

## Research Article

### Environmental, Social, and Governance Investment in Emerging Markets: A Case Study of Firms in ASEAN

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#### Abstract

*This study examines the current situation of environmental, social, and governance (ESG) investment in Association of Southeast Asian Nations (ASEAN) countries. Based on a purposive sampling, our sample includes 143 leading firms from 10 ASEAN countries. By intensively reviewing firms' multiyear annual and sustainability reports, we utilize content analysis to identify the characteristics of ESG firms (firms considering ESG factors in their investment decision-making process). Our result shows that ESG firms, on average, have higher profitability. Moreover, ESG investment helps lower costs and boost revenue and profits. However, ESG investment has only been implicitly and unsystematically implemented in ASEAN firms.*

**Keywords:** ASEAN, emerging markets, environmental social and governance (ESG) investment, ESG factors, Southeast Asia, sustainability

#### I. Introduction

Environmental, social, and governance (ESG) factors have become an important part of global investment decisions. ESG encompasses a broad array of measures and is receiving increasingly widespread attention and recognition from policymakers, investors, and

the public for promoting sustainable working practices and company operations. In particular, investors have begun to realize the contribution of these factors to efficiency, productivity, long-term risk management, and operational enhancement. ESG represents an approach through which companies can act sustainably by taking action in certain areas and also provide value to their investors, going beyond simple profit. It can be seen as an investment, rather than a cost, to signal that a company is sustainable and that it operates responsibly, in turn adding value to society and all stakeholders.

However, despite these promising developments, a lack of understanding of the importance of ESG investment still remains among investors and policymakers, especially in emerging markets, e.g., in Association of Southeast Asian Nations (ASEAN) countries. Debate persists on the relationship between ESG investment and firms' performance and the optimal methods for integrating ESG factors into investment decisions. As the demand for ESG investment is growing around the world, understanding of ESG investment and the ways in which companies can utilize ESG factors is critical.

Previous studies focus on (i) the negative impacts on company activities due to the negligence of ESG issues (e.g. (Clark, et al., 2015) (Ministry of Environment, Japan, 2017); (ii) ESG investment helping companies avoid the realization of certain risks (Clark, et al., 2015) (Ministry of Environment, Japan, 2017); (iii) the inconclusive impact of ESG investment on firms' financial performance (e.g. (Baron, et al., 2009, p. 1); (Busch & Hoffmann, 2011, p. 233); (Jayachandran, et al., 2013, p. 1255); and (iv) the positive externalities of ESG investment. A growing body of ESG investment literature puts significant emphasis on the

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relationship between ESG investment and firm performance. Some of these studies (e.g. (Albuquerque, et al., 2013); (Koh, et al., 2014, p. 1464); (Liang & Renneboog, 2014, p. 853) find a positive relationship, while others (e.g. (Cornett, et al., 2013); (Garcia-Castro, et al., 2010) report no effect. For a more comprehensive review of the literature, the research papers by (Clark, et al., 2015); (Crifo & Vanina, 2015, p. 112); (Friede, et al., 2015, p. 210); (Fulton, et al., 2012); (von Wallis & Klein, 2015, p. 61); and (Unruh, et al., 2016) are recommended. To briefly summarize the previous studies, we identify the existing gap in the literature as follows. Firstly, the findings of the relationship between ESG investment and firm performance are inconclusive; however, there have been no research showing a negative relationship between the two variables. Secondly, despite the interconnected nature of ESG factors (Galbreath, 2013, p. 529), most of the studies analyze the environment factor, social factor, and governance factor separately. In other words, there are few comprehensive studies analyzing the overall impact of ESG investment. Thirdly, most of ESG studies are those of advanced markets but not emerging markets, such as markets in the ASEAN countries. Finally, data availability is often lacking in emerging markets and considered a significant technical issue in the study of ESG investment.

