DETERMINANTS OF CORPORATE SUSTAINABILITY PERFORMANCE: THE EFFECTS OF CORPORATE STRATEGY AND INSTITUTIONAL QUALITY IN ASEAN REGION

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by

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LIST OF ABBREVIATIONS

ACMF	ASEAN Capital Market Forum
ADB	ASIAN Development Bank
BIND	Board Independence
BSD	Banking Stock Development
CG	Corporate Governance
Climatec	Climate Change
CO_2	Carbon Dioxide
CS	Corporate Strategy
CSP	Corporate Sustainability Performance
DCPS	Domestic Credit to private sector
EGD	Environmental Degradation
EPI	Environmental Performance Index
ESG	Environmental, Social, and Governance
FD	Financial Development
FDOB	Female Director on Board
FE	Fixed Effects
FSIZE	Firm Size
GDP	Gross domestic product
GHG	Greenhouse Gas Protocol
GSIA	Global Sustainable Investment Alliance
IQ	Institutional Quality
IPCC	Intergovernmental Panel on Climate Change
LEV	Leverage
NPV	Net Present Value
OECD	Organization for Economic Cooperation and Development

OLS	Ordinary Least Squares
POLS	Pooled Ordinary Least Squares
PRI	Principle of Responsible Investment
PROF	Profitability
RE	Random Effects
ROT	Real Option Theory
SDGs	Sustainable Development Goals
SMD	Stock Market Development
SRI	Sustainable and Responsible Investment
UN	United Nations
UNFCC	United Nations Framework Conventions on Climate Change
WBCSD	World Business Council for Sustainable Development
WEF	World Economic Forum

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PENENTU PRESTASI KEMAMPANAN KORPORAT:

KESAN STRATEGI KORPORAT DAN KUALITI INSTITUSI DI WILAYAH ASEAN

ABSTRAK

Negara-negara ASEAN telah membangunkan dan menilai rancangan tambahan, bermatlamatkan pembangunan kelestarian (SDGs) sebagai rancangan kepada pembangunan negara ASEAN. Namun begitu, dengan hanya tinggal lapan tahun lagi sehingga wawasan SDGs 2030, pelaksanaan aktiviti pembangunan mampan di negara-negara ASEAN jauh ketinggalan berbanding apa yang dibayangkan oleh Pertubuhan Bangsa-Bangsa Bersatu pada asalnya. Prestasi kemampanan korporat (CSP) di negara ASEAN pada masa ini adalah lemah berbanding dengan negara maju lain. Kajian ini bertujuan untuk menyiasat faktor-faktor yang mempengaruhi prestasi kemampanan korporat di negara ASEAN. Kajian ini akan menfokuskan tiga pembolehubah yang penting, iaitu tadbir urus korporat, kemerosotan alam sekitar dan pembangunan kewangan yang mungkin mempengaruhi CSP. Tambahan pula, kajian ini menyiasat bagaimana strategi korporat dan kualiti institusi mempunyai kesan ambang ke atas CSP. Kajian ini menggunakan penilai Panel Static dan Panel Ambang dengan menggunakan 118 firma yang disenaraikan di bursa saham ASEAN antara 2011 dan 2020. Kajian ni mengesahkan pengarah wanita dan pengarah bebas dalam lembaga ASEAN mempunyai kesan positif terhadap kemampanan korporat. Menariknya, campur tangan strategi korporat akan mengurangkan prestasi kemampanan korporat yang rendah sambil mengukuhkan hubungan antara tadbir urus korporat dan CSP. Dalam tempoh sampel, firma ASEAN dipengaruhi secara positif oleh faktor luaran yang mempengaruhi CSP (pembangunan kewangan dan kemerosotan alam sekitar).

Penemuan menunjukkan bahawa proksi degradasi alam sekitar seperti perubahan iklim, pelepasan karbon, dan pembandaran mempunyai kesan ke atas CSP pada tahap tinggi dan rejim kesan ambang rendah dengan campur tangan kualiti institusi. Anehnya, dengan campur tangan kualiti institusi, permodalan pasaran mempengaruhi firma pada kedua-dua rejim kesan ambang rendah dan tinggi, manakala pembangunan sektor perbankan hanya terjejas pada tahap kualiti institusi yang lebih tinggi. Kajian ini menyimpulkan dengan menerangkan keadaan semasa prestasi kelestarian korporat (CSP) di negara-negara ASEAN dan menekankan perlunya usaha bergerak sasaran dan inisiatif kerajaan untuk meningkatkan CSP di negara-negara ASEAN. Penemuan kajian menunjukkan bahawa negara-negara ASEAN perlu menggalakkan syarikat-syarikat untuk mengamalkan amalan tadbir urus korporat yang baik, seperti meningkatkan kepelbagaian lembaga pengarah dan menggalakkan kehadiran pengarah-pengarah bebas, serta mengintegrasikan konsep-konsep kelestarian dalam strategi korporat, yang dapat memudahkan struktur tadbir urus yang baik untuk membuat keputusan yang lebih baik. Selain itu, meningkatkan kualiti institusi adalah penting bagi mempromosikan amalan pembangunan mampan agar negara-negara ASEAN mencapai matlamat SDGs dan menyumbang secara berkesan kepada usaha kelestarian global. Untuk memastikan masa depan yang lebih mampan bagi rantau ini dan penduduknya, beberapa aktiviti perlu diperkukuhkan untuk mengekang jurang sekarang dan menutup kesenjangan.

