbk.	2011	0.10	0.23	1.49	22.46	0.86	42	0.17	0.04	0.00	5.36	6.17
155	Adaro Energy Tbk.	2012	0.06	0.15	1.16	22.62	0.94	43	0.16	0.03	0.00	4.28	6.03
155	Adaro Energy Tbk.	2013	0.03	0.09	0.81	22.62	0.83	44	0.16	0.02	0.01	6.41	5.56
155	Adaro Energy Tbk.	2014	0.03	0.06	0.74	22.58	0.68	45	0.20	-0.01	0.01	6.39	5.01
155	Adaro Energy Tbk.	2015	0.03	0.05	0.46	22.51	0.55	46	0.21	-0.03	0.01	6.36	4.88
155	Adaro Energy Tbk.	2016	0.05	0.11	0.85	22.60	0.46	47	0.21	-0.03	0.00	3.53	5.03
155	Adaro Energy Tbk.	2017	0.07	0.14	0.86	22.64	0.40	48	0.20	-0.02	0.01	3.81	5.07
155	Adaro Energy Tbk.	2018	0.06	0.11	0.58	22.68	0.39	49	0.17	0.01	0.01	3.20	5.17
155	Adaro Energy Tbk.	2019	0.06	0.11	0.76	22.70	0.52	50	0.18	0.02	0.01	3.03	5.02
155	Adaro Energy Tbk.	2020	0.02	0.04	0.73	22.58	0.41	51	0.17	0.01	0.01	1.92	-2.07
155	Adaro Energy Tbk.	2021	0.12	0.23	0.87	22.75	0.39	52	0.16	0.01	0.01	1.56	3.70
155	Adaro Energy Tbk.	2022	0.23	0.41	0.89	23.10	0.26	53	0.17	0.03	0.02	4.21	5.31
156	AKR Corporindo Tbk.	2015	0.07	0.17	1811.19	20.83	0.64	56	0.21	-0.03	0.01	6.36	4.88
156	AKR Corporindo Tbk.	2016	0.06	0.15	1527.75	20.88	0.59	57	0.21	-0.03	0.00	3.53	5.03
156	AKR Corporindo Tbk.	2017	0.07	0.02	1525.95	20.94	0.04	58	0.20	-0.02	0.01	3.81	5.07
156	AKR Corporindo Tbk.	2018	0.08	0.20	844.15	21.06	0.51	59	0.17	0.01	0.01	3.20	5.17
156	AKR Corporindo Tbk.	2019	0.03	0.08	722.65	21.16	0.55	60	0.18	0.02	0.01	3.03	5.02
156	AKR Corporindo Tbk.	2020	0.05	0.10	646.61	21.01	0.47	61	0.17	0.01	0.01	1.92	-2.07
156	AKR Corporindo Tbk.	2021	0.05	0.12	685.02	21.22	0.33	62	0.16	0.01	0.01	1.56	3.70
156	AKR Corporindo Tbk.	2022	0.09	0.23	1071.67	21.28	0.28	63	0.17	0.03	0.02	4.21	5.31
157	Bayan Resources Tbk	2020	0.20	0.40	2.18	21.21	0.00	47	0.14	0.01	0.01	1.92	-2.07
157	Bayan Resources Tbk	2021	0.50	0.67	2.57	21.61	0.00	48	0.14	0.01	0.01	1.56	3.70
157	Bayan Resources Tbk	2022	0.55	1.15	11.97	22.10	0.00	49	0.14	0.01	0.01	4.21	5.31
158	Bumi Resources Tbk	2010	0.03	0.20	0.70	22.68	3.80	38	0.15	0.03	0.01	5.13	6.22
158	Bumi Resources Tbk	2011	0.03	0.26	0.73	22.73	4.94	39	0.15	0.04	0.01	5.36	6.17

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
158	Bumi Resources Tbk	2012	-0.09	-4.41	0.75	22.72	28.34	40	0.15	0.04	0.00	4.28	6.03
158	Bumi Resources Tbk	2013	-0.09	1.24	0.79	22.67	-8.83	41	0.15	0.03	0.00	6.41	5.56
158	Bumi Resources Tbk	2014	-0.08	0.43	0.91	22.25	-4.84	42	0.14	0.02	0.00	6.39	5.01
158	Bumi Resources Tbk	2015	-0.57	0.69	1.24	21.95	-1.51	43	0.14	0.01	0.00	6.36	4.88
158	Bumi Resources Tbk	2016	0.02	-0.02	1.45	21.86	-1.65	44	0.20	0.03	0.01	3.53	5.03
158	Bumi Resources Tbk	2017	0.10	-0.85	0.48	22.03	-3.99	45	0.13	0.02	0.02	3.81	5.07
158	Bumi Resources Tbk	2018	0.06	-1.12	0.49	22.09	-7.91	46	0.13	0.01	0.02	3.20	5.17
158	Bumi Resources Tbk	2019	0.00	-0.04	0.57	22.03	-9.04	47	0.13	0.00	0.01	3.03	5.02
158	Bumi Resources Tbk	2020	-0.10	0.56	0.58	21.96	-2.87	48	0.13	-0.01	0.01	1.92	-2.07
158	Bumi Resources Tbk	2021	0.04	-0.35	0.52	22.16	-3.90	49	0.13	0.01	0.00	1.56	3.70
158	Bumi Resources Tbk	2022	0.12	0.35	0.26	22.22	0.37	50	0.13	0.01	0.00	4.21	5.31
159	Perusahaan Gas Negara Tbk	2010	0.19	0.45	3.73	21.99	0.92	152	0.15	0.03	0.01	5.13	6.22
159	Perusahaan Gas Negara Tbk	2011	0.20	0.39	2.84	21.95	0.63	153	0.15	0.04	0.01	5.36	6.17
159	Perusahaan Gas Negara Tbk	2012	0.23	0.41	3.24	22.09	0.43	154	0.15	0.04	0.00	4.28	6.03
159	Perusahaan Gas Negara Tbk	2013	0.19	0.32	2.55	22.19	0.41	155	0.15	0.03	0.00	6.41	5.56
159	Perusahaan Gas Negara Tbk	2014	0.12	0.25	2.35	22.53	0.64	156	0.14	0.02	0.00	6.39	5.01
159	Perusahaan Gas Negara Tbk	2015	0.07	0.13	1.31	22.46	0.90	157	0.14	0.01	0.00	6.36	4.88
159	Perusahaan Gas Negara Tbk	2016	0.05	0.10	1.21	22.59	0.92	158	0.20	0.03	0.01	3.53	5.03
159	Perusahaan Gas Negara Tbk	2017	0.03	0.05	0.88	22.65	0.75	159	0.13	0.02	0.02	3.81	5.07
159	Perusahaan Gas Negara Tbk	2018	0.04	0.12	0.86	22.83	1.36	160	0.13	0.01	0.02	3.20	5.17
159	Perusahaan Gas Negara Tbk	2019	0.01	0.03	0.82	22.80	1.09	161	0.13	0.00	0.01	3.03	5.02
159	Perusahaan Gas Negara Tbk	2020	-0.04	-0.12	0.77	22.74	1.39	162	0.13	-0.01	0.01	1.92	-2.07
159	Perusahaan Gas Negara Tbk	2021	0.04	0.12	0.70	22.74	1.17	163	0.13	0.01	0.00	1.56	3.70
159	Perusahaan Gas Negara Tbk	2022	0.05	0.12	0.70	22.70	0.82	164	0.13	0.01	0.00	4.21	5.31
160	Bukit Asam Tbk	2012	0.23	0.35	2.75	21.00	0.01	90	0.15	0.04	0.00	4.28	6.03
160	Bukit Asam Tbk	2013	0.18	0.29	2.14	20.68	0.01	91	0.15	0.03	0.00	6.41	5.56

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
160	Bukit Asam Tbk	2014	0.13	0.23	2.08	20.91	0.27	92	0.14	0.02	0.00	6.39	5.01
160	Bukit Asam Tbk	2015	0.12	0.23	0.67	20.93	0.22	93	0.14	0.01	0.00	6.36	4.88
160	Bukit Asam Tbk	2016	0.11	0.20	1.58	21.04	0.23	94	0.20	0.03	0.01	3.53	5.03
160	Bukit Asam Tbk	2017	0.21	0.33	1.24	21.21	0.07	95	0.13	0.02	0.02	3.81	5.07
160	Bukit Asam Tbk	2018	0.21	0.31	1.01	21.25	0.05	96	0.13	0.01	0.02	3.20	5.17
160	Bukit Asam Tbk	2019	0.15	0.22	1.07	21.35	0.03	97	0.13	0.00	0.01	3.03	5.02
160	Bukit Asam Tbk	2020	0.10	0.14	1.22	21.26	0.06	98	0.13	-0.01	0.01	1.92	-2.07
160	Bukit Asam Tbk	2021	0.22	0.33	0.81	21.65	0.04	99	0.13	0.01	0.00	1.56	3.70
160	Bukit Asam Tbk	2022	0.17	0.26	1.46	21.79	0.10	100	0.13	0.01	0.00	4.21	5.31
161	Carimin Petroleum Bhd	2020	0.04	0.08	0.32	4.31	0.26	32	0.11	0.00	0.01	-1.14	-5.46
161	Carimin Petroleum Bhd	2021	0.05	0.08	0.65	18.06	0.18	33	0.15	0.00	0.01	2.48	3.30
161	Carimin Petroleum Bhd	2022	0.02	0.04	0.60	17.99	0.15	34	0.21	0.01	0.01	3.38	8.65
162	Dialog Group Bhd	2013	0.07	0.15	3.20	20.62	0.59	30	0.18	0.03	0.00	2.11	4.69
162	Dialog Group Bhd	2014	0.07	0.14	2.36	20.74	0.62	31	0.16	0.02	0.00	3.14	6.01
162	Dialog Group Bhd	2015	0.08	0.15	2.19	20.69	0.43	32	0.14	0.00	0.01	2.10	5.09
162	Dialog Group Bhd	2016	0.07	0.12	1.95	20.75	0.36	33	0.15	-0.02	0.01	2.09	4.45
162	Dialog Group Bhd	2017	0.06	0.12	2.80	21.03	0.46	34	0.15	-0.03	0.01	3.87	5.81
162	Dialog Group Bhd	2018	0.08	0.14	2.94	21.18	0.46	35	0.15	-0.02	0.01	0.88	4.84
162	Dialog Group Bhd	2019	0.08	0.14	3.16	21.21	0.44	36	0.15	0.00	0.00	0.66	4.41
162	Dialog Group Bhd	2020	0.09	0.16	3.16	21.24	0.47	37	0.11	0.00	0.01	-1.14	-5.46
162	Dialog Group Bhd	2021	0.07	0.11	2.10	21.38	0.38	38	0.15	0.00	0.01	2.48	3.30
162	Dialog Group Bhd	2022	0.06	0.10	1.84	21.42	0.43	39	0.21	0.01	0.01	3.38	8.65
163	Deleum Bhd	2020	0.01	0.02	0.25	5.08	0.22	39	0.11	0.00	0.01	-1.14	-5.46
163	Deleum Bhd	2021	0.03	0.05	0.38	18.80	0.08	40	0.15	0.00	0.01	2.48	3.30
163	Deleum Bhd	2022	0.06	0.11	0.52	18.90	0.02	41	0.21	0.01	0.01	3.38	8.65
164	Hengyuan Refining Company Bhd	2020	0.05	0.11	2.46	7.02	0.38	61	0.11	0.00	0.01	-1.14	-5.46