To address the aforementioned gaps and limitations, our study examines the current situation of ESG investment in ASEAN emerging markets. To overcome the issue of data unavailability, we compile our own dataset covering 143 leading ASEAN firms from 10 ASEAN Member States by intensively reviewing their multiyear annual and sustainability reports. Content analysis is used to gain insights into ESG and non-ESG firms' strategic approach, practical ESG investment, performance measures, and challenges. This

study is therefore an initial steppingstone for providing policy recommendations that can help firms and societies benefit from ESG investment, particularly for those in emerging markets.

## II. ESG Investment Trends and Prospects

According to the Global Sustainable Investment Alliance (GSIA), Malaysia is the largest market (30%) for sustainable investing in Asia excluding Japan and among ASEAN Member States. (Global Sustainable Investment Alliance (GSIA), 2017) However, during 2012–2014, Singapore and Indonesia experienced the fastest growth of sustainable investing in ASEAN, and Singapore is considered as a center for technology and sustainable investment products, while Indonesia is positioned as a hub of Islamic fund (Global Sustainable Investment Alliance (GSIA), 2017).

Table 1 shows the prevalence of ESG issues in the financial markets of ASEAN economies. While ESG mechanisms have not been adopted across the board, the stock exchanges of several ASEAN Member States require ESG reporting as a listing requirement, offer guidance on ESG reporting, and offer ESG training, among other measures. These initiatives indicate a growing trend and progressive support for ESG among exchanges in ASEAN economies. Meanwhile, governance-related disclosure is the most comprehensive form of ESG reporting, while the social and environment aspects are lagging in terms of disclosure quality. The ASEAN Member States each have varying levels of ESG investment development and policy implementation. While awareness of ESG has been increasing substantially in recent years, there is still much progress to be made in moving beyond awareness-building to the practical

development and implementation of ESG frameworks.

However, there has been a strong and sustained progression by some ASEAN stock exchanges in their global rankings for disclosure (Table 2). The Stock Exchange of Thailand (SET) rose from 40th place in 2013 to 10th in 2017, marking a continual year-on-year progression. Behind this strong performance have been increasing disclosure rates, growth, and timeliness among large Thai firms, encouraged by the voluntary reporting guidelines published by the stock exchange in 2012 and the subsequent mandatory requirements issued by the securities regulator in 2014.

While the trends and efforts for ESG investment are significant and encouraging, there are still challenges remaining for ASEAN entrepreneurs. At present, many ASEAN firms have not fully integrated ESG investment into their core business strategies and suffer from inadequate support from the public sector. Further progress by firms, exchanges, and policymakers is particularly important given this context. These challenges should be addressed urgently to take advantage of the growth potential of ESG investment.

Country	Stock exchange	Requires ESG reporting	Written guidance on ESG reporting	ESG-related training	Sustainability-related indices
Brunei Darussalam	-	No	No	No	No
Cambodia	CSX	No	No	No	No
Indonesia	IDX	Yes	No	No	Yes
Lao PDR	LSX	No	No	No	No
Malaysia	BURSA	Yes	Yes	Yes	Yes
Myanmar	YSX	No	No	No	No
Philippines	PSE	No	No	Yes	No
Singapore	SGX	Yes	Yes	Yes	Yes
Thailand	SET	Yes	Yes	Yes	Yes
Viet Nam	HOSE	Yes	Yes	Yes	Yes
Viet Nam	HNX	Yes	Yes	Yes	No

**Tab. 1.** ASEAN's Sustainability Landscape

**Source:** Authors based on database of Sustainable Stock Exchanges Initiative (2019)

Ranking					Exchange name	Score (%)			
2013	2014	2015	2016	2017		Disclosure	Disclosure growth	Timeliness	Overall
40	27	17	13	10	SET	73.8	62.5	69.0	70.1
24	23	19	17	15	Bursa Malaysia	51.1	62.6	80.9	62.4
18	22	15	18	16	SGX	53.1	53.9	78.5	60.9
37	38	31	34	25	IDX	39.3	34.4	66.6	46.5
26	18	14	15	27	SSE	25.8	35.3	85.7	45.7
39	33	28	32	29	PSE	43.9	33.9	42.8	41.6
16	31	35	-	32	KRX	42.8	27.9	45.2	40.5
3	12	21	28	36	TSE	53.6	33.3	19.0	39.2
38	26	20	43	37	SZSE	20.2	15.5	83.3	38.2
-	-	-	-	53	HOSE	12.1	3.6	-	9.6