DETERMINANTS OF CORPORATE SUSTAINABILITY PERFORMANCE: THE EFFECTS OF CORPORATE STRATEGY AND INSTITUTIONAL QUALITY IN ASEAN REGION

ABSTRACT

In addition to ASEAN's national development plans, ASEAN countries have developed and evaluated plans for sustainability development goals (SDGs). Nonetheless, with only eight years remaining until the SDGs vision of 2030, implementing sustainable development activities in ASEAN countries is far behind what the United Nations had originally envisioned. Compared to other developed nations, the corporate sustainability performance (CSP) in ASEAN countries is currently poor. This study aims to investigate the factors that influence corporate sustainability performance in ASEAN countries. This study examined three important variables: corporate governance, environmental degradation and financial development that influenced CSP. Furthermore, the study investigates how corporate strategy and institutional quality have a threshold effect on CSP. Using the Static Panel and Panel Threshold effect estimator, this study utilised 118 firms listed on the ASEAN stock exchange between 2011 and 2020. The study validates the female directors and of independent directors on ASEAN boards positively impacts corporate sustainability. Intriguingly, the intervention of corporate strategy will mitigate the low corporate sustainability performance while strengthening the link between corporate governance and CSP. During the sample period, ASEAN firms are positively influenced by external factors that affect CSP (financial development and environmental degradation). The findings show that environmental degradation proxies such as climate change, carbon emissions, and urbanisation impact CSP at both high and low threshold effect regimes with the intervention of institutional quality. Surprisingly, with the intervention of institutional quality, market capitalization affects firms at low and high threshold effect regimes. In contrast, banking sector development is only affected at higher levels of institutional quality. This study concludes by shedding light on the current state of CSP in ASEAN countries and highlighting the need for targeted efforts and governmental initiatives to improve CSP in ASEAN countries. The findings suggest that ASEAN countries should encourage companies to adopt sound corporate governance practises, such as increasing board diversity and promoting the presence of independent directors, as well as integrating sustainability concepts into corporate strategy, which could facilitate the good governance structure for better decision-making. Moreover, enhancing institutional quality is vital for promoting sustainable development practises in order for ASEAN countries to attain the SDGs, and contribute effectively to global sustainability efforts. To assure a more sustainable future for the region and its inhabitants, a number of activities must be intensified in order to bridge the present chasm and close the gap.

CHAPTER 1

INTRODUCTION

1.1 Preamble

This chapter presents an overview of the economic trends in the Association of Southeast Asian Nations (ASEAN) countries. The background of the study accompanies this, the issue of the argument by which the problem statement is addressed, and the research objectives and research questions of the study. The chapter proceeds by highlighting the significance of the study. It also delves into the scope of the study, aiming to establish the boundaries within which the research is conducted. Finally, the chapter provides a clear definition of related terms used in this study.

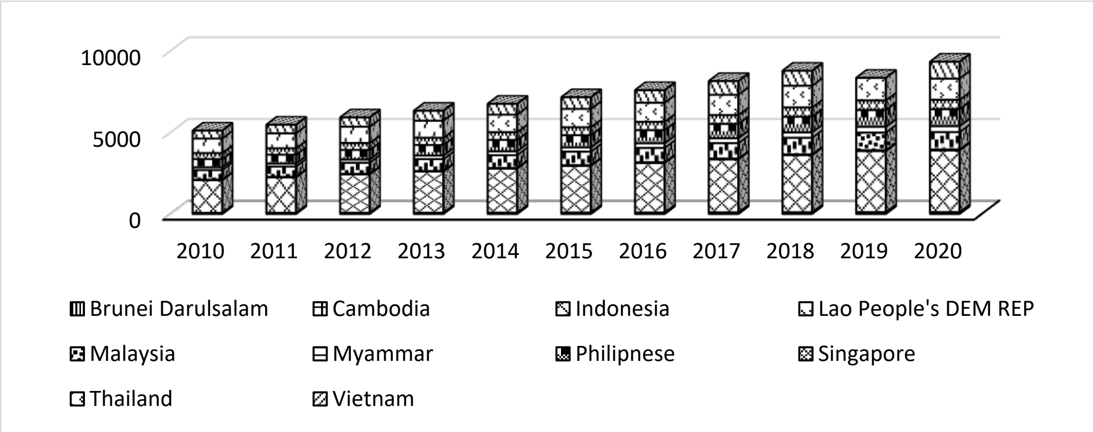
1.2 Economies Overview in ASEAN Countries

ASEAN was formed on August 8th, 1967, which is an interregional region comprised of ten countries in Southeast Asia, namely Indonesia, Thailand, Malaysia, Singapore, the Philippines, Vietnam, Myanmar, Cambodia, Laos, and Brunei. Initially, ASEAN only had five member countries. Later, it grows to about ten countries. The ASEAN members' dynamic economic growth has enticed five more countries to join the organization. On January 7th, 1984, Brunei became the sixth member of ASEAN, followed by Vietnam (July 28th, 1995), Laos, and Myanmar (July 23rd, 1997), and the last country to join ASEAN was Cambodia. Cambodia was supposed to join ASEAN simultaneously with Laos and Myanmar. However, due to political instability, it was delayed. One of the great achievements of ASEAN countries in 2006 was that they were granted the status of "observer" at the United Nations General Assembly, which could be one of the dialogue partners with the United Nations (UN). Countries in

ASEAN are synergized together to facilitate various purposes, such as economic development, political stability, security enhancement, promoting regional peace (military), educational collaboration, and sociocultural understanding. The history of the ASEAN creation was due to the fear of communism. Therefore, in mid-1970, after the end of the Vietnam War, the countries achieved unified integration to form ASEAN.

Currently, ASEAN is seen as the biggest global challenge in the region, which is known as the world's third-largest economy and is projected to be the world's fourth-largest economy in the next decade. ASEAN is forecast to expand by four percent annually over the next decade, rendering it the world's fourth-largest economy (ASEAN Working Committee on Capital Market Development, 2020; World Economic Forum, 2020), ASEAN's GDP is forecasted to reach $4.5 trillion, accounting for around 60 percent of gross domestic product with an estimated population of about 723 million by 2030. One in six market-class households is therefore centered in ASEAN (World Economic Forum, 2020).