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
164	Hengyuan Refining Company Bhd	2021	0.02	0.04	0.36	21.00	0.40	62	0.15	0.00	0.01	2.48	3.30
164	Hengyuan Refining Company Bhd	2022	-0.02	-0.11	0.40	21.13	1.18	63	0.21	0.01	0.01	3.38	8.65
165	Hibiscus Petroleum Bhd	2020	-0.02	-0.04	0.13	6.34	0.06	11	0.11	0.00	0.01	-1.14	-5.46
165	Hibiscus Petroleum Bhd	2021	0.04	0.07	0.59	20.33	0.02	12	0.15	0.00	0.01	2.48	3.30
165	Hibiscus Petroleum Bhd	2022	0.12	0.31	0.49	20.95	0.25	13	0.21	0.01	0.01	3.38	8.65
167	Icon Offshore Bhd	2020	0.03	0.08	0.48	5.27	1.02	9	0.11	0.00	0.01	-1.14	-5.46
167	Icon Offshore Bhd	2021	0.02	0.06	0.49	19.26	0.86	10	0.15	0.00	0.01	2.48	3.30
167	Icon Offshore Bhd	2022	0.22	0.46	0.72	18.96	0.79	11	0.21	0.01	0.01	3.38	8.65
168	Malaysia Marine & Heavy Holdings Bhd	2012	0.05	0.10	1.46	21.18	0.00	40	0.21	0.02	0.01	1.66	5.47
168	Malaysia Marine & Heavy Holdings Bhd	2013	0.05	0.10	1.18	21.15	0.11	41	0.18	0.03	0.00	2.11	4.69
168	Malaysia Marine & Heavy Holdings Bhd	2014	0.03	0.05	0.70	20.97	0.10	42	0.16	0.02	0.00	3.14	6.01
168	Malaysia Marine & Heavy Holdings Bhd	2015	0.01	0.02	0.37	20.73	0.00	43	0.14	0.00	0.01	2.10	5.09
168	Malaysia Marine & Heavy Holdings Bhd	2016	-0.04	-0.06	0.40	20.50	0.01	44	0.15	-0.02	0.01	2.09	4.45
168	Malaysia Marine & Heavy Holdings Bhd	2017	0.01	0.01	0.38	20.55	0.00	45	0.15	-0.03	0.01	3.87	5.81
168	Malaysia Marine & Heavy Holdings Bhd	2018	-0.04	-0.05	0.29	20.46	0.02	46	0.15	-0.02	0.01	0.88	4.84
168	Malaysia Marine & Heavy Holdings Bhd	2019	-0.01	-0.01	0.49	20.48	0.08	47	0.15	0.00	0.00	0.66	4.41
168	Malaysia Marine & Heavy Holdings Bhd	2020	-0.12	-0.19	0.31	20.48	0.13	48	0.11	0.00	0.01	-1.14	-5.46
168	Malaysia Marine & Heavy Holdings Bhd	2021	-0.08	-0.16	0.31	20.52	0.22	49	0.15	0.00	0.01	2.48	3.30
168	Malaysia Marine & Heavy Holdings Bhd	2022	0.02	0.04	0.40	20.45	0.19	50	0.21	0.01	0.01	3.38	8.65
169	Perdana Petroleum Bhd	2020	-0.05	-0.08	0.10	5.66	0.13	33	0.11	0.00	0.01	-1.14	-5.46

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
169	Perdana Petroleum Bhd	2021	-0.40	-0.63	0.40	19.10	0.13	34	0.15	0.00	0.01	2.48	3.30
169	Perdana Petroleum Bhd	2022	0.01	0.02	0.40	19.05	0.09	35	0.21	0.01	0.01	3.38	8.65
170	Sapura Energy Bhd	2014	0.04	0.11	0.95	22.80	1.21	3	0.16	0.02	0.00	3.14	6.01
170	Sapura Energy Bhd	2015	0.05	0.13	0.78	22.98	1.41	4	0.14	0.00	0.01	2.10	5.09
170	Sapura Energy Bhd	2016	-0.02	-0.07	0.75	22.90	1.50	5	0.15	-0.02	0.01	2.09	4.45
170	Sapura Energy Bhd	2017	0.01	0.02	0.62	22.86	1.43	6	0.15	-0.03	0.01	3.87	5.81
170	Sapura Energy Bhd	2018	-0.08	-0.24	0.60	22.76	1.74	7	0.15	-0.02	0.01	0.88	4.84
170	Sapura Energy Bhd	2019	0.01	0.02	0.64	22.83	1.22	8	0.15	0.00	0.00	0.66	4.41
170	Sapura Energy Bhd	2020	-0.20	-0.49	0.54	22.44	1.12	9	0.11	0.00	0.01	-1.14	-5.46
170	Sapura Energy Bhd	2021	-0.01	-1.89	0.49	22.45	126.24	10	0.15	0.00	0.01	2.48	3.30
170	Sapura Energy Bhd	2022	-0.57	-107.30	0.71	22.07	125.68	11	0.21	0.01	0.01	3.38	8.65
171	Serba Dinamik Holdings Bhd	2019	0.08	0.20	1.59	21.17	1.40	27	0.15	0.00	0.00	0.66	4.41
171	Serba Dinamik Holdings Bhd	2020	0.00	0.00	0.00	0.00	0.00	28	0.11	0.00	0.01	-1.14	-5.46
171	Serba Dinamik Holdings Bhd	2021	-0.02	-0.06	0.70	21.35	1.38	29	0.15	0.00	0.01	2.48	3.30
171	Serba Dinamik Holdings Bhd	2022	-0.18	-0.60	0.59	21.10	1.99	30	0.21	0.01	0.01	3.38	8.65
172	UZMA Bhd	2020	-0.02	-0.05	0.51	5.73	1.30	21	0.11	0.00	0.01	-1.14	-5.46
172	UZMA Bhd	2021	-0.01	-0.02	0.54	19.51	1.12	22	0.15	0.00	0.01	2.48	3.30
172	UZMA Bhd	2022	0.00	0.01	0.52	19.47	0.94	23	0.21	0.01	0.01	3.38	8.65
173	Velesto Energy Bhd	2020	-0.14	-0.21	0.31	6.76	0.47	3	0.11	0.00	0.01	-1.14	-5.46
173	Velesto Energy Bhd	2021	-0.03	-0.04	0.53	20.40	0.26	4	0.15	0.00	0.01	2.48	3.30
173	Velesto Energy Bhd	2022	-0.03	-0.04	0.58	20.37	0.25	5	0.21	0.01	0.01	3.38	8.65
174	Kim Loong Resources Bhd	2020	0.04	0.06	0.27	5.47	0.02	54	0.11	0.00	0.01	-1.14	-5.46
174	Kim Loong Resources Bhd	2021	0.08	0.12	0.37	19.41	0.07	55	0.15	0.00	0.01	2.48	3.30
174	Kim Loong Resources Bhd	2022	0.11	0.17	0.61	19.53	0.08	56	0.21	0.01	0.01	3.38	8.65
175	KNM Group Bhd	2020	0.02	0.03	0.38	20.68	0.79	31	0.11	0.00	0.01	-1.14	-5.46
175	KNM Group Bhd	2021	0.00	0.00	0.00	0.00	0.00	32	0.15	0.00	0.01	2.48	3.30

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
175	KNM Group Bhd	2022	-0.28	-0.97	0.42	20.37	1.43	33	0.21	0.01	0.01	3.38	8.65
176	Yinson Holdings Berhad	2020	0.02	0.06	0.57	7.75	1.11	38	0.11	0.00	0.01	-1.14	-5.46
176	Yinson Holdings Berhad	2021	0.03	0.08	0.76	21.80	1.66	39	0.15	0.00	0.01	2.48	3.30
176	Yinson Holdings Berhad	2022	0.03	0.09	0.71	22.01	2.06	40	0.21	0.01	0.01	3.38	8.65
177	Axiata Group Bhd	2009	0.04	0.09	1.02	23.10	0.68	18	0.15	0.05	0.01	0.58	-1.51
177	Axiata Group Bhd	2010	0.04	0.09	1.32	23.24	0.57	19	0.14	0.04	0.01	1.62	7.42
177	Axiata Group Bhd	2011	0.06	0.12	1.32	23.29	0.58	20	0.14	0.04	0.00	3.17	5.29
177	Axiata Group Bhd	2012	0.06	0.12	1.58	23.37	0.63	21	0.14	0.02	0.00	1.66	5.47
177	Axiata Group Bhd	2013	0.06	0.14	1.65	23.31	0.68	22	0.14	0.02	0.00	2.11	4.69
177	Axiata Group Bhd	2014	0.05	0.12	1.51	23.37	0.70	23	0.14	0.01	0.00	3.14	6.01
177	Axiata Group Bhd	2015	0.05	0.12	1.30	23.29	0.73	24	0.14	0.00	0.00	2.10	5.09
177	Axiata Group Bhd	2016	0.01	0.02	0.92	23.48	1.00	25	0.15	-0.02	0.00	2.09	4.45
177	Axiata Group Bhd	2017	0.01	0.03	1.00	23.57	0.83	26	0.16	-0.01	0.00	3.87	5.81
177	Axiata Group Bhd	2018	-0.08	-0.28	0.90	23.46	1.27	27	0.16	0.00	0.00	0.88	4.84
177	Axiata Group Bhd	2019	0.02	0.09	0.95	23.51	1.59	28	0.16	0.00	0.00	0.66	4.41
177	Axiata Group Bhd	2020	0.01	0.02	0.90	23.55	1.55	29	0.16	0.00	0.00	-1.14	-5.46
177	Axiata Group Bhd	2021	0.01	0.05	0.92	23.58	1.62	30	0.15	0.00	0.00	2.48	3.30
177	Axiata Group Bhd	2022	0.12	0.41	0.79	23.64	1.50	31	0.15	-0.01	0.00	3.38	8.65
178	Maxis Bhd	2010	0.12	0.25	1.75	22.50	0.59	16	0.14	0.04	0.01	1.62	7.42
178	Maxis Bhd	2011	0.15	0.32	1.48	22.46	0.73	17	0.14	0.04	0.00	3.17	5.29
178	Maxis Bhd	2012	0.10	0.26	2.19	22.49	0.97	18	0.14	0.02	0.00	1.66	5.47
178	Maxis Bhd	2013	0.11	0.31	2.89	22.39	1.26	19	0.14	0.02	0.00	2.11	4.69
178	Maxis Bhd	2014	0.10	0.39	3.48	22.37	1.91	20	0.14	0.01	0.00	3.14	6.01
178	Maxis Bhd	2015	0.10	0.46	4.22	22.21	2.36	21	0.14	0.00	0.00	2.10	5.09
178	Maxis Bhd	2016	0.11	0.46	3.30	22.20	2.09	22	0.15	-0.02	0.00	2.09	4.45
178	Maxis Bhd	2017	0.11	0.30	3.42	22.28	1.10	23	0.16	-0.01	0.00	3.87	5.81