**Tab. 2.** Sustainability Disclosure Rankings of Stock Exchanges in ASEAN and Selected Economies

**Notes:** The 2017 ranking covers 55 economies in total.

**Source:** Authors based on Corporate Knights (2017)

### a. Misperceptions about ESG Investment

As ESG investment is generally in its early stages in ASEAN, there are still firms that consider ESG investment to be an unnecessary practice or even a burden. A lack of understanding of the importance of ESG investment remains among investors and even policymakers. Despite increasing demand for sustainable and impact investment solutions and a growing body of evidence to support the effectiveness of ESG investment, particularly from the financial perspective, many investors are still skeptical of the relationship between ESG investment and firms' performance. The first misperception is that ESG investment is costly and unprofitable. Secondly, some firms believe that ESG investment is only relevant when considering investment in the financial market. Thirdly, some firms believe that consumers and investors care little about ESG factors.

### b. Limited Capacity to Fully Integrate ESG Investment

The main challenge to the development of ESG investment among ASEAN entrepreneurs is that ASEAN firms still have not acquired the necessary capacity to fully

integrate ESG factors into their core business strategies.

*Lack of know-how.* The concept of ESG investment is new and broad. ESG factors are traditionally non-financial in nature and, therefore, difficult to measure in quantitative terms. Depending on the industry, the scope of ESG investment can also vary greatly. Even within the same industry, ESG investment can be broad-based as it includes multiple aspects, such as cost reductions, supply chain management, and technology development; and several stakeholders, such as consumers, communities, and regulators. Therefore, there is no one-size-fits-all solution for firms to fully integrate ESG investment. The lack of a standardized and objective method for implementing ESG investment and measuring its results poses a daunting prospect to many firms. However, this challenge also offers a new opportunity to implement ESG initiatives and incorporate them in core business strategies by allowing firms to become creative, innovative, and flexible.

*Lack of resources.* This is particularly true for micro, small, and medium-sized enterprises (MSMEs). In addition to the lack of know-how in which even large firms are facing difficulties, a lack of resources, such as financial resources and human resources, poses a greater hurdle to MSMEs in integrating ESG investment. In such firms, the keys to overcoming these challenges will be creativity and innovation.

### *c. Insufficient Guidelines and Support from Exchanges and the Government*

The performance of exchanges and the involvement of the government varies considerably among ASEAN countries. In general, there are insufficient guidelines from exchanges in many countries. Only four countries (Malaysia, Singapore, Thailand, and Viet Nam) provide written guidance on ESG

reporting and require listed companies to report on ESG, while five countries (Malaysia, the Philippines, Singapore, Thailand, and Viet Nam) offer some form of ESG-related training. Although the exchanges have been engaged in promoting ESG among their listed companies, greater support from the exchanges is still needed.

## **III. Data and Methodology**

### *a. Data Collection*

Based on a purposive sampling, our data collection focuses on firms that are listed in the Forbes Global 2000 and Nikkei Asia 300 in 2017 and 2018. For the countries that did not appear in either list, i.e., Brunei Darussalam, Cambodia, Myanmar, and Lao PDR, we requested those countries' government officials to provide a list of the top-performing firms in the same years. The motivation underlying the purposive sampling is to capture firms that have high possibilities of practicing ESG investment while reflecting the real situation of ESG investment in ASEAN. The sampling assumes that being on either list implies that the firms have been performing well and might be more sustainable than those firms that were not listed. The sample includes 143 firms from 10 ASEAN Member States. These firms come from various sectors, including construction; energy; food, beverages, and tobacco; health care; hotels, restaurants, and leisure; industrial conglomerates; industrial machinery and materials; media and telecommunications; retail and trading; and transportation. To focus on real investment rather than financial investment, the sample excludes the financial sector, e.g., banks, investment funds, insurance companies, and real estate.