Figure 1.1 shows that the GDP trend in ASEAN countries is increasing from 2010 to 2020. The largest GDP (in dollars) among ASEAN countries is dominated by Indonesia, followed by Thailand, Malaysia, Vietnam, and Singapore. Indonesia had the highest GDP in dollars gained due to having the largest population, which indirectly influenced purchasing power parity (PPP) among their population and contributed significantly to GDP growth. Besides, according to Figure 1.1, Brunei has the weakest GDP in dollars. This may be due to the slight decline in economic freedom over the past five years. The main index of economic freedom holds an abysmal performance on the financial performance score. This factor accounts for Brunei's lowest GDP among the ASEAN countries, have stagnant growth in GDP for the end of quarter four in 2019 and early quarter one in 2020. This is due to the COVID-19 pandemic, which affected not only ASEAN countries but also the world economy.



Source: (World Bank, 2021)

Figure 1.1 Growth Domestic Product (GDP) of the ASEAN countries, in billion (U.S dollar)

Besides, ASEAN countries have also established sustainable development goals (SDG) as one of ASEAN's core goals to be attained by 2030. In line with the global mission of achieving the 17 Sustainable Development Goals (SDG), ASEAN countries continue their great achievements in poverty reduction, better health outcomes, and improvements in education (IMF, 2018). These achievements resulted in improved incomes and economic opportunities, especially for women. Reflecting on the region's economic dynamism, high-income growth (GDP), better structural reforms, and technology upgrades are helping foster sustainability in ASEAN (IMF, 2018). In fact, by having strong policy efforts, most ASEAN countries are on track to eradicate absolute poverty by 2030, which is a major milestone. Besides, several ASEAN countries are still performing reasonably well regarding gender equality. Consequently, with funding for continued income gains, economic welfare in ASEAN countries is projected to converge towards advanced Asian levels. This is ASEAN's most aggressive attempt to achieve sustainable development, foster political peace and stability for financial deepening, and expand regional integration. The benchmarking and role models for emerging ASEAN countries are indirect.

Today, ASEAN is poised to become a significant consumption opportunity led by four mega-powers. First, ASEAN has a strong demographic trend; second, growing income levels; third, strategic shifts that stimulate foreign investment; and fourth, technological advances that open new consumer markets (World Economic Forum, 2020). Among the commonalities, each ASEAN economy will grow differently, and a "multi-local" strategy is crucial to productive enterprises in this highly competitive market. Due to this, work on greening the economy is an essential part of sustainable economic reforms. Often, the economic development in the world may also be triggered by excessive and unsustainable business practices correlated with the bubble economy.

The global drive for sustainable growth creates challenges and prospects. As such, the sustainability of an organization relies, in turn, on the willingness of the corporation to predict the consequences of this policy and, thus, to integrate sustainable growth strategies into its business models (Amui et al., 2017; Grove & Clouse, 2018; Nigam et al., 2018). The unique position and growth of ASEAN nations make it more complicated for other regions to manage environmental stability and economic development. Economic prospects in ASEAN are prosperous due to rapid GDP growth. However, GDP growth is insignificant at the cost of environmental and social resources, which is a crucial obstacle to development. This calls for urgent attention by relevant stakeholders to improve the sector's economic sustainability and, consequently, shed light on the sustainability of companies. Therefore, it is important to recognise the determinants of corporate sustainability performance and the actions of companies in ASEAN countries.

1.3 Sustainability and Corporate Sustainability

The concept of sustainable development was initially propounded in the second half of the 20th century. It was later defined by the Brundtland Commission in 1987 and subsequently applied at the macroeconomic level to address global issues concerning, e.g., global warming, soil degradation, and poverty, that cannot be attended to at the local level (Kocmanová et al., 2016). In 2015, the United Nations (UN) general assembly adopted the definition by the Commission to attain global sustainable development goals (SDGs) by 2030. The SDGs constitute 17 sets of goals to be achieved by the end of the said year. The SDGs prioritize problems associated with hunger, inequality, climate change, environmental destruction, peace, and justice for a better global future (United Nations, 2018a). Sustainability is important in providing an improved current and future living standard for the population, estimated to be about 9 billion by 2050 (WEF, 2013). Investing in sustainability helps maintain the financial system's long-term resilience to promote accountability and a longer economic outlook (European Political Strategy Centre (EPSC, 2016)). Sustainability is important not just at the national level but also at the global level, such that multiple actors involved might operate together to meet the SDGs. Since sustainable development requires companies to address global issues, particularly social and environmental problems, companies must integrate the issue of sustainable development into their business activities to safeguard the planet.