No	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
178	Maxis Bhd	2018	0.09	0.25	3.02	22.29	1.07	24	0.16	0.00	0.00	0.88	4.84
178	Maxis Bhd	2019	0.07	0.21	3.35	22.42	1.42	25	0.16	0.00	0.00	0.66	4.41
178	Maxis Bhd	2020	0.06	0.19	2.90	22.42	1.38	26	0.16	0.00	0.00	-1.14	-5.46
178	Maxis Bhd	2021	0.06	0.20	2.90	22.41	1.50	27	0.15	0.00	0.00	2.48	3.30
178	Maxis Bhd	2022	0.05	0.19	2.98	22.38	1.55	28	0.15	-0.01	0.00	3.38	8.65
179	OCK Group Bhd	2020	0.02	0.05	0.46	5.86	1.11	21	0.16	0.00	0.00	-1.14	-5.46
179	OCK Group Bhd	2021	0.02	0.04	0.74	19.68	1.01	22	0.15	0.00	0.00	2.48	3.30
179	OCK Group Bhd	2022	0.02	0.05	0.73	19.74	1.19	23	0.15	-0.01	0.00	3.38	8.65
180	Time DotCom Bhd	2020	0.08	0.10	0.31	6.88	0.06	25	0.16	0.00	0.00	-1.14	-5.46
180	Time DotCom Bhd	2021	0.10	0.13	1.77	20.71	0.08	26	0.15	0.00	0.00	2.48	3.30
180	Time DotCom Bhd	2022	0.11	0.15	1.90	20.67	0.03	27	0.15	-0.01	0.00	3.38	8.65
181	Telekom Malaysia Bhd	2010	0.04	0.12	1.03	22.42	1.01	15	0.14	0.04	0.01	1.62	7.42
181	Telekom Malaysia Bhd	2011	0.05	0.14	1.39	22.38	0.89	16	0.14	0.04	0.00	3.17	5.29
181	Telekom Malaysia Bhd	2012	0.06	0.18	1.30	22.71	1.04	17	0.14	0.02	0.00	1.66	5.47
181	Telekom Malaysia Bhd	2013	0.05	0.15	1.24	22.59	0.90	18	0.14	0.02	0.00	2.11	4.69
181	Telekom Malaysia Bhd	2014	0.04	0.12	1.42	22.59	0.85	19	0.14	0.01	0.00	3.14	6.01
181	Telekom Malaysia Bhd	2015	0.03	0.10	1.35	22.46	0.97	20	0.14	0.00	0.00	2.10	5.09
181	Telekom Malaysia Bhd	2016	0.03	0.11	1.23	22.44	1.09	21	0.15	-0.02	0.00	2.09	4.45
181	Telekom Malaysia Bhd	2017	0.04	0.11	1.29	22.54	1.04	22	0.16	-0.01	0.00	3.87	5.81
181	Telekom Malaysia Bhd	2018	0.01	0.02	0.78	22.47	1.14	23	0.16	0.00	0.00	0.88	4.84
181	Telekom Malaysia Bhd	2019	0.02	0.08	0.98	22.56	1.45	24	0.16	0.00	0.00	0.66	4.41
181	Telekom Malaysia Bhd	2020	0.04	0.14	1.24	22.52	1.34	25	0.16	0.00	0.00	-1.14	-5.46
181	Telekom Malaysia Bhd	2021	0.04	0.12	9.43	22.42	1.01	26	0.15	0.00	0.00	2.48	3.30
181	Telekom Malaysia Bhd	2022	0.05	0.14	1.20	22.38	0.89	27	0.15	-0.01	0.00	3.38	8.65

APPENDIX H

CORPORATE FINANCIAL PERFORMANCE OF NON-SHARIAH-COMPLIANT COMPANIES

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
1	Gudang Garam Tbk	2010	0.13	0.19	2770.39	21.95	0.13	53	0.15	0.03	0.01	5.13	6.22
1	Gudang Garam Tbk	2011	0.13	0.21	2532.03	22.18	0.25	54	0.15	0.04	0.01	5.36	6.17
1	Gudang Garam Tbk	2012	0.10	0.16	7.39	22.19	0.31	55	0.15	0.04	0.00	4.28	6.03
1	Gudang Garam Tbk	2013	0.10	0.17	5.20	22.15	0.44	56	0.15	0.03	0.00	6.41	5.56
1	Gudang Garam Tbk	2014	0.10	0.17	6.33	22.27	0.55	57	0.14	0.02	0.00	6.39	5.01
1	Gudang Garam Tbk	2015	0.10	0.17	4.77	22.26	0.54	58	0.14	0.01	0.00	6.36	4.88
1	Gudang Garam Tbk	2016	0.11	0.17	6.25	22.26	0.50	59	0.20	0.03	0.01	3.53	5.03
1	Gudang Garam Tbk	2017	0.12	0.19	8.25	22.32	0.49	60	0.13	0.02	0.02	3.81	5.07
1	Gudang Garam Tbk	2018	0.11	0.17	8.17	22.30	0.38	61	0.13	0.01	0.02	3.20	5.17
1	Gudang Garam Tbk	2019	0.14	0.21	5.38	22.46	0.34	62	0.13	0.00	0.01	3.03	5.02
1	Gudang Garam Tbk	2020	0.10	0.13	4.06	22.44	0.11	63	0.13	-0.01	0.01	1.92	-2.07
1	Gudang Garam Tbk	2021	0.06	0.09	3.07	22.56	0.17	64	0.13	0.01	0.00	1.56	3.70
1	Gudang Garam Tbk	2022	0.03	0.05	1.90	22.46	0.18	65	0.13	0.01	0.00	4.21	5.31
2	Hanjaya Mandala Sampoerna Tbk	2015	0.28	0.33	0.65	21.74	0.00	103	0.14	0.01	0.00	6.36	4.88
2	Hanjaya Mandala Sampoerna Tbk	2016	0.30	0.38	0.66	21.87	0.00	104	0.20	0.03	0.01	3.53	5.03
2	Hanjaya Mandala Sampoerna Tbk	2017	0.30	0.38	0.82	21.88	0.00	105	0.13	0.02	0.02	3.81	5.07
2	Hanjaya Mandala Sampoerna Tbk	2018	0.29	0.38	0.58	21.91	0.00	106	0.13	0.01	0.02	3.20	5.17
2	Hanjaya Mandala Sampoerna Tbk	2019	0.27	0.38	0.32	22.02	0.01	107	0.13	0.00	0.01	3.03	5.02
2	Hanjaya Mandala Sampoerna Tbk	2020	0.17	0.28	0.19	21.98	0.01	108	0.13	-0.01	0.01	1.92	-2.07
2	Hanjaya Mandala Sampoerna Tbk	2021	0.13	0.24	0.14	22.04	0.01	109	0.13	0.01	0.00	1.56	3.70

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
2	Hanjaya Mandala Sampoerna Tbk	2022	0.12	0.24	0.14	21.98	0.02	110	0.13	0.01	0.00	4.21	5.31
3	Kawan Food Bhd	2020	0.06	0.08	0.34	4.64	0.04	61	0.10	0.00	0.01	-1.14	-5.46
3	Kawan Food Bhd	2021	0.07	0.09	1.38	18.46	0.03	62	0.12	0.01	0.01	2.48	3.30
3	Kawan Food Bhd	2022	0.08	0.10	1.76	18.47	0.02	63	0.10	0.01	0.01	3.38	8.65
4	Lay Hong Bhd	2020	0.00	0.01	0.44	5.30	0.90	61	0.10	0.00	0.01	-1.14	-5.46
4	Lay Hong Bhd	2021	0.00	0.01	0.48	19.24	0.72	62	0.12	0.01	0.01	2.48	3.30
4	Lay Hong Bhd	2022	0.00	-0.01	0.47	19.23	0.62	63	0.10	0.01	0.01	3.38	8.65
5	Lii Hein Industries Bhd	2020	0.12	0.18	0.54	5.02	0.10	36	0.10	0.00	0.01	-1.14	-5.46
5	Lii Hein Industries Bhd	2021	0.06	0.09	0.91	18.79	0.09	37	0.12	0.01	0.01	2.48	3.30
5	Lii Hein Industries Bhd	2022	0.12	0.15	0.75	18.77	0.07	38	0.10	0.01	0.01	3.38	8.65
6	MBM Resources Bhd	2020	0.76	0.94	0.50	20.15	0.01	41	0.10	0.00	0.01	1.56	3.30
6	MBM Resources Bhd	2021	0.65	0.80	0.46	20.16	0.01	42	0.12	0.01	0.01	4.21	8.65
6	MBM Resources Bhd	2022	0.11	0.14	0.61	6.35	0.00	43	0.10	0.01	0.01	3.38	8.65
7	Malayan Flour Mills Bhd	2020	0.00	0.00	0.59	6.47	1.11	55	0.10	0.00	0.01	-1.14	-5.46
7	Malayan Flour Mills Bhd	2021	0.06	0.14	0.71	20.30	0.99	56	0.12	0.01	0.01	2.48	3.30
7	Malayan Flour Mills Bhd	2022	0.05	0.11	0.70	20.25	0.83	57	0.10	0.01	0.01	3.38	8.65
8	Milux Corporation Bhd	2020	-0.09	-0.13	0.28	2.61	0.14	44	0.10	0.00	0.01	-1.14	-5.46
8	Milux Corporation Bhd	2021	0.09	0.13	99.02	16.52	140.06	45	0.12	0.01	0.01	2.48	3.30
8	Milux Corporation Bhd	2022	0.05	0.07	110.44	16.51	153.77	46	0.10	0.01	0.01	3.38	8.65
9	MR DIY Group (M) Bhd	2020	0.14	0.37	1.09	6.33	1.37	16	0.10	0.00	0.01	-1.14	-5.46
9	MR DIY Group (M) Bhd	2021	0.16	0.38	8.89	20.29	1.15	17	0.12	0.01	0.01	2.48	3.30
9	MR DIY Group (M) Bhd	2022	0.14	0.33	6.17	20.44	1.14	18	0.10	0.01	0.01	3.38	8.65
10	Beshom Holdings Bhd	2020	0.09	0.11	0.41	4.43	0.02	46	0.10	0.00	0.01	-1.14	-5.46
10	Beshom Holdings Bhd	2021	0.10	0.12	0.39	18.32	0.01	47	0.12	0.01	0.01	2.48	3.30
10	Beshom Holdings Bhd	2022	0.08	0.09	0.25	18.26	0.01	48	0.10	0.01	0.01	3.38	8.65
11	Genting Malaysia Bhd	2009	0.11	0.13	0.30	21.92	0.00	30	0.15	0.03	0.01	0.58	-1.51