### *b. Content Analysis and Identification Strategy*

In our study, we define ESG investment as any investment that takes ESG factors into consideration. This can encompass both responsible investment as well as corporate social responsibility (CSR) related to ESG. Responsible investment refers to an investment approach that incorporates ESG factors into investment decisions. This consideration of ESG aspects is important because of the potential for affecting financial performance across all asset classes, leading to sustainable and long-term returns and better risk management, including efficiency and production-related benefits. CSR signifies a business approach for integrating ESG into firms' management strategies and methods. It goes beyond firms' legal requirements to include areas such as environmental management and community engagement. While CSR is business-centric and not an investment approach, it can help to draw investors who might be attracted by the ability to include ESG factors in their decisions. CSR and responsible investment are distinct from each other in that responsible investment is associated with financial investment (i.e., including investment relating to financial products and instruments). Therefore, its objectives are aligned with those of investors who focus only on financial returns. CSR, on the other hand, focuses on real investment because of its business-based approach.

Content analysis is utilized as a main research method to explore firms' awareness of ESG investment and ESG adoption. Furthermore, the analysis seeks to gain insights into firms' ESG strategic approach, practical ESG investment, performance measures, and challenges. We review multiple years of firms' annual reports and sustainability reports (where available) to identify ESG firms in our sample. We define ESG firms as firms that either incorporate ESG factors in their strategies or have a section for

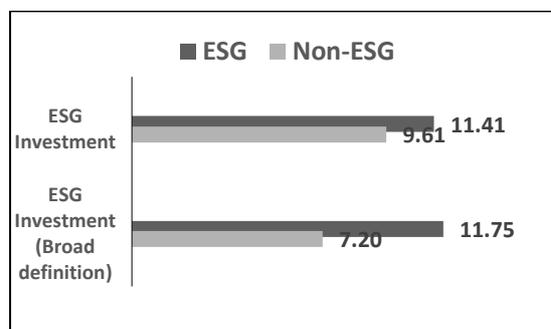
ESG investment in their annual reports, sustainability reports, or their websites. For a broader definition of ESG firms, we include firms that report activities related to sustainability but do not explicitly include ESG factors in their strategies or have a section on ESG investment in their annual reports, sustainability reports, or websites.

## **IV. Results and Discussion**

### *a. ESG Investment is Associated with Greater Profitability*

ESG investment helps firms increase profitability through two mechanisms, namely cost reduction and revenue generation. The average net profit margin of ESG companies in the sample is higher than that of non-ESG companies (Figure 1). The ESG companies comprise companies that have either incorporated ESG aspects in their business strategies or have a section on ESG investment in their annual reports, sustainability reports, or websites. The average ESG company profit margin is 11.41%, whereas the value for non-ESG companies is 9.61%. The net profit margin is calculated from the net profit divided by the total revenue. The net profit margin is averaged over time (1990–2018) and across companies to obtain average profit margins for both ESG and non-ESG firms. This is consistent with the general concept that ESG investment prevents risks associated with environmental, social, and governance issues and, in turn, promotes a consistent stream of income growth. On the other hand, non-ESG companies face higher risks; therefore, the growth of their income streams may fluctuate over time. This may result in lower profitability than ESG companies. With a broader definition of ESG investment, the average profit margin is 11.75% for ESG companies and 7.20% for non-ESG companies. This broader definition of ESG investment includes (i) ESG companies and (ii)

companies that report activities related to sustainability but do not explicitly include ESG perspectives in their strategies. The gap in profitability between ESG and non-ESG companies is wider when the broader definition of ESG investment is applied.