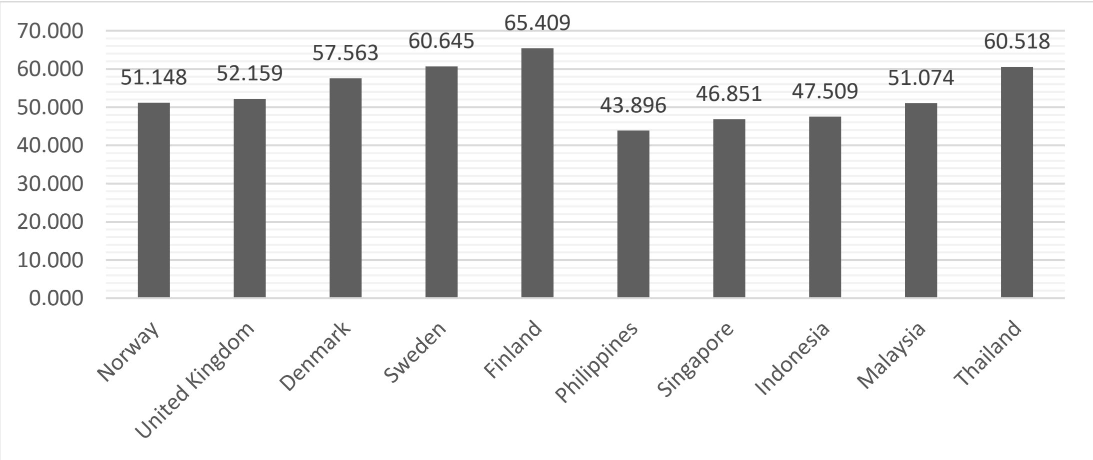
Sustainability is defined as the act of development that meets the present needs while safeguarding the planet's life support system on which the welfare of the current and future generations depends (Ameer & Othman, 2012; Centre for Governance, 2018; Shrivastava & Addas, 2014a). Sustainability is also a tool that minimizes the possible misconduct by corporations to harm their communities (Smit & Van Zyl, 2016). At the corporate level, corporate sustainability refers to a business and investment strategy that seeks to use the best business practices to meet and balance the need of current and future stakeholders (Artiach et al., 2010). Since companies seek long-term sustainability benefits, companies should pay attention not only to stakeholders but also to the environmental, social, political, and economic facets. Companies that successfully incorporate social and environmental aspects, and are governed effectively, can gain public confidence and attract investors, not to mention create shareholder value to sustain performance and maintain a firm reputation (Ismail & Mohd Latif, 2019; Ng & Rezaee, 2015). As a result, it assists companies in becoming more appealing investments to socially responsible investors while mitigating risks.

With regards to ASEAN regions, the level of implementation of the SDGs agenda in 2030 has reached up to six years of implementation. However, after the adoption of SDGs by ASEAN in 2015, the trend of sustainability index among these nations began to decline due to a lack of compliance, integrated policies, and coordination (ASEAN Working Committee on Capital Market Development, 2020; United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), 2020), as well as a lack of accessibility to their corporate sustainability report (Centre for Governance, 2018). The *decreasing* trend worsened with the COVID-19 outbreak in 2020. A report released by the United Nations in 2021 reveals that less than half of countries worldwide allocated only 15% for SDG in their budgets and national recovery plans (Sachs et al., 2021). This significant setback for global sustainable development has resulted in a sustainability gap. The gap shows that more effort is required to attain SDG transformation by 2030 and beyond. Hence, the decades of SDGs implementation call for a strong, multidimensional system.

Meanwhile, corporate sustainability is used as an instrument for the organization to contribute to sustainable development. Thus, it is necessary to integrate corporate sustainability within company systems because developing and implementing new sustainability business models (SBMs) and sustainability practices will positively impact the triple bottom line (TBL). This will create sustainable value that can promote sustainable development. The importance of information disclosure cannot be overemphasized to achieve corporate and sustainability development. Among the factors determining information disclosure in corporations is environmental, social, and governance (ESG) rating assessment. The ESG rating agencies do the assessment. The rating agencies are crucial actors behind ESG assessments as their assessment provides the fundamental source of information for socially responsible investors, indicating how companies manage and contribute to sustainable development through their activities in the financial market (Drempetic et al., 2019).

The ESG rating by the rating agencies measures corporate sustainability performance (CSP). The rating criteria and methodologies differ among various rating agencies. Specialized data providers such as Bloomberg, Sustainalytics, Refinitve Asset 4, S&P Capital, and MSCI ESG research are among the famous rating agencies (Budsaratragoon & Jitmaneeroj, 2019; Dorfleitner et al., 2016; Halbritter, 2015; Unite et al., 2019). The ESG rating agencies provide important information that serves as a

CSP reference in tracking the performance of the leading sustainability caution companies for sustainable and responsible investment (SRI) in the capital market. Furthermore, ESG rating also serves as a framework for how a company manages its risks and opportunities as market and non-market conditions changes. Therefore, it demonstrates the firm's ability to create and sustain long-term value in a rapidly changing world. This will positively impact the entire landscape (environmental, economic, and social system) in which a company operates. However, some difficulties exist in obtaining a company's specific data by data providers due to unstandardized regulations governing publicly traded ESG data worldwide. Companies may implement disparate ESG practices. Hence an in-depth assessment of corporate sustainability practices is highly required (Budsaratragoon & Jitmaneeroj, 2019; Drempetic et al., 2019).



Sources: Author's compilation (ESG score: 0 -100).

Figure 1.2 Aggregate ESG Ratings for Listed Companies in ASEAN Countries and Selected Developed Countries (2015-2022)

Figure 1.2 shows aggregate ESG Ratings for Listed Companies in ASEAN countries and some developed countries from 2015 to 2022. Unlike in developed countries, as shown in Figure 1.2, the ESG score of Malaysia, Singapore, Indonesia, and the Philippines countries are lagged except for Thailand. These findings are consistent with the report by (CFA Institute, 2019; Pan, 2021; RobecoSAM, 2021). The possible explanation behind the lag is that some ASEAN countries, such as Indonesia and the Philippines, are only required by regulators to disclose information on sustainability only after the year 2020 (Indonesia Financial Services Authority (Otoritas Jasa Keuangan), 2017; Republic of the Philippines Securities and Exchange Commission, 2019). This situation has led to insufficient data access on sustainability among those countries. This makes companies in ASEAN countries have higher ESG risks than most companies in developed countries. Thailand leads the ASEAN countries regarding ESG performance, with moderate risk exposure and a relatively good ESG rating. This information is consistent with the World ESG disclosure performance report. The Stock Exchange of Thailand (SET) ranked ninth out of 47 stock exchanges worldwide in 2019 (Corporate Knights, 2019). As of 2019, Bursa Malaysia, Singapore's stock exchange, the Philippine Stock Exchange, and the Indonesian Stock Exchange are ranked 22, 24, 30, and 36, respectively, in the World ESG Disclosure Performance Report (Corporate Knights, 2019). At the same time, the Sustainable Development Goals (SDGs) index trend shows a downward trend for all ASEAN countries from 2019 to 2021. Thailand is ranked 40th, 41st, and 43rd, while Malaysia is ranked 68th, 60th, and 65th, Singapore is ranked 66th, 93rd, and 76th, while Indonesia is ranked 102,101 and 97th. This demonstrates the importance of countries' economic and environmental activities in relation to companies' ESG performance. Therefore, it is necessary to examine this phenomenon. In summary, the ESG framework can be seen as a reflection of the SDGs index, comparing the progress of ASEAN countries with that of developed nations in achieving the SDGs from 2019 to 2021, as illustrated in Figure 1.3.