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
11	Genting Malaysia Bhd	2010	0.08	0.11	0.40	22.29	0.09	31	0.14	0.02	0.01	1.62	7.42
11	Genting Malaysia Bhd	2011	0.09	0.12	0.67	22.37	0.15	32	0.15	0.02	0.01	3.17	5.29
11	Genting Malaysia Bhd	2012	0.08	0.11	0.53	22.43	0.08	33	0.15	0.03	0.01	1.66	5.47
11	Genting Malaysia Bhd	2013	0.08	0.11	0.59	22.52	0.11	34	0.16	0.03	0.01	2.11	4.69
11	Genting Malaysia Bhd	2014	0.06	0.08	0.50	22.51	0.10	35	0.14	0.02	0.01	3.14	6.01
11	Genting Malaysia Bhd	2015	0.05	0.07	0.46	22.58	0.24	36	0.12	0.00	0.01	2.10	5.09
11	Genting Malaysia Bhd	2016	0.11	0.16	0.46	22.55	0.22	37	0.09	-0.02	0.00	2.09	4.45
11	Genting Malaysia Bhd	2017	0.04	0.06	0.59	22.73	0.36	38	0.09	-0.01	0.00	3.87	5.81
11	Genting Malaysia Bhd	2018	0.00	0.00	0.52	22.76	0.54	39	0.09	-0.01	0.01	0.88	4.84
11	Genting Malaysia Bhd	2019	0.04	0.07	0.55	22.82	0.59	40	0.10	0.00	0.01	0.66	4.41
11	Genting Malaysia Bhd	2020	-0.08	-0.15	0.46	22.67	0.69	41	0.10	0.00	0.01	-1.14	-5.46
11	Genting Malaysia Bhd	2021	-0.03	-0.07	0.55	22.71	1.00	42	0.12	0.01	0.01	2.48	3.30
11	Genting Malaysia Bhd	2022	-0.02	-0.04	0.63	22.60	1.02	43	0.10	0.01	0.01	3.38	8.65
12	7-Eleven Malaysia Holdings Bhd	2020	0.01	0.43	0.99	6.23	17.87	37	0.10	0.00	0.01	-1.14	-5.46
12	7-Eleven Malaysia Holdings Bhd	2021	0.02	0.50	1.02	20.11	14.42	38	0.12	0.01	0.01	2.48	3.30
12	7-Eleven Malaysia Holdings Bhd	2022	0.02	0.50	1.15	20.23	10.53	39	0.10	0.01	0.01	3.38	8.65
13	Sports Toto Bhd	2010	0.03	0.08	3.78	19.77	1.00	42	0.14	0.02	0.01	1.62	7.42
13	Sports Toto Bhd	2011	0.23	0.73	3.23	20.01	1.21	43	0.15	0.02	0.01	3.17	5.29
13	Sports Toto Bhd	2012	0.28	0.83	3.78	19.97	1.15	44	0.15	0.03	0.01	1.66	5.47
13	Sports Toto Bhd	2013	0.25	0.67	3.09	20.04	0.97	45	0.16	0.03	0.01	2.11	4.69
13	Sports Toto Bhd	2014	0.15	0.53	2.34	20.31	1.17	46	0.14	0.02	0.01	3.14	6.01
13	Sports Toto Bhd	2015	0.17	0.56	2.14	20.27	1.37	47	0.12	0.00	0.01	2.10	5.09
13	Sports Toto Bhd	2016	0.11	0.39	1.74	20.34	1.50	48	0.09	-0.02	0.00	2.09	4.45
13	Sports Toto Bhd	2017	0.09	0.32	1.65	20.21	1.49	49	0.09	-0.01	0.00	3.87	5.81
13	Sports Toto Bhd	2018	0.08	0.30	1.44	20.32	1.55	50	0.09	-0.01	0.01	0.88	4.84
13	Sports Toto Bhd	2019	0.09	0.32	1.96	20.29	1.56	51	0.10	0.00	0.01	0.66	4.41

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
13	Sports Toto Bhd	2020	0.05	0.18	1.39	20.34	2.01	52	0.10	0.00	0.01	-1.14	-5.46
13	Sports Toto Bhd	2021	0.06	0.23	1.22	20.35	1.63	53	0.12	0.01	0.01	2.48	3.30
13	Sports Toto Bhd	2022	0.05	0.19	1.07	20.42	1.66	54	0.10	0.01	0.01	3.38	8.65
14	Bank Central Asia Tbk	2009	0.02	0.22	0.01	24.12	0.03	53	0.22	0.03	0.00	4.39	4.63
14	Bank Central Asia Tbk	2010	0.03	0.25	0.01	24.31	0.03	54	0.25	0.03	0.01	5.13	6.22
14	Bank Central Asia Tbk	2011	0.03	0.27	0.01	24.46	0.03	55	0.24	0.03	0.00	5.36	6.17
14	Bank Central Asia Tbk	2012	0.03	0.23	0.01	24.55	0.02	56	0.21	0.03	0.00	4.28	6.03
14	Bank Central Asia Tbk	2013	0.03	0.26	0.02	24.43	0.06	57	0.21	0.03	0.00	6.41	5.56
14	Bank Central Asia Tbk	2014	0.03	0.23	0.02	24.53	0.07	58	0.22	0.02	0.00	6.39	5.01
14	Bank Central Asia Tbk	2015	0.03	0.21	0.02	24.49	0.05	59	0.21	0.01	0.00	6.36	4.88
14	Bank Central Asia Tbk	2016	0.03	0.19	0.02	24.64	0.05	60	0.21	0.01	0.00	3.53	5.03
14	Bank Central Asia Tbk	2017	0.03	0.18	0.02	24.74	0.03	61	0.22	0.01	0.00	3.81	5.07
14	Bank Central Asia Tbk	2018	0.03	0.17	0.02	24.78	0.02	62	0.21	0.01	0.00	3.20	5.17
14	Bank Central Asia Tbk	2019	0.03	0.16	0.03	24.92	0.02	63	0.22	0.01	0.00	3.03	5.02
14	Bank Central Asia Tbk	2020	0.02	0.14	0.02	25.06	0.01	64	0.21	0.01	0.00	1.92	-2.07
14	Bank Central Asia Tbk	2021	0.03	0.16	0.02	25.18	0.01	65	0.22	0.01	0.00	1.56	3.70
14	Bank Central Asia Tbk	2022	0.03	0.19	0.03	25.16	0.01	66	0.22	0.02	0.00	4.21	5.31
15	Bank Negara Indonesia Tbk	2009	0.01	0.12	0.03	23.91	0.29	64	0.22	0.03	0.00	4.39	4.63
15	Bank Negara Indonesia Tbk	2010	0.02	0.12	0.03	24.04	0.17	65	0.25	0.03	0.01	5.13	6.22
15	Bank Negara Indonesia Tbk	2011	0.02	0.18	0.04	24.22	0.23	66	0.24	0.03	0.00	5.36	6.17
15	Bank Negara Indonesia Tbk	2012	0.02	0.17	0.04	24.27	0.20	67	0.21	0.03	0.00	4.28	6.03
15	Bank Negara Indonesia Tbk	2013	0.03	0.22	0.09	24.18	0.52	68	0.21	0.03	0.00	6.41	5.56
15	Bank Negara Indonesia Tbk	2014	0.03	0.19	0.08	24.24	0.34	69	0.22	0.02	0.00	6.39	5.01
15	Bank Negara Indonesia Tbk	2015	0.02	0.12	0.08	24.34	0.43	70	0.21	0.01	0.00	6.36	4.88
15	Bank Negara Indonesia Tbk	2016	0.02	0.13	0.09	24.52	0.50	71	0.21	0.01	0.00	3.53	5.03
15	Bank Negara Indonesia Tbk	2017	0.02	0.14	0.11	24.68	0.51	72	0.22	0.01	0.00	3.81	5.07

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
15	Bank Negara Indonesia Tbk	2018	0.02	0.14	0.12	24.76	0.71	73	0.21	0.01	0.00	3.20	5.17
15	Bank Negara Indonesia Tbk	2019	0.02	0.12	0.10	24.83	0.51	74	0.22	0.01	0.00	3.03	5.02
15	Bank Negara Indonesia Tbk	2020	0.00	0.03	0.07	24.87	0.46	75	0.21	0.01	0.00	1.92	-2.07
15	Bank Negara Indonesia Tbk	2021	0.01	0.09	0.07	24.94	0.44	76	0.22	0.01	0.00	1.56	3.70
15	Bank Negara Indonesia Tbk	2022	0.02	0.14	0.09	24.91	0.46	77	0.22	0.02	0.00	4.21	5.31
16	Bank Rakyat Indonesia Tbk	2009	0.02	0.24	0.10	24.24	0.67	115	0.22	0.03	0.00	4.39	4.63
16	Bank Rakyat Indonesia Tbk	2010	0.03	0.31	0.09	24.53	0.44	116	0.25	0.03	0.01	5.13	6.22
16	Bank Rakyat Indonesia Tbk	2011	0.03	0.31	0.10	24.67	0.46	117	0.24	0.03	0.00	5.36	6.17
16	Bank Rakyat Indonesia Tbk	2012	0.03	0.30	0.05	24.77	0.33	118	0.21	0.03	0.00	4.28	6.03
16	Bank Rakyat Indonesia Tbk	2013	0.04	0.32	0.06	24.66	0.35	119	0.21	0.03	0.00	6.41	5.56
16	Bank Rakyat Indonesia Tbk	2014	0.03	0.26	0.09	24.90	0.63	120	0.22	0.02	0.00	6.39	5.01
16	Bank Rakyat Indonesia Tbk	2015	0.03	0.23	0.09	24.88	0.64	121	0.21	0.01	0.00	6.36	4.88
16	Bank Rakyat Indonesia Tbk	2016	0.03	0.18	0.10	25.03	0.58	122	0.21	0.01	0.00	3.53	5.03
16	Bank Rakyat Indonesia Tbk	2017	0.03	0.18	0.10	25.15	0.56	123	0.22	0.01	0.00	3.81	5.07
16	Bank Rakyat Indonesia Tbk	2018	0.02	0.18	0.12	25.23	0.72	124	0.21	0.01	0.00	3.20	5.17
16	Bank Rakyat Indonesia Tbk	2019	0.02	0.16	0.12	25.35	0.71	125	0.22	0.01	0.00	3.03	5.02
16	Bank Rakyat Indonesia Tbk	2020	0.01	0.08	0.14	25.46	0.91	126	0.21	0.01	0.00	1.92	-2.07
16	Bank Rakyat Indonesia Tbk	2021	0.02	0.11	0.11	25.49	0.53	127	0.22	0.01	0.00	1.56	3.70
16	Bank Rakyat Indonesia Tbk	2022	0.03	0.18	0.11	25.51	0.51	128	0.22	0.02	0.00	4.21	5.31
17	Bank Tabungan Negara Tbk	2017	0.01	0.14	0.19	23.69	2.13	121	0.22	0.01	0.00	3.81	5.07
17	Bank Tabungan Negara Tbk	2018	0.01	0.12	0.20	23.79	2.47	122	0.21	0.01	0.00	3.20	5.17
17	Bank Tabungan Negara Tbk	2019	0.00	0.01	0.22	23.83	2.84	123	0.22	0.01	0.00	3.03	5.02
17	Bank Tabungan Negara Tbk	2020	0.00	0.08	0.20	23.97	3.48	124	0.21	0.01	0.00	1.92	-2.07
17	Bank Tabungan Negara Tbk	2021	0.01	0.11	0.18	23.98	3.08	125	0.22	0.01	0.00	1.56	3.70
17	Bank Tabungan Negara Tbk	2022	0.01	0.12	0.17	23.97	2.60	126	0.22	0.02	0.00	4.21	5.31
18	Bank Danamon Indonesia Tbk	2009	0.16	0.09	1.11	20.63	0.55	54	0.22	0.03	0.00	4.39	4.63