**Fig. 1.** Average Net Profit Margin of ESG Companies Versus Non-ESG Companies (%)

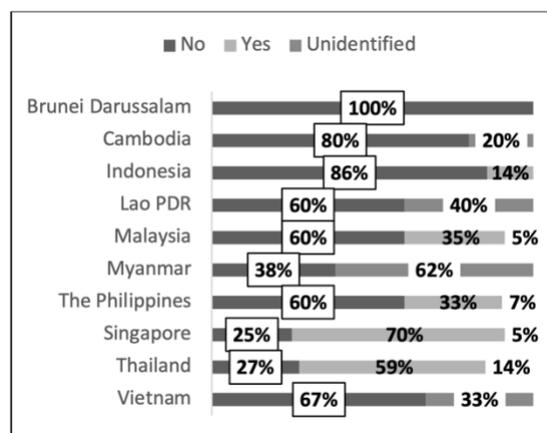
**Notes:** a. The net profit margin is calculated from the net profit divided by the total revenue. The net profit margin is averaged over time (1990–2018) and across companies to obtain average profit margins for both ESG and non-ESG firms; b. ESG firms are firms that either incorporate ESG factors in their strategies or have a section for ESG investment in their annual reports, sustainability reports, or their websites. ESG firms with a broader definition are firms that report activities related to sustainability but do not explicitly include ESG factors in their strategies or have a section on ESG investment in their annual reports, sustainability reports, or websites.

**Source:** Authors

*b. Moving into the Mainstream*

The adoption of ESG investment is gaining momentum in ASEAN countries. One-third of the sample firms were considered as ESG firms. ASEAN-5 countries (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) show a promising trend of ESG investment, but greater efforts are necessary for the rest of the Member States to catch up with ASEAN-5 (Figure 2). The majority of the sample companies in Singapore (70%) and Thailand (59%) were ESG firms. With this fact,

Singapore and Thailand have a higher proportion of ESG firms than other Member States and, therefore, are leading in terms of ESG investment among ASEAN countries.



**Fig. 2.** ESG investment by country

**Source:** Authors

ESG firms are mainly in the food, beverage, and tobacco industry, industrial machinery and materials industry, and transportation industry. Moreover, awareness shows signs of increasing in other industries, such as the construction (18%), energy (36%), health care (33%), industrial conglomerates (25%), and media and telecommunications (27%) industries. However, slow adoption of ESG investment is observed in the tourism-related industries (hotels, restaurants, and leisure) and retail and trading, in which none of the sample firms explicitly discuss ESG investment in their company reports or websites.

In terms of the duration of ESG investment, Thai companies have been engaging in ESG investment longer than those of other Member States. The longest duration of adoption of ESG investment is six years by PTT Public Company Limited (PTT), a Thai company in the energy industry. Similarly, Thai Oil Public Company Limited (Thai Oil) and Indorama Ventures Public Company Limited from Thailand have engaged in ESG investment for five years, which is the second-longest

among all ESG firms. Apart from Thai companies, Top Glove Corporation Bhd. from Malaysia also illustrates a long period of ESG investment adoption. The majority of ESG firms (62%) adopted ESG investment in 2017 or 2018; therefore, in recent years, the growth rate of ESG firms has been high in ASEAN countries (approximately 260%). However, only one-third of the ESG firms reported having concrete ESG analysis or frameworks.

#### *c. Hidden Potential*

Although only one-third of the sample were identified as ESG firms, with the broader definition of ESG investment, the situation for ESG investment is better in ASEAN, where ESG firms account for more than half of the sample. This implies potential growth for ESG investment in ASEAN. This potential growth is not only found for ESG firms that explicitly incorporate ESG factors in their business strategies but also those companies that are implicitly involved in ESG investment (hereafter, implicit ESG firms). In contrast with ESG firms, implicit ESG firms include environmental, social, and governance factors in their business strategies in a non-integrated manner. For example, they may have sustainability strategies considering the environment and social aspects, which represent the “E” and “S” elements of ESG investment, but do not integrate them in their main business strategies or have an ESG framework or analysis. Rather, sustainability strategies tend to be considered as a part of a CSR program, which may not necessarily be related to a firm’s main business strategies. With the current ESG trend and support from the government, these implicit ESG firms can mature and become ESG firms in the near future.