ESG can be a mirror image to SDGs Index

Developed Countries

VS

ASEAN Countries

Table 3: The ESG ranking of Stock Exchange in the World ESG performance report in 2019

Developed Countries	ESG ranking in 2019 (out of 47 stock exchanges)
	2019
Nasdaq Copenhagen	10th
Nasdaq Stockholm	10th
Nasdaq Helsinki	1st

ASEAN Countries	ESG ranking in 2019 (out of 47 stock exchanges)
	2019
Stock Exchange of Thailand	9th
Bursa Malaysia	22nd
Singapore Exchange	24th

Sources: Corporate Knight (2019)

Table 4: ASEAN vs Developed nations of SDGs Index from 2019 to 2021

Developed Countries	SDG index from 2019 to 2021		
	2019	2020	2021
Denmark	1st	2nd	3rd
Sweden	2nd	1th	2nd
Finland	3rd	3rd	1st

ASEAN Countries	SDG index from 2019 to 2021		
	2019	2020	2021
Thailand	40th	41st	43rd
Malaysia	68th	60th	65th
Singapore	66th	93rd	76th

Sources: Sustainability Development Report (2021)

Figure 1.3 ASEAN vs Developed nations of SDGs Index from 2019 to 2021

Moreover, ESG disclosure in developed nations such as Finland, Sweden, United Kingdom is relatively in line with SDG's performance, as shown in the ESG Statistics of the 2019 World ESG disclosure performance report. Evidence shows that Finland, Norway, and Switzerland have recorded excellent disclosure ratings across all indicators in the last decade. This makes them the top three leading countries in ESG ranking worldwide (Corporate Knights, 2019). This indicates that European companies disclosed their environmental activities (such as energy consumption and greenhouse gas emissions) exceptionally well for environmental indicators. The reason for higher ESG disclosure in most developed economies is that they have regulations that mandate companies to disclose ESG activities. This matched the SDG's performance indicators and the SDGs index (PMO Finland, 2020; Sachs et al., 2021). It suggests that economic development, such as financial development (FD), can foster corporate sustainability performance.

Numerous voluntary and mandatory regulations have been developed worldwide to encourage corporate sustainability disclosure [1] to improve ESG performance. Countries like the United Kingdom, Finland, Switzerland, and the United States have adopted mandatory sustainability reporting, making them more transparent in sustainability practices (Bartels & Teresa, 2016; KPMG, 2020b). Therefore, this action encourages emerging markets to incorporate ESG factors into their corporate investment decisions. It has further prompted emerging market regulators to adopt sustainability disclosures in public listed company's annual reports

[1] Corporate Sustainability Performance (CSP) and disclosure are not the same, but they are closely related concepts within the realm of sustainability reporting. In this study, Corporate Sustainability Performance (CSP) represents the actual sustainability performance of a company in relation to its ESG performance (Baraibar-diez & Odriozola, 2019; Bui et al., 2022), while disclosure is the process of communicating this information to stakeholders (Mahmood, 2018; Michelon & Parbonetti, 2012). Both are crucial components of corporate sustainability and are interconnected in promoting transparency, accountability, and stakeholder engagement.

(Ismail & Mohd Latif, 2019), thus fostering sound corporate governance (CG) mechanisms. The disclosure of mandatory or voluntary sustainability activities lies in the hands of corporate boards that take ESG decisions within the interplay of resource control and shareholder objective to reduce possible agency conflict issues (Alsayegh et al., 2020). For instance, 80% of companies in the Asia Pacific region voluntarily disclose the sustainability report and ESG data, which require corporate scrutiny from financial stakeholders, especially asset owners and managers[2] (KPMG, 2020b), suggesting that corporate companies require good corporate governance to improve disclosure. In terms of board gender diversity, studies have claimed that female directors take more proactive environmental decisions than male directors, who are more concerned about the firm's asset decisions enabling them to make a meaningful contribution to society, to the environment, and to sustainable development (Braun, 2010; Haque, 2017; Ismail & Mohd Latif, 2019; Liao et al., 2015).

Despite ASEAN's rapid GDP growth, it is less prosperous when pursued at the expense of environmental and social capital. The Intergovernmental Panel on Climate Change (IPCC) outlined how climate change will affect natural environments, land use, and ocean life in 2018 and 2019 (Schumacher et al., 2020). As a result, this report addresses climate change and human resource utilization in an indirect manner. Because of this, developing countries are more vulnerable to externalities than developed countries (Schumacher et al., 2020). This makes the environmental and social pillars critical for corporate sustainability in ASEAN regions. If a company is truly sustainable, it is expected to be socially beneficial, environmentally friendly, and profitable in the long run.

[2] The Asia Pacific region accounts for 78 percent of the global reporting rate, while the Middle East and Africa account for only 52 percent (Alsayegh et al., 2020).