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
18	Bank Danamon Indonesia Tbk	2010	0.29	0.15	1.32	20.81	0.65	55	0.25	0.03	0.01	5.13	6.22
18	Bank Danamon Indonesia Tbk	2011	0.31	0.14	1.81	20.94	0.76	56	0.24	0.03	0.00	5.36	6.17
18	Bank Danamon Indonesia Tbk	2012	0.03	0.14	0.21	23.51	0.86	57	0.21	0.03	0.00	4.28	6.03
18	Bank Danamon Indonesia Tbk	2013	0.03	0.15	0.19	23.44	0.93	58	0.21	0.03	0.00	6.41	5.56
18	Bank Danamon Indonesia Tbk	2014	0.01	0.08	0.17	23.49	0.83	59	0.22	0.02	0.00	6.39	5.01
18	Bank Danamon Indonesia Tbk	2015	0.01	0.07	0.14	23.34	0.67	60	0.21	0.01	0.00	6.36	4.88
18	Bank Danamon Indonesia Tbk	2016	0.02	0.08	0.14	23.28	0.55	61	0.21	0.01	0.00	3.53	5.03
18	Bank Danamon Indonesia Tbk	2017	0.02	0.10	0.15	23.30	0.52	62	0.22	0.01	0.00	3.81	5.07
18	Bank Danamon Indonesia Tbk	2018	0.02	0.09	0.16	23.29	0.53	63	0.21	0.01	0.00	3.20	5.17
18	Bank Danamon Indonesia Tbk	2019	0.02	0.09	0.14	23.36	0.53	64	0.22	0.01	0.00	3.03	5.02
18	Bank Danamon Indonesia Tbk	2020	0.00	0.02	0.10	23.38	0.41	65	0.21	0.01	0.00	1.92	-2.07
18	Bank Danamon Indonesia Tbk	2021	0.01	0.04	0.07	23.32	0.25	66	0.22	0.01	0.00	1.56	3.70
18	Bank Danamon Indonesia Tbk	2022	0.02	0.07	0.06	23.26	0.22	67	0.22	0.02	0.00	4.21	5.31
19	Bank Mandiri Tbk	2009	0.02	0.18	0.04	24.46	0.35	12	0.22	0.03	0.00	4.39	4.63
19	Bank Mandiri Tbk	2010	0.02	0.22	0.04	24.63	0.32	13	0.25	0.03	0.01	5.13	6.22
19	Bank Mandiri Tbk	2011	0.02	0.21	0.04	24.83	0.32	14	0.24	0.03	0.00	5.36	6.17
19	Bank Mandiri Tbk	2012	0.03	0.21	0.10	24.91	0.79	15	0.21	0.03	0.00	4.28	6.03
19	Bank Mandiri Tbk	2013	0.03	0.24	0.11	24.82	0.85	16	0.21	0.03	0.00	6.41	5.56
19	Bank Mandiri Tbk	2014	0.02	0.20	0.12	24.96	0.87	17	0.22	0.02	0.00	6.39	5.01
19	Bank Mandiri Tbk	2015	0.02	0.18	0.12	24.92	0.85	18	0.21	0.01	0.00	6.36	4.88
19	Bank Mandiri Tbk	2016	0.01	0.09	0.12	25.07	0.73	19	0.21	0.01	0.00	3.53	5.03
19	Bank Mandiri Tbk	2017	0.02	0.13	0.12	25.14	0.74	20	0.22	0.01	0.00	3.81	5.07
19	Bank Mandiri Tbk	2018	0.02	0.14	0.15	25.16	0.90	21	0.21	0.01	0.00	3.20	5.17
19	Bank Mandiri Tbk	2019	0.02	0.13	0.14	25.28	0.85	22	0.22	0.01	0.00	3.03	5.02
19	Bank Mandiri Tbk	2020	0.01	0.09	0.12	25.42	0.94	23	0.21	0.01	0.00	1.92	-2.07
19	Bank Mandiri Tbk	2021	0.02	0.14	0.17	25.52	1.37	24	0.22	0.01	0.00	1.56	3.70

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
19	Bank Mandiri Tbk	2022	0.02	0.19	0.18	25.57	1.44	25	0.22	0.02	0.00	4.21	5.31
20	Affin Bank Bhd	2020	0.00	0.02	0.05	9.76	0.36	16	0.14	0.00	0.00	-1.14	-5.46
20	Affin Bank Bhd	2021	0.01	0.05	0.07	23.66	0.41	17	0.13	0.01	0.00	0.00	3.30
20	Affin Bank Bhd	2022	0.01	0.11	0.11	23.74	0.80	18	0.13	0.01	0.00	0.00	8.65
21	Alliance bank Malaysia	2010	0.01	0.10	0.12	23.00	0.59	29	0.15	0.02	0.00	1.62	7.42
21	Alliance bank Malaysia	2011	0.01	0.12	0.11	23.20	0.39	30	0.14	0.02	0.00	3.17	5.29
21	Alliance bank Malaysia	2012	0.01	0.13	0.05	23.29	0.16	31	0.16	0.02	0.00	1.66	5.47
21	Alliance bank Malaysia	2013	0.01	0.13	0.05	23.37	0.17	32	0.15	0.02	0.00	2.11	4.69
21	Alliance bank Malaysia	2014	0.01	0.14	0.04	23.41	0.15	33	0.15	0.02	0.00	3.14	6.01
21	Alliance bank Malaysia	2015	0.01	0.13	0.04	23.39	0.32	34	0.15	0.01	0.01	2.10	5.09
21	Alliance bank Malaysia	2016	0.01	0.10	0.05	23.38	0.38	35	0.16	0.00	0.00	2.09	4.45
21	Alliance bank Malaysia	2017	0.01	0.11	0.05	23.23	0.34	36	0.16	-0.01	0.00	3.87	5.81
21	Alliance bank Malaysia	2018	0.01	0.08	0.06	23.36	0.45	37	0.15	0.00	0.00	0.88	4.84
21	Alliance bank Malaysia	2019	0.01	0.09	0.05	23.35	0.40	38	0.15	0.00	0.00	0.66	4.41
21	Alliance bank Malaysia	2020	0.01	0.07	0.06	23.37	0.47	39	0.14	0.00	0.00	-1.14	-5.46
21	Alliance bank Malaysia	2021	0.01	0.06	0.05	23.41	0.37	40	0.13	0.01	0.00	2.48	3.30
21	Alliance bank Malaysia	2022	0.01	0.09	0.05	23.41	0.37	41	0.13	0.01	0.00	3.38	8.65
22	AMMB Holdings Bhd	2010	0.01	0.10	0.15	24.11	0.59	35	0.15	0.02	0.00	1.62	7.42
22	AMMB Holdings Bhd	2011	0.01	0.13	0.19	24.30	0.63	36	0.14	0.02	0.00	3.17	5.29
22	AMMB Holdings Bhd	2012	0.01	0.13	0.13	24.33	0.89	37	0.16	0.02	0.00	1.66	5.47
22	AMMB Holdings Bhd	2013	0.01	0.13	0.16	24.44	1.32	38	0.15	0.02	0.00	2.11	4.69
22	AMMB Holdings Bhd	2014	0.01	0.14	0.15	24.43	1.14	39	0.15	0.02	0.00	3.14	6.01
22	AMMB Holdings Bhd	2015	0.02	0.15	0.14	24.31	1.10	40	0.15	0.01	0.01	2.10	5.09
22	AMMB Holdings Bhd	2016	0.01	0.08	0.14	24.26	1.15	41	0.16	0.00	0.00	2.09	4.45
22	AMMB Holdings Bhd	2017	0.01	0.09	0.13	24.14	0.94	42	0.16	-0.01	0.00	3.87	5.81
22	AMMB Holdings Bhd	2018	0.01	0.06	0.11	24.30	0.82	43	0.15	0.00	0.00	0.88	4.84

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
22	AMMB Holdings Bhd	2019	0.01	0.09	0.13	24.38	1.04	44	0.15	0.00	0.00	0.66	4.41
22	AMMB Holdings Bhd	2020	0.01	0.07	0.12	24.39	1.00	45	0.14	0.00	0.00	-1.14	-5.46
22	AMMB Holdings Bhd	2021	-0.02	-0.26	0.10	24.44	1.01	46	0.13	0.01	0.00	2.48	3.30
22	AMMB Holdings Bhd	2022	0.01	0.09	0.11	24.45	1.00	47	0.13	0.01	0.00	3.38	8.65
23	Bursa Malaysia Bhd	2010	0.06	0.13	0.30	20.13	0.00	35	0.15	0.02	0.00	1.62	7.42
23	Bursa Malaysia Bhd	2011	0.09	0.17	0.31	20.08	0.00	36	0.14	0.02	0.00	3.17	5.29
23	Bursa Malaysia Bhd	2012	0.07	0.17	0.03	20.39	0.00	37	0.16	0.02	0.00	1.66	5.47
23	Bursa Malaysia Bhd	2013	0.10	0.22	0.04	20.09	0.00	38	0.15	0.02	0.00	2.11	4.69
23	Bursa Malaysia Bhd	2014	0.13	0.28	0.03	19.98	0.00	39	0.15	0.02	0.00	3.14	6.01
23	Bursa Malaysia Bhd	2015	0.10	0.27	0.02	20.00	0.00	40	0.15	0.01	0.01	2.10	5.09
23	Bursa Malaysia Bhd	2016	0.09	0.24	0.01	20.11	0.00	41	0.16	0.00	0.00	2.09	4.45
23	Bursa Malaysia Bhd	2017	0.09	0.25	0.02	20.13	0.01	42	0.16	-0.01	0.00	3.87	5.81
23	Bursa Malaysia Bhd	2018	0.09	0.26	0.02	20.19	0.01	43	0.15	0.00	0.00	0.88	4.84
23	Bursa Malaysia Bhd	2019	0.08	0.24	0.02	20.16	0.01	44	0.15	0.00	0.00	0.66	4.41
23	Bursa Malaysia Bhd	2020	0.11	0.40	0.01	20.51	0.01	45	0.14	0.00	0.00	-1.14	-5.46
23	Bursa Malaysia Bhd	2021	0.08	0.44	0.01	20.77	0.01	46	0.13	0.01	0.00	2.48	3.30
23	Bursa Malaysia Bhd	2022	0.05	0.29	0.01	20.69	0.01	47	0.13	0.01	0.00	3.38	8.65
24	CIMB Group Holdings Bhd	2009	0.01	0.13	0.09	24.97	0.56	23	0.16	0.02	0.00	0.58	-1.51
24	CIMB Group Holdings Bhd	2010	0.01	0.14	0.12	25.19	0.63	24	0.15	0.02	0.00	1.62	7.42
24	CIMB Group Holdings Bhd	2011	0.01	0.16	0.12	25.27	0.73	25	0.14	0.02	0.00	3.17	5.29
24	CIMB Group Holdings Bhd	2012	0.01	0.11	0.14	25.42	0.98	26	0.16	0.02	0.00	1.66	5.47
24	CIMB Group Holdings Bhd	2013	0.01	0.16	0.14	25.45	1.12	27	0.15	0.02	0.00	2.11	4.69
24	CIMB Group Holdings Bhd	2014	0.01	0.09	0.12	25.50	0.96	28	0.15	0.02	0.00	3.14	6.01
24	CIMB Group Holdings Bhd	2015	0.01	0.08	0.12	25.40	1.08	29	0.15	0.01	0.01	2.10	5.09
24	CIMB Group Holdings Bhd	2016	0.01	0.08	0.10	25.41	0.87	30	0.16	0.00	0.00	2.09	4.45
24	CIMB Group Holdings Bhd	2017	0.01	0.09	0.13	25.55	1.01	31	0.16	-0.01	0.00	3.87	5.81