#### *d. ESG Investment Mechanisms*

In general, ESG investment helps firms raise profitability through two main mechanisms, cost reduction and revenue generation. Firms with best practices comprehensively report concrete statistics on either cost reduction or income generation, or both. Our sample shows that ASEAN ESG firms are creative and innovative in integrating ESG investment in their business strategies. They offer new business solutions and products to their clients while utilizing new technology and innovation in their production processes to improve efficiency. Most of the firms focus on the “E” factor as there is growing demand from environmentally conscious clients, and it is relatively easier to quantify. However, some firms also focus on the “S” factor as they believe improving the working environment and stakeholder involvement, especially for workers and suppliers, can result in higher operational efficiency and lower operational and transactional costs. Regarding the “G” factor, all firms report on corporate governance, but only a few show concrete statistics related to cost and revenue benefits or attempt to estimate the costs of governance-related risks.

According to our analysis, few firms develop a robust story or framework for their ESG investment. Many ESG firms report on sustainability performance in an implicit, unintegrated, and unsystematic manner as they have not realized that communicating their ESG initiatives and performance to consumers, business clients, and investors is important. In contrast, non-ESG firms probably have not recognized the benefits of ESG investment, whereas some may be aware of ESG investment but do not know where to start. This is related to the issue of firms’ misperceptions of ESG investment and the limited capacity for the integration of ESG factors.

While the results show the benefits of ESG investment, many entrepreneurs are still skeptical of the contribution of ESG investment to a firm's financial and economic performance. Thus, the most pressing agenda for policymakers is to change entrepreneurs' perceptions of ESG investment by conveying its benefits to them and society as a whole.

Regulators and policymakers can utilize information technology and big data to help implement policies and regulations, such as through the promotion of ESG investment, assimilation of ESG investment information, evaluation of ESG performance, and compilation of ESG data. By taking advantage of technology, regulators and policymakers can reduce transaction costs, improve work efficiency, and connect all stakeholders together to help monitor firms' ESG performance and design proper policies and regulations that meet the needs of society.

## V. Conclusion

Throughout this study, the importance and benefits of ESG investment have been emphasized as witnessed by the growing demand for ESG investment around the world, including ASEAN, and the finding that ESG investment is associated with greater profitability. All firms, regardless of their size and whether they are listed on a stock market, should, therefore, integrate ESG investment into their core business strategies and implement ESG investment as an essential part of their growth strategies.

ASEAN has made strong and encouraging progress in increasing the uptake of ESG investment. ASEAN ESG firms provide strong examples of innovative and creative strategies for incorporating ESG into business strategies and objectives. They have grown to utilize the latest technologies and offer new business solutions and products along with the

concerted consideration of ESG factors. Although significant progress is still needed for the "S" and "G" factors of ESG, the "E" factor now plays a strong role in the strategies of many firms.

Nevertheless, challenges remain. At present, ASEAN firms have not fully integrated ESG investment in their core business strategies, and inadequate support from governments may aggravate the current ESG situation. Although firms, regulators, and policymakers are the main players who should take immediate action to further progress ESG investment, involving other stakeholders through frameworks and dialogue can also help accelerate the progress. All stakeholders can work together to design well-rounded and comprehensive ESG initiatives at the firm level and shape better ESG-related policy instruments at the national level. Through these efforts, it is hoped that the ESG issues facing society will be reflected in an increasing number of initiatives, policies, and regulations. This, in turn, will create a better ESG investment environment and promote sustainable development throughout society.

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