Sustainability is important for serving the interest of more than just the stakeholder and preserving the public image of a corporation. Investment in sustainability works as a preventive insurance effect for adverse ESG events. In other words, having a good ESG Score contributes to the long-term competitive advantage of the firm (Birindelli et al., 2018; Delmas et al., 2011). However, a report by Global Sustainability Investment Alliances (GSIA, 2019; Stroebel & Wurgler, 2021) revealed that many companies believe that the market still does not correctly price climate change. The rising issue with the ASEAN SDGs is that only around 60 percent of all metrics can be accomplished, with the Philippines and Indonesia achieving 57 percent, Thailand (56 percent), and Malaysia achieving 55 percent (ESCAP, 2020). Thus, to reach long-term sustainability, all companies and society need to discuss the substantial effect of the SDGs on how they communicate with customers, workers, and their climate.

SDGs are a method to minimize, alleviate and neutralize environmental effects arising from industrialization and economic growth. that both industry and humanity have played a significant role in contributing to the degradation of the environment. (EGD) (Karaman et al., 2018; Kumar & Firoz, 2018; Rathnayaka Mudiyanselage, 2018; Rueda et al., 2017). As a result, a growing number of organizations and individuals have become aware of the importance of environmental issues (Yoon et al., 2018; Yu, Luu, & Huirong, 2020), and it motivates them to explore solutions to fix the issue by incorporating sustainability activities and other means. Furthermore, the mitigation of climate change and reduction of greenhouse gases and other environmental pollution require both emerging and industrialized nations to adopt diverse methods, behaviours, and technologies. This collective effort is crucial for minimizing the effects of climate change and preserving the well-being of the environment and river systems (Ferreira et al., 2020; Liu et al., 2019; WEF, 2013). To date, companies that are participating in the green management initiative have continuously addressed how mitigation is to be acted upon and the necessity for companies to step past merely following a technological viewpoint instead of following environmental justice strategies and principles, attitudes, and beliefs that are primarily based on the level of change by cultivating green culture (Broccardo et al., 2019; Denoncourt, 2019; Esty & Winston, 2006). Given the need to move quickly to resolve climate change concerns and to act in an environmentally-conscious way, the correct mindset and action to ensure that workers comply within the organization by contributing themselves to green practices will undoubtedly improve the company's environmental efficiency (Haque, 2017; Zhu et al., 2018).

Implementing sustainability policies in today's corporate environment is important, with sectors influenced by climate change. Economies and companies are taking creative steps to encourage and adopt green business practices, but implementing new organizational strategies needs to be understood in the context of the change needed to be considered in light of changes (Goyal et al., 2015). In ASEAN, sustainability has emerged as a top priority for policymakers and practitioners, with several organizations integrating SDGs into their processes and activities to promote efficiency and foster a more sustainable socio-economic development orientation (CIMB, 2018; ESCAP, 2020). A clear illustration of the challenges faced can be observed in the ranking variability of Malaysia according to the Global Green Economic Index (GCEI) between 2014 and 2018, which assesses nations' environmental commitments and green success. In 2014, Malaysia occupied the 35th position among 60 nations. However, its ranking dropped to 65th out of 80 nations in 2016 and further declined to 55th out of 130 nations in 2018, indicating a significant downward trend compared to the 2014 ranking (Dual Citizen LLC., 2015, 2017, 2019). This decline highlights the challenge faced by ASEAN countries in striking a balance between environmental preservation and socio-economic growth. Consequently, scholars, professionals, and regulators express deep concern, highlighting the urgency to address sustainability concerns and promote the long-term viability of businesses.

Following the progressive goal for green growth outlined in the ASEAN countries' national development plan, the ASEAN countries have implemented the national development plan to achieve the ASEAN Capital Market Forum (ACMF) action plan 2016 to 2020 and 2021 to 2025 (ACMF, 2020; ASEAN Secretariat, 2018). ASEAN securities regulators plan to shift away from traditional and costly economic practises and toward a greater emphasis on social and economic development, with all practises required to meet the ACMF action plans. This green journey will almost certainly lead to more prosperous ASEAN nations. If successful, green growth will boost economic prosperity, alter cultural perceptions and behaviours, and influence policy decisions at the government and organisational levels. ACMF and the Asian Development Bank (ADB) are also developing a roadmap for the ASEAN sustainability capital market in 2020 to bolster the sustainable finance agenda. The significance of this roadmap lies in its ability to steer regional capital market connectivity and development in a more sustainable direction, consistent with the ASEAN Community Vision 2025 and the UN 2030 Agenda for Sustainable Development (ACMF, 2020). However, with only eight years left until the SDGs vision of 2030, the implementation of sustainable development activities in ASEAN countries lags far behind what was originally targeted by the UN, as documented in the Global Green Economy Index (GGEI) and the Environmental Efficiency Index (EPI) from 2014 to 2018 as well as the SDGs index from 2019 to 2021.

The need to evaluate the determinants of corporate sustainability in the light of corporate governance, environmental degradation, and financial development metrics is thus crucial for companies to achieve green development and to help form a firm and systemic culture toward corporate sustainability. Moreover, with a green economy, nations would have strong economic and social justifications. Considering the growing interest in corporate reporting and the effects of a high sustainability score benefit various stakeholders, including shareholders, further analysis in the area is anticipated.