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
24	CIMB Group Holdings Bhd	2018	0.01	0.11	0.13	25.59	1.10	32	0.15	0.00	0.00	0.88	4.84
24	CIMB Group Holdings Bhd	2019	0.01	0.08	0.13	25.67	1.09	33	0.15	0.00	0.00	0.66	4.41
24	CIMB Group Holdings Bhd	2020	0.00	0.02	0.13	25.73	1.18	34	0.14	0.00	0.00	-1.14	-5.46
24	CIMB Group Holdings Bhd	2021	0.01	0.07	0.12	25.73	1.06	35	0.13	0.01	0.00	2.48	3.30
24	CIMB Group Holdings Bhd	2022	0.01	0.09	0.12	25.74	1.06	36	0.13	0.01	0.00	3.38	8.65
25	Hong Leong Bank Bhd	2010	0.01	0.15	0.05	23.99	0.15	106	0.15	0.02	0.00	1.62	7.42
25	Hong Leong Bank Bhd	2011	0.01	0.15	0.08	24.60	0.91	107	0.14	0.02	0.00	3.17	5.29
25	Hong Leong Bank Bhd	2012	0.01	0.15	0.13	24.63	0.63	108	0.16	0.02	0.00	1.66	5.47
25	Hong Leong Bank Bhd	2013	0.01	0.15	0.13	24.67	0.77	109	0.15	0.02	0.00	2.11	4.69
25	Hong Leong Bank Bhd	2014	0.01	0.14	0.14	24.70	0.89	110	0.15	0.02	0.00	3.14	6.01
25	Hong Leong Bank Bhd	2015	0.01	0.15	0.12	24.61	0.75	111	0.15	0.01	0.01	2.10	5.09
25	Hong Leong Bank Bhd	2016	0.01	0.09	0.08	24.58	0.38	112	0.16	0.00	0.00	2.09	4.45
25	Hong Leong Bank Bhd	2017	0.01	0.09	0.09	24.54	0.26	113	0.16	-0.01	0.00	3.87	5.81
25	Hong Leong Bank Bhd	2018	0.01	0.11	0.11	24.64	0.33	114	0.15	0.00	0.00	0.88	4.84
25	Hong Leong Bank Bhd	2019	0.01	0.10	0.08	24.64	0.21	115	0.15	0.00	0.00	0.66	4.41
25	Hong Leong Bank Bhd	2020	0.01	0.09	0.09	24.67	0.26	116	0.14	0.00	0.00	-1.14	-5.46
25	Hong Leong Bank Bhd	2021	0.01	0.10	0.09	24.77	0.18	117	0.13	0.01	0.00	2.48	3.30
25	Hong Leong Bank Bhd	2022	0.01	0.11	0.12	24.78	0.38	118	0.13	0.01	0.00	3.38	8.65
26	Hong Leong Financial Group Bhd	2010	0.01	0.16	0.11	24.09	1.26	48	0.15	0.02	0.00	1.62	7.42
26	Hong Leong Financial Group Bhd	2011	0.01	0.22	0.09	24.67	1.07	49	0.14	0.02	0.00	3.17	5.29
26	Hong Leong Financial Group Bhd	2012	0.01	0.14	0.13	24.71	1.20	50	0.16	0.02	0.00	1.66	5.47
26	Hong Leong Financial Group Bhd	2013	0.01	0.15	0.14	24.77	1.41	51	0.15	0.02	0.00	2.11	4.69
26	Hong Leong Financial Group Bhd	2014	0.01	0.15	0.15	24.81	1.47	52	0.15	0.02	0.00	3.14	6.01
26	Hong Leong Financial Group Bhd	2015	0.01	0.13	0.12	24.71	1.06	53	0.15	0.01	0.01	2.10	5.09
26	Hong Leong Financial Group Bhd	2016	0.01	0.09	0.09	24.68	0.66	54	0.16	0.00	0.00	2.09	4.45
26	Hong Leong Financial Group Bhd	2017	0.01	0.09	0.09	24.66	0.49	55	0.16	-0.01	0.00	3.87	5.81

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
26	Hong Leong Financial Group Bhd	2018	0.01	0.11	0.10	24.76	0.51	56	0.15	0.00	0.00	0.88	4.84
26	Hong Leong Financial Group Bhd	2019	0.01	0.10	0.08	24.78	0.39	57	0.15	0.00	0.00	0.66	4.41
26	Hong Leong Financial Group Bhd	2020	0.01	0.09	0.09	24.80	0.41	58	0.14	0.00	0.00	-1.14	-5.46
26	Hong Leong Financial Group Bhd	2021	0.01	0.10	0.08	24.91	0.30	59	0.13	0.01	0.00	2.48	3.30
26	Hong Leong Financial Group Bhd	2022	0.01	0.11	0.10	24.90	0.53	60	0.13	0.01	0.00	3.38	8.65
27	Malayan Banking Bhd	2009	0.00	0.03	0.11	25.21	0.69	50	0.16	0.02	0.00	0.58	-1.51
27	Malayan Banking Bhd	2010	0.01	0.13	0.10	25.37	0.62	51	0.15	0.02	0.00	1.62	7.42
27	Malayan Banking Bhd	2011	0.01	0.14	0.11	25.64	0.72	52	0.14	0.02	0.00	3.17	5.29
27	Malayan Banking Bhd	2012	0.01	0.14	0.12	25.81	0.72	53	0.16	0.02	0.00	1.66	5.47
27	Malayan Banking Bhd	2013	0.01	0.15	0.12	25.86	0.82	54	0.15	0.02	0.00	2.11	4.69
27	Malayan Banking Bhd	2014	0.01	0.14	0.11	25.93	0.84	55	0.15	0.02	0.00	3.14	6.01
27	Malayan Banking Bhd	2015	0.01	0.12	0.12	25.83	1.02	56	0.15	0.01	0.01	2.10	5.09
27	Malayan Banking Bhd	2016	0.01	0.11	0.11	25.82	0.89	57	0.16	0.00	0.00	2.09	4.45
27	Malayan Banking Bhd	2017	0.01	0.10	0.11	25.97	0.82	58	0.16	-0.01	0.00	3.87	5.81
27	Malayan Banking Bhd	2018	0.01	0.11	0.11	26.00	0.82	59	0.15	0.00	0.00	0.88	4.84
27	Malayan Banking Bhd	2019	0.01	0.10	0.11	26.04	0.86	60	0.15	0.00	0.00	0.66	4.41
27	Malayan Banking Bhd	2020	0.01	0.07	0.10	26.09	0.74	61	0.14	0.00	0.00	-1.14	-5.46
27	Malayan Banking Bhd	2021	0.01	0.10	0.09	26.10	0.67	62	0.13	0.01	0.00	2.48	3.30
27	Malayan Banking Bhd	2022	0.01	0.10	0.09	26.09	0.72	63	0.13	0.01	0.00	3.38	8.65
28	Public Bank Bhd	2009	0.01	0.22	0.05	24.87	0.73	44	0.16	0.02	0.00	0.58	-1.51
28	Public Bank Bhd	2010	0.01	0.22	0.05	25.02	0.62	45	0.15	0.02	0.00	1.62	7.42
28	Public Bank Bhd	2011	0.02	0.24	0.06	25.09	0.73	46	0.14	0.02	0.00	3.17	5.29
28	Public Bank Bhd	2012	13.79	0.21	57.75	18.31	0.58	47	0.16	0.02	0.00	1.66	5.47
28	Public Bank Bhd	2013	0.01	0.21	0.06	25.26	0.53	48	0.15	0.02	0.00	2.11	4.69
28	Public Bank Bhd	2014	0.01	0.17	0.06	25.32	0.48	49	0.15	0.02	0.00	3.14	6.01
28	Public Bank Bhd	2015	0.02	0.18	0.05	25.16	0.44	50	0.15	0.01	0.01	2.10	5.09

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
28	Public Bank Bhd	2016	0.01	0.16	0.06	25.16	0.47	51	0.16	0.00	0.00	2.09	4.45
28	Public Bank Bhd	2017	0.01	0.14	0.07	25.31	0.53	52	0.16	-0.01	0.00	3.87	5.81
28	Public Bank Bhd	2018	0.01	0.14	0.08	25.34	0.56	53	0.15	0.00	0.00	0.88	4.84
28	Public Bank Bhd	2019	0.01	0.12	0.06	25.39	0.46	54	0.15	0.00	0.00	0.66	4.41
28	Public Bank Bhd	2020	0.01	0.10	0.06	25.44	0.40	55	0.14	0.00	0.00	-1.14	-5.46
28	Public Bank Bhd	2021	0.01	0.12	0.06	25.43	0.38	56	0.13	0.01	0.00	2.48	3.30
28	Public Bank Bhd	2022	0.01	0.12	0.07	25.44	0.49	57	0.13	0.01	0.00	3.38	8.65
29	RHB Bank Bhd	2010	0.01	0.14	0.10	24.46	1.14	14	0.15	0.02	0.00	1.62	7.42
29	RHB Bank Bhd	2011	0.01	0.13	0.08	24.60	0.96	15	0.14	0.02	0.00	3.17	5.29
29	RHB Bank Bhd	2012	0.01	0.12	0.09	24.85	0.72	16	0.16	0.02	0.00	1.66	5.47
29	RHB Bank Bhd	2013	0.01	0.11	0.09	24.79	0.62	17	0.15	0.02	0.00	2.11	4.69
29	RHB Bank Bhd	2014	0.01	0.12	0.08	24.86	0.69	18	0.15	0.02	0.00	3.14	6.01
29	RHB Bank Bhd	2015	0.01	0.10	0.10	24.70	1.06	19	0.15	0.01	0.01	2.10	5.09
29	RHB Bank Bhd	2016	0.01	0.08	0.09	24.69	0.78	20	0.16	0.00	0.00	2.09	4.45
29	RHB Bank Bhd	2017	0.01	0.08	0.07	24.77	0.48	21	0.16	-0.01	0.00	3.87	5.81
29	RHB Bank Bhd	2018	0.01	0.10	0.09	24.80	0.70	22	0.15	0.00	0.00	0.88	4.84
29	RHB Bank Bhd	2019	0.01	0.10	0.07	24.87	0.50	23	0.15	0.00	0.00	0.66	4.41
29	RHB Bank Bhd	2020	0.01	0.07	0.06	24.93	0.41	24	0.14	0.00	0.00	-1.14	-5.46
29	RHB Bank Bhd	2021	0.01	0.09	0.06	24.97	0.43	25	0.13	0.01	0.00	2.48	3.30
29	RHB Bank Bhd	2022	0.01	0.09	0.09	24.98	0.75	26	0.13	0.01	0.00	3.38	8.65
30	Tune Protect Group Bhd	2020	0.01	0.03	0.02	6.08	0.01	10	0.14	0.00	0.00	-1.14	-5.46
30	Tune Protect Group Bhd	2021	-0.01	-0.03	0.00	19.72	0.01	11	0.13	0.01	0.00	2.48	3.30
30	Tune Protect Group Bhd	2022	-0.03	-0.07	0.00	19.52	0.01	12	0.13	0.01	0.00	3.38	8.65
31	Jasa Marga Tbk	2012	0.07	0.19	0.68	21.67	1.33	35	0.24	0.02	0.00	4.28	6.03
31	Jasa Marga Tbk	2013	0.04	0.13	0.68	21.56	1.54	36	0.24	0.02	0.00	6.41	5.56
31	Jasa Marga Tbk	2014	0.05	0.15	0.69	21.67	1.71	37	0.30	0.01	0.01	6.39	5.01

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
31	Jasa Marga Tbk	2015	0.04	0.14	0.61	21.71	1.79	38	0.26	0.01	0.01	6.36	4.88
31	Jasa Marga Tbk	2016	0.04	0.14	0.62	22.10	2.00	39	0.25	0.01	0.01	3.53	5.03
31	Jasa Marga Tbk	2017	0.03	0.15	0.65	22.49	2.28	40	0.21	0.02	0.01	3.81	5.07
31	Jasa Marga Tbk	2018	0.03	0.13	0.55	22.48	2.05	41	0.21	0.02	0.00	3.20	5.17
31	Jasa Marga Tbk	2019	0.02	0.12	0.54	22.69	2.39	42	0.23	0.01	0.01	3.03	5.02
31	Jasa Marga Tbk	2020	0.00	0.03	0.67	22.72	3.44	43	0.28	0.00	0.01	1.92	-2.07
31	Jasa Marga Tbk	2021	0.02	0.08	0.67	22.68	3.08	44	0.28	-0.01	0.00	1.56	3.70
31	Jasa Marga Tbk	2022	0.03	0.13	0.62	22.49	2.42	45	0.29	-0.01	0.00	4.21	5.31
32	Tower Bersama Infrastructure Tbk PT	2013	0.08	0.37	0.73	21.15	3.26	10	0.24	0.02	0.00	6.41	5.56
32	Tower Bersama Infrastructure Tbk PT	2014	0.03	0.35	0.77	21.28	7.74	11	0.30	0.01	0.01	6.39	5.01
32	Tower Bersama Infrastructure Tbk PT	2015	0.06	0.96	0.84	21.23	12.08	12	0.26	0.01	0.01	6.36	4.88
32	Tower Bersama Infrastructure Tbk PT	2016	0.06	0.84	0.83	21.28	12.16	13	0.25	0.01	0.01	3.53	5.03
32	Tower Bersama Infrastructure Tbk PT	2017	0.09	0.76	0.83	21.36	6.60	14	0.21	0.02	0.01	3.81	5.07
32	Tower Bersama Infrastructure Tbk PT	2018	0.02	0.20	0.81	21.44	6.78	15	0.21	0.02	0.00	3.20	5.17
32	Tower Bersama Infrastructure Tbk PT	2019	0.03	0.16	0.77	21.52	4.60	16	0.23	0.01	0.01	3.03	5.02
32	Tower Bersama Infrastructure Tbk PT	2020	0.03	0.11	0.69	21.68	2.79	17	0.28	0.00	0.01	1.92	-2.07
32	Tower Bersama Infrastructure Tbk PT	2021	0.04	0.17	0.73	21.80	3.17	18	0.28	-0.01	0.00	1.56	3.70
32	Tower Bersama Infrastructure Tbk PT	2022	0.04	0.17	0.72	21.74	2.87	19	0.29	-0.01	0.00	4.21	5.31
33	Sarana Menara Nusantara Tbk	2019	0.08	0.26	0.56	21.41	1.74	12	0.23	0.01	0.01	3.03	5.02
33	Sarana Menara Nusantara Tbk	2020	0.08	0.27	0.60	21.61	1.99	13	0.28	0.00	0.01	1.92	-2.07
33	Sarana Menara Nusantara Tbk	2021	0.05	0.28	0.72	22.25	3.91	14	0.28	-0.01	0.00	1.56	3.70
33	Sarana Menara Nusantara Tbk	2022	0.05	0.25	0.70	22.16	3.12	15	0.29	-0.01	0.00	4.21	5.31
34	Waskita Karya Tbk	2015	0.04	0.11	0.33	21.52	0.87	55	0.26	0.01	0.01	6.36	4.88
34	Waskita Karya Tbk	2016	0.03	0.16	0.48	22.24	2.28	56	0.25	0.01	0.01	3.53	5.03
34	Waskita Karya Tbk	2017	0.04	0.28	0.52	22.70	3.13	57	0.21	0.02	0.01	3.81	5.07
34	Waskita Karya Tbk	2018	0.03	0.22	0.56	22.89	3.59	58	0.21	0.02	0.00	3.20	5.17

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
34	Waskita Karya Tbk	2019	0.01	0.05	0.60	22.90	3.96	59	0.23	0.01	0.01	3.03	5.02
34	Waskita Karya Tbk	2020	-0.07	-2.24	0.66	22.69	20.35	60	0.28	0.00	0.01	1.92	-2.07
34	Waskita Karya Tbk	2021	-0.01	-0.11	0.66	22.70	6.74	61	0.28	-0.01	0.00	1.56	3.70
34	Waskita Karya Tbk	2022	-0.02	-0.22	0.66	22.56	7.11	62	0.29	-0.01	0.00	4.21	5.31
35	Mega First Corporation Bhd	2020	0.10	0.16	0.42	6.64	0.34	55	0.24	0.01	0.01	-1.14	-5.46
35	Mega First Corporation Bhd	2021	0.12	0.19	1.06	20.65	0.33	56	0.25	0.01	0.01	2.48	3.30
35	Mega First Corporation Bhd	2022	0.09	0.14	0.90	20.70	0.27	57	0.22	0.00	0.00	3.38	8.65
36	Malakaoff Corp Bhd	2020	0.01	0.04	0.51	8.70	1.78	46	0.24	0.01	0.01	-1.14	-5.46
36	Malakaoff Corp Bhd	2021	0.01	0.04	0.58	22.44	1.59	47	0.25	0.01	0.01	2.48	3.30
36	Malakaoff Corp Bhd	2022	0.01	0.05	0.54	22.33	1.38	48	0.22	0.00	0.00	3.38	8.65
37	Leon Fuat Bhd	2020	0.04	0.07	0.51	5.20	0.77	49	0.24	0.01	0.01	-1.14	-5.46
37	Leon Fuat Bhd	2021	0.13	0.26	0.60	19.33	0.82	50	0.25	0.01	0.01	2.48	3.30
37	Leon Fuat Bhd	2022	0.03	0.05	0.55	19.28	0.81	51	0.22	0.00	0.00	3.38	8.65
38	Luster Industries Bhd	2020	0.02	0.02	0.06	4.48	0.05	35	0.24	0.01	0.01	-1.14	-5.46
38	Luster Industries Bhd	2021	0.02	0.03	0.05	18.62	0.08	36	0.25	0.01	0.01	2.48	3.30
38	Luster Industries Bhd	2022	-0.03	-0.06	0.13	18.65	0.25	37	0.22	0.00	0.00	3.38	8.65
39	YTL Corporation Bhd	2010	0.02	0.08	0.78	23.38	2.92	56	0.23	0.03	0.00	1.62	7.42
39	YTL Corporation Bhd	2011	0.02	0.10	0.74	23.50	2.73	57	0.23	0.03	0.00	3.17	5.29
39	YTL Corporation Bhd	2012	0.02	0.10	0.80	23.51	2.40	58	0.24	0.03	0.00	1.66	5.47
39	YTL Corporation Bhd	2013	0.02	0.10	0.75	23.55	2.34	59	0.25	0.02	0.00	2.11	4.69
39	YTL Corporation Bhd	2014	0.03	0.11	0.70	23.67	2.33	60	0.26	0.01	0.00	3.14	6.01
39	YTL Corporation Bhd	2015	0.02	0.08	0.66	23.60	2.56	61	0.27	0.00	0.00	2.10	5.09
39	YTL Corporation Bhd	2016	0.01	0.06	0.62	23.54	2.54	62	0.26	-0.01	0.00	2.09	4.45
39	YTL Corporation Bhd	2017	0.01	0.06	0.64	23.58	2.91	63	0.25	-0.02	0.00	3.87	5.81
39	YTL Corporation Bhd	2018	0.00	0.02	0.64	23.60	2.98	64	0.26	-0.01	0.01	0.88	4.84
39	YTL Corporation Bhd	2019	0.00	0.02	0.65	23.65	3.47	65	0.26	0.00	0.01	0.66	4.41

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
39	YTL Corporation Bhd	2020	0.00	-0.02	0.70	23.52	3.63	66	0.24	0.01	0.01	-1.14	-5.46
39	YTL Corporation Bhd	2021	-0.01	-0.03	0.66	23.60	3.64	67	0.25	0.01	0.01	2.48	3.30
39	YTL Corporation Bhd	2022	0.01	0.04	0.65	23.52	3.37	68	0.22	0.00	0.00	3.38	8.65
40	Matrix COncepts Holdings Bhd	2020	0.10	0.15	0.32	6.39	0.27	25	0.10	0.00	0.00	-1.14	-5.46
40	Matrix COncepts Holdings Bhd	2021	0.10	0.14	0.83	20.26	0.18	26	0.09	-0.01	0.00	2.48	3.30
40	Matrix COncepts Holdings Bhd	2022	0.08	0.11	0.78	20.25	0.15	27	0.10	0.00	0.01	3.38	8.65
41	MKH Bhd	2020	0.01	0.03	0.28	6.69	0.40	42	0.10	0.00	0.00	-1.14	-5.46
41	MKH Bhd	2021	0.02	0.05	0.52	20.53	0.63	43	0.09	-0.01	0.00	2.48	3.30
41	MKH Bhd	2022	0.04	0.07	0.48	20.42	0.51	44	0.10	0.00	0.01	3.38	8.65
42	Malton Bhd	2020	0.01	0.02	0.32	6.32	0.56	41	0.10	0.00	0.00	-1.14	-5.46
42	Malton Bhd	2021	0.00	0.00	0.33	20.27	0.67	42	0.09	-0.01	0.00	2.48	3.30
42	Malton Bhd	2022	0.03	0.08	0.31	20.18	0.57	43	0.10	0.00	0.01	3.38	8.65
43	Malaysian Resources Corporation Bhd	2020	-0.02	-0.04	0.26	7.63	0.44	53	0.10	0.00	0.00	-1.14	-5.46
43	Malaysian Resources Corporation Bhd	2021	0.00	0.00	0.68	21.52	1.04	54	0.09	-0.01	0.00	3.87	3.30
43	Malaysian Resources Corporation Bhd	2022	0.01	0.01	0.65	21.46	1.04	55	0.10	0.00	0.01	0.88	8.65
44	Land & General BHd	2020	0.01	0.01	0.14	5.89	0.19	57	0.10	0.00	0.00	-1.14	-5.46
44	Land & General BHd	2021	0.01	0.02	0.14	19.79	0.20	58	0.09	-0.01	0.00	2.48	3.30
44	Land & General BHd	2022	0.02	0.02	0.13	19.76	0.18	59	0.10	0.00	0.01	3.38	8.65
45	MI Technovation Bhd	2020	0.12	0.13	0.51	4.70	0.02	14	0.08	0.00	0.00	-1.14	-5.46
45	MI Technovation Bhd	2021	0.05	0.06	2.59	19.49	0.11	15	0.08	0.01	0.01	2.48	3.30
45	MI Technovation Bhd	2022	0.06	0.07	1.01	19.45	0.08	16	0.07	0.02	0.01	3.38	8.65
46	Elsoft Research Bhd	2020	0.01	0.01	0.03	3.29	0.00	25	0.08	0.00	0.00	-1.14	-5.46
46	Elsoft Research Bhd	2021	0.09	0.10	5.76	17.18	0.00	26	0.08	0.01	0.01	2.48	3.30
46	Elsoft Research Bhd	2022	0.28	0.31	2.53	17.35	0.00	27	0.07	0.02	0.01	3.38	8.65
47	DRB-Hicom Bhd	2020	0.01	0.07	0.23	9.34	1.00	21	0.08	0.00	0.00	-1.14	-5.46