1.4 Problem Statement

Corporate Sustainability Performance (CSP) has proven difficult to implement (Chabrak, 2015; Lewellyn & Muller-Kahle, 2023; Nigam et al., 2018; Vaz, 2019). Evidence shows that CSP in ASEAN was observed to have low performance compared to developed nations, as shown in Figure 1.2. Even when upper management and key stakeholders are considered in the design and implementation process, some difficulties in CSP have been observed due to low corporate sustainability disclosure rate, difficulties in obtaining sustainability information, voluntary disclosure requirements, lack of funding, and inadequate rules and standard guidelines (Campanella et al., 2021; CFA Institute, 2019; Lewellyn & Muller-Kahle, 2023; Pan, 2021; RobecoSAM, 2021; P. Sharma et al., 2020b; Vaz, 2019; E. P. Yu, Luu, & Huirong, 2020). Therefore, this has made the exercise highly subjective due to the willingness of the companies to participate and lack of public disclosure ESG data. This has also impact negatively on the company image as results of low public trust. The lack of disclosure on sustainability creates information asymmetry for stakeholders, causing inefficiency and ultimately harming the economy. The assumptions are (1) the non- ESG disclosure listed companies might have less knowledge of CSP drivers for corporate sustainability commitment than ESG disclosure listed companies (2) A higher rating can increase capital access, while a low rating can cause shareholder demands for change (3) Since the corporate disclosure enforcement is not mandatory and those who failed to disclosure will not be penalised, many companies do not consider the disclosure commitment necessary. (4) CSP implementation, along with the costs associated with sustainability activities entailed significant expenditures. In summary, the availability of adequate resources can affect CSP. Consequently, the company with adequate and sufficient resources tend to report on sustainability then the weaker companies. Although a number of factors have been suggested as important elements in improving CSP, the impact of internal factors (i.e. Corporate governance variables), environmental level factors (environmental degradation) and national level factors (i.e. financial development) are found to be a common thread (Hock et al., 2020; Husted & Sousa-Filho, 2019; Jia & Li, 2020). The problem lies in the unclear factors of CSP drivers that motivate certain companies to disclose the sustainable matters. Furthermore, very little attention has been given in literature to what factors that determine CSP specially in ASEAN countries. Hence, this study aims to investigate the CSP driver with the expectations that understanding the relationship could enhance the CSP.

Sustainability disclosure by all public listed in ASEAN companies is considered voluntary practice (Husnaini & Basuki, 2020). Even though all publicly listed ASEAN companies are recently required by their stock exchanges to make sustainability disclosure. However, many companies are still not adhering to the requirement. Therefore, the board of directors (BOD) is uncertain about committing more resources of their companies to sustainability because this may negatively impact the business's bottom line. As such, the sustainability issues in ASEAN companies remain a concern. The voluntary disclosure of information leads to insufficient data for socially and environmentally conscious investors to evaluate ESG companies for future companies. In the near term, the investor will value ESG companies' differences and diversity due to voluntary disclosure. Therefore, the companies will lose their competitiveness and risk losing the key investor. As a result, it is questionable whether a strong board and corporate governance will impact sustainability reporting in the absence or inadequacy of desired performance and resources.

Internal conflicts within boards often arise due to the absence of mandatory ESG disclosure and its associated costs, leading to disagreements between managers and the board regarding sustainability initiatives (Bunget et al., 2020; Miras-Rodríguez et al., 2018). Cohesive communication and collaboration between managers and the board are crucial to address these conflicts, especially in boards facing consensus challenges or limited diversity of perspectives (Suttipun, 2021). Such collaboration is essential for unbiased governance and achieving sustainability goals, particularly in boards with low gender diversity, which may hinder their contribution to corporate strategy (International Finance Corporation, 2019; Mahmood, 2018; Shakil et al., 2020). Despite evidence suggesting a positive correlation between higher female board representation and increased ESG disclosure, female representation in most ASEAN countries remains below 50%, indicating inadequate female participation (CLSA, 2018). CLSA's report highlights that ASEAN countries rank lowest in ESG performance regarding board independence compared to Asia-Pacific counterparts like Hong Kong and Taiwan as shown in Table 2.3, underlining the importance of board composition and diversity in shaping ESG practices and governance standards.

Regional issues concerning environmental degradation, such as carbon emission, climate change, urbanization, pollution, and water pollution, as well as dumping of toxic waste, open burning, and deforestation, have resulted in serious environmental problems (Ahmed et al., 2020; ASEAN Secretariat, 2017; UNEP, 2017). These environmental degradations have increased the sustainability issues among ASEAN countries. Thus, it raised the question of how the ASEAN countries would maintain their environment while achieving economic development. Growing concern for industrial pollution is one of the greatest environmental risks that can harm society and public health. Thus, it raised public concern about the role of companies in acting toward a sustainable society and the environment. As such, companies need to disclose sustainability issues, develop awareness, and enhance competitiveness in the corporate world regarding sustainability practices.

Given the global warming and crisis environment, environmental degradation greatly affected the firm's sustainability regarding the vulnerability index. The ASEAN countries are far more vulnerable than South and Northeast Asia (Vu, 2020). This poses a serious problem as six out of twenty of the most vulnerable countries in the world to climate change are ASEAN countries [3]. Evidence shows that climate change will significantly reduce the ASEAN regional GDP by up to 11% by 2100 (ASEAN Working Committee on Capital Market Development, 2020). The constant decline in the world ranking of green growth and Environment Performance Index (EPI) among the ASEAN Countries, as depicted in Tables 2.3 and 2.4, indicates the gap in global green practices between ASEAN countries and Global nations. Therefore,

[3] https://environment.ASEAN .org/awgcc/

it is imperative for this study to understand the importance of green practices that influence corporate sustainability in ASEAN context.

The impact of environmental degradation on corporate sustainability is undeniable. However, other understudied factors (such as urbanization and carbon emissions) may negatively influence the CSP, a factor that is still lacking in the empirical literature. Thus, urbanization and carbon emissions on CSP have received limited attention, limiting our broad knowledge of corporate sustainability and how to approach a sustainable environment further. As evidenced in Figure 2.4, rising urbanization among ASEAN countries has increased carbon emissions leading to environmental degradation. Furthermore, carbon emissions per capita have increased due to the urban population, rising energy consumption, and increased GDP (Figure 2.3). Increased access to urban areas drives environmental degradation and electricity consumption, adding to the challenges of CSP. This scenario raises the question of how environmental degradation impacts CSP among ASEAN publicly listed companies. While the global society today now strives for ecological and social sustainability, most past evidence on the concept of corporate sustainability has focused on financial performance and maximizing wealth. As a result, the need for corporations to focus on environmental sustainability and be transparent by disclosing sustainability activities that may impact the environment and society as a whole.