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
47	DRB-Hicom Bhd	2021	-0.01	-0.03	0.28	23.15	1.15	22	0.08	0.01	0.01	2.48	3.30
47	DRB-Hicom Bhd	2022	0.00	0.02	0.28	23.18	1.07	23	0.07	0.02	0.01	3.38	8.65
48	Dufu Technology Corp Bhd	2020	0.16	0.19	0.80	4.35	0.07	34	0.08	0.00	0.00	-1.14	-5.46
48	Dufu Technology Corp Bhd	2021	0.19	0.24	0.99	18.35	0.06	35	0.08	0.01	0.01	2.48	3.30
48	Dufu Technology Corp Bhd	2022	0.16	0.20	0.43	18.38	0.17	36	0.07	0.02	0.01	3.38	8.65
49	Duopharma Biotech Bhs	2020	0.05	0.09	0.61	5.57	0.47	43	0.08	0.00	0.00	-1.14	-5.46
49	Duopharma Biotech Bhs	2021	0.06	0.11	0.57	19.45	0.64	44	0.08	0.01	0.01	2.48	3.30
49	Duopharma Biotech Bhs	2022	0.06	0.11	0.56	19.44	0.66	45	0.07	0.02	0.01	3.38	8.65
50	Excel Force Msc Bhd	2020	0.10	0.11	0.04	3.24	0.01	27	0.08	0.00	0.00	-1.14	-5.46
50	Excel Force Msc Bhd	2021	0.11	0.12	0.05	17.09	0.01	28	0.08	0.01	0.01	3.38	3.30
50	Excel Force Msc Bhd	2022	0.11	0.12	0.05	10.16	0.01	29	0.07	0.02	0.01	4.21	8.65
51	George Kent (Malaysia) Bhd	2020	0.05	0.08	0.17	5.21	0.13	85	0.08	0.00	0.00	-1.14	-5.46
51	George Kent (Malaysia) Bhd	2021	0.06	0.09	0.32	19.14	0.42	86	0.08	0.01	0.01	2.48	3.30
51	George Kent (Malaysia) Bhd	2022	0.04	0.06	0.28	19.15	0.38	87	0.07	0.02	0.01	3.38	8.65
52	Globetronics Technology Bhd	2020	0.15	0.16	0.41	4.42	0.00	31	0.08	0.00	0.00	-1.14	-5.46
52	Globetronics Technology Bhd	2021	0.16	0.18	0.24	18.20	0.00	32	0.08	0.01	0.01	2.48	3.30
52	Globetronics Technology Bhd	2022	0.14	0.15	0.14	18.12	0.00	33	0.07	0.02	0.01	3.38	8.65
53	Willowglen Msc Bhd	2020	0.08	0.10	0.09	3.96	0.01	49	0.08	0.00	0.00	-1.14	-5.46
53	Willowglen Msc Bhd	2021	0.07	0.08	0.08	17.75	0.01	50	0.08	0.01	0.01	2.48	3.30
53	Willowglen Msc Bhd	2022	0.07	0.08	0.09	17.79	0.02	51	0.07	0.02	0.01	3.38	8.65
54	Hartalega Holdings Bhd	2015	0.03	0.05	0.64	21.25	0.54	28	0.16	0.01	0.01	2.10	5.09
54	Hartalega Holdings Bhd	2016	0.05	0.09	0.57	21.23	0.55	29	0.17	0.00	0.00	2.09	4.45
54	Hartalega Holdings Bhd	2017	0.04	0.07	0.88	21.46	0.74	30	0.17	0.00	0.00	3.87	5.81
54	Hartalega Holdings Bhd	2018	0.02	0.04	0.99	21.36	0.68	31	0.16	0.01	0.00	0.88	4.84
54	Hartalega Holdings Bhd	2019	0.02	0.03	0.89	21.45	0.53	32	0.19	0.02	0.00	0.66	4.41
54	Hartalega Holdings Bhd	2020	0.03	0.05	1.60	21.47	0.53	33	0.16	0.02	0.00	-1.14	-5.46

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
54	Hartalega Holdings Bhd	2021	0.05	0.08	0.92	21.42	0.49	34	0.15	0.04	0.01	2.48	3.30
54	Hartalega Holdings Bhd	2022	0.05	0.09	0.45	21.42	0.47	35	0.17	0.03	0.02	3.38	8.65
55	Top Glove Corporation Bhd	2017	0.11	0.16	0.49	20.37	0.18	27	0.17	0.00	0.00	3.87	5.81
55	Top Glove Corporation Bhd	2018	0.08	0.18	0.77	20.98	0.93	28	0.16	0.01	0.00	0.88	4.84
55	Top Glove Corporation Bhd	2019	0.07	0.15	0.75	21.03	0.95	29	0.19	0.02	0.00	0.66	4.41
55	Top Glove Corporation Bhd	2020	0.20	0.28	1.29	21.46	0.09	30	0.16	0.02	0.00	-1.14	-5.46
55	Top Glove Corporation Bhd	2021	0.80	1.09	1.09	21.58	0.07	31	0.15	0.04	0.01	2.48	3.30
55	Top Glove Corporation Bhd	2022	0.04	0.04	0.20	21.32	0.06	32	0.17	0.03	0.02	3.38	8.65
56	YSP Southeast Asi Holdings Bhd	2020	0.05	0.06	0.48	18.53	0.17	34	0.16	0.02	0.00	-1.14	-5.46
56	YSP Southeast Asi Holdings Bhd	2021	0.03	0.04	0.40	18.49	0.14	35	0.15	0.04	0.01	2.48	3.30
56	YSP Southeast Asi Holdings Bhd	2022	0.07	0.09	0.47	18.49	0.09	36	0.17	0.03	0.02	3.38	8.65
57	Astro Malaysia Holdings Bhd	2013	0.06	0.82	1.17	21.46	7.19	18	0.14	0.02	0.00	2.11	4.69
57	Astro Malaysia Holdings Bhd	2014	0.07	0.77	1.13	21.48	5.97	19	0.14	0.01	0.00	3.14	6.01
57	Astro Malaysia Holdings Bhd	2015	0.09	0.82	1.07	21.34	5.05	20	0.14	0.00	0.00	2.10	5.09
57	Astro Malaysia Holdings Bhd	2016	0.09	1.07	1.03	21.23	6.34	21	0.15	-0.02	0.00	2.09	4.45
57	Astro Malaysia Holdings Bhd	2017	0.11	1.07	1.17	21.07	5.46	22	0.16	-0.01	0.00	3.87	5.81
57	Astro Malaysia Holdings Bhd	2018	0.10	1.08	0.82	21.29	6.07	23	0.16	0.00	0.00	0.88	4.84
57	Astro Malaysia Holdings Bhd	2019	0.07	0.80	0.84	21.15	6.10	24	0.16	0.00	0.00	0.66	4.41
57	Astro Malaysia Holdings Bhd	2020	0.10	0.76	0.75	21.14	4.11	25	0.16	0.00	0.00	-1.14	-5.46
57	Astro Malaysia Holdings Bhd	2021	0.09	0.48	0.75	21.08	3.14	26	0.15	0.00	0.00	2.48	3.30
57	Astro Malaysia Holdings Bhd	2022	0.09	0.41	0.69	20.96	2.69	27	0.15	-0.01	0.00	3.38	8.65
58	CelcomDigi Bhd	2009	0.21	0.64	0.84	21.05	0.61	22	0.15	0.05	0.01	0.58	-1.51
58	CelcomDigi Bhd	2010	0.22	0.84	1.01	21.23	0.80	23	0.14	0.04	0.01	1.62	7.42
58	CelcomDigi Bhd	2011	0.27	0.92	1.71	21.15	0.52	24	0.14	0.04	0.00	3.17	5.29
58	CelcomDigi Bhd	2012	0.30	4.57	2.98	21.00	4.13	25	0.14	0.02	0.00	1.66	5.47
58	CelcomDigi Bhd	2013	0.47	2.69	3.02	20.86	1.13	26	0.14	0.02	0.00	2.11	4.69

Firm	NAME	Year	ROA	ROE	TobinsQ	FirmSize	Lev	FirmAge	HHI	Mnf	Dyn	Inflation	GDP
58	CelcomDigi Bhd	2014	0.50	3.16	3.33	20.93	1.53	27	0.14	0.01	0.00	3.14	6.01
58	CelcomDigi Bhd	2015	0.41	3.64	2.33	20.81	2.49	28	0.14	0.00	0.00	2.10	5.09
58	CelcomDigi Bhd	2016	0.32	3.41	1.82	20.93	4.39	29	0.15	-0.02	0.00	2.09	4.45
58	CelcomDigi Bhd	2017	0.24	2.68	1.75	21.09	5.21	30	0.16	-0.01	0.00	3.87	5.81
58	CelcomDigi Bhd	2018	0.25	2.34	1.61	21.13	4.00	31	0.16	0.00	0.00	0.88	4.84
58	CelcomDigi Bhd	2019	0.17	2.14	1.46	21.41	7.80	32	0.16	0.00	0.00	0.66	4.41
58	CelcomDigi Bhd	2020	0.14	1.93	1.41	21.43	9.00	33	0.16	0.00	0.00	-1.14	-5.46
58	CelcomDigi Bhd	2021	0.15	1.85	1.49	21.36	7.84	34	0.15	0.00	0.00	2.48	3.30
58	CelcomDigi Bhd	2022	0.02	0.05	0.56	22.87	0.92	35	0.15	-0.01	0.00	3.38	8.65
59	Media Prima Bhd	2009	0.09	0.20	0.45	20.23	0.62	9	0.15	0.05	0.01	0.58	-1.51
59	Media Prima Bhd	2010	0.10	0.19	0.81	20.40	0.45	10	0.14	0.04	0.01	1.62	7.42
59	Media Prima Bhd	2011	0.09	0.16	0.78	20.45	0.37	11	0.14	0.04	0.00	3.17	5.29
59	Media Prima Bhd	2012	0.08	0.13	0.74	20.59	0.44	12	0.14	0.02	0.00	1.66	5.47
59	Media Prima Bhd	2013	0.09	0.13	0.74	20.49	0.30	13	0.14	0.02	0.00	2.11	4.69
59	Media Prima Bhd	2014	0.03	0.05	0.51	20.38	0.28	14	0.14	0.01	0.00	3.14	6.01
59	Media Prima Bhd	2015	0.07	0.09	0.33	20.11	0.19	15	0.14	0.00	0.00	2.10	5.09
59	Media Prima Bhd	2016	-0.03	-0.04	0.31	19.99	0.21	16	0.15	-0.02	0.00	2.09	4.45
59	Media Prima Bhd	2017	-0.39	-0.08	0.33	19.78	0.04	17	0.16	-0.01	0.00	3.87	5.81
59	Media Prima Bhd	2018	0.05	0.07	0.08	19.58	0.01	18	0.16	0.00	0.00	0.88	4.84
59	Media Prima Bhd	2019	-0.12	-0.29	0.23	19.68	0.42	19	0.16	0.00	0.00	0.66	4.41
59	Media Prima Bhd	2020	-0.01	-0.03	0.28	19.64	0.54	20	0.16	0.00	0.00	-1.14	-5.46
59	Media Prima Bhd	2021	0.04	0.09	0.30	19.64	0.48	21	0.15	0.00	0.00	2.48	3.30
59	Media Prima Bhd	2022	0.05	0.10	0.32	5.71	0.44	22	0.15	-0.01	0.00	3.38	8.65