Beyond this, a factor that contributes to achieving the ASEAN SDGs objective in 2030 is funding. The issue of funding has become a serious challenge to the ASEAN countries since the Asia Pacific region alone will require about USD 1.5 trillion in additional investment to achieve SDGs by 2030, and the five ASEAN Member States (AMS) will require about USD 1.3 trillion to achieve SDG goals (ESCAP, 2020). Although the AMS has taken the initiative to promote sustainable finance and implement the 2030 Regional Agenda for Sustainable Development in ASIA and the Pacific, there is currently a vague regional financial plan for SDGs with no regional taxonomy and a green finance standard (ASEAN Working Committee on Capital Market Development, 2020). Therefore, it is imperative to investigate to what extent funding will hinder the achievement of the said objective. It is estimated that ASEAN's green funding opportunities will be raised by USD 3 trillion between 2016 and 2030 and that 60 percent will need to be provided for infrastructure UN Environment & DBS, (2017). This highlights that financial development among ASEAN countries should act as a catalyst to enhance sound financial development to make economic sustainability for a paradigm shift. Hence, this studies specifically curious about the effect of financial development on corporate sustainability performance if the financial development sufficiently improves the level of ESG in developing countries.

Other factors can be examined as possible antecedents, moderators, and consequences in corporate sustainability. Previous studies just measured a direct relationship between antecedents and CSP (see Crisóstomo et al., 2019; Lourenço & Branco, 2013; Wang et al., 2020). There are few studies using moderators but measuring different variables such as religious affiliation (Terzani & Turzo, 2020), industry sensitivity (Qureshi et al., 2020), Corporate sustainability (ESG) x Digitalization (Forcadell et al., 2020), R&D intensity (main moderator) (Wagner, 2010), and advertising intensity (quality management perspective) (Wagner, 2010). Given that previous studies found mixed findings of moderating effects on corporate sustainability performance, thus this study proposes corporate strategy and institutional quality as threshold variables. Most previous studies reported a weak or negative relationship between corporate governance and ESG performance (Cancela et al., 2020; Ismail et al., 2019b). Evidence shows the negative relationship may be because corporate governance mechanisms are not independently determined and are better at monitoring other related factors, especially non-financial metrics like corporate sustainability (Gillan et al., 2003). This weak relationship could be further improved by including corporate strategy in the research framework. Corporate strategy often results in empowering managerial control and steering the strategic direction of a firm for competitive advantage (Beekun et al., 1998). Firm-level governance instruments are also moot in competitive industries; thus, the effects of governance could be beneficial by interacting governance proxies with competition measures. Previous studies (such as Bettinazzi et al., 2015; Duanmu et al., 2018; Hu et al., 2020) examined the influence of corporate strategy on CSP and found that corporate strategy enhances CSP.

In addition, environmental degradation and financial development are influenced by the threshold effect of institutional quality (IQ) to assess the role of IQ strength in facilitating their relationship with firm sustainability. Since the quality of institutions in ASEAN varies significantly over regions, certain institutional conditions, such as the rule of law, the quality of bureaucracy, corruption, and the risk of expropriation, impact the environment. Thus, the role of IQ is needed to help reduce uncertainty and monitor financial stability on climate-related financial risk. A study done by Panayotou (1997) explains that the quality of institutions lessens environmental degradation even if the country has low-income levels. As countries progress from low to high future income growth, institutional quality will improve to reduce the environmental cost of economic growth. One can argue that, due to economic growth, environmental regulations will also increase (Yandle et al., 2004). Nevertheless, the CSP will improve with the aid of regulators, and if government institutions are strong enough to enforce environmental policies, the environment will improve. Institutional quality is, therefore, a matter of environmental quality (Zakaria & Bibi, 2019). In this context, this study is being undertaken to also investigate the threshold effect of institutional quality on the relationship between environmental degradation, financial development, and CSP. Hence, this study will examine the role of corporate strategy and institutional quality as threshold variables in the relationships between corporate governance, environmental degradation, financial development, and CSP.

1.5 Research Objectives

Much research has investigated corporate governance, environmental degradation, and financial development as antecedents of CSP. Corporate strategy, an organizational factor, and institutional quality, an institutional factor, have also contributed to CSP. However, the literature has yet to reveal any attempt to structurally map out the reciprocal relationships between corporate governance, environmental degradation, financial development, corporate strategy, institutional quality, and CSP in a single study. The current study attempts to fill the gap by analyzing reciprocal relationships between three main factors in an ASEAN context. Specifically, the objective of this study is:

1. To examine the influence of corporate governance on corporate sustainability performance and the role of corporate strategy as a threshold variable in facilitating corporate governance-corporate sustainability performance relationships in ASEAN public listed companies.

2. To investigate the influence of environmental degradation and corporate sustainability performance and the role of institutional

quality as a threshold variable in facilitating environmental degradation-corporate sustainability performance relationship in ASEAN public listed companies.

3. To investigate the impact of financial development and corporate sustainability performance and the role of institutional quality as a threshold variable in facilitating the financial development-corporate sustainability performance relationship in ASEAN public listed companies.

1.6 Research Questions

The research question for this study is designed as follows:

1. What is the impact of corporate governance on corporate sustainability performance, and what is the role of corporate strategy as a threshold variable in facilitating the corporate governance-corporate sustainability performance relationship in ASEAN public listed companies?

2. What is the impact of environmental degradation and corporate sustainability performance, and what is the role of institutional quality as a threshold variable in facilitating the environmental degradation-corporate sustainability performance relationship in ASEAN public listed companies?

3. What is the impact of financial development and corporate sustainability performance, and what is the role of institutional quality as a threshold variable in facilitating the financial development-