ESG Investing Themes in Developing Countries

Research Progress and Future Prospects: a systematic literature review

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Dissertation written under the supervision of
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Abstract

Purpose – This thesis aims to evaluate the research progress in the field of ESG investment in developing countries based on academic articles retrieved from the Web of Science (WoS) database.

Design/Methodology/Approach – This research used a mix of quantitative and qualitative manual content analysis. For this purpose, 46 articles about ESG in developing countries were retrieved from the Web of Science (WoS) database to conduct a systematic review of the research progress in the field of ESG investment for identifying research gaps and laying down the research agenda for the future.

Findings – This research found that most of the reviewed papers focus on the correlation between ESG and corporate financial performance by analyzing empirical data.

Research Limitations – The articles included in the study were sourced from only one index (Web of Science), limiting the capacity to explore various literature available on sustainable investment from other sources, especially in languages other than English.

Originality – To the author's best knowledge, this is the first study to conduct a systematic literature review about ESG investing themes in developing countries.

Keywords – Developing Countries, Emerging Markets, Environmental, ESG, Fund, Governance, Investing, Portfolio, Social, Strategy, Systematic Literature Review

Category – Master Thesis

Title: ESG Investing Themes in Developing Countries - Research Progress and Future Prospects: a systematic literature review

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Sumário

Propósito – Esta tese tem como objetivo avaliar o progresso da pesquisa no campo dos investimentos em ESG nos países em desenvolvimento com base em artigos acadêmicos recuperados do banco de dados da Web of Science (WoS).

Projeto/Metodologia/Abordagem – Esta pesquisa utilizou uma mistura de análise de conteúdo manual quantitativo e qualitativo. Para este fim, 45 artigos sobre ESG nos países em desenvolvimento foram recuperados do banco de dados da Web of Science (WoS). Isto permitiu conduzir uma revisão sistemática do progresso da pesquisa no campo do investimento em ESG para identificar lacunas de pesquisa e propor uma agenda de pesquisa para o futuro.

Resultados – Esta pesquisa descobriu que a maioria dos artigos revisados se concentra na correlação entre a ESG e o desempenho financeiro corporativo através da análise de dados empíricos.

Limitações da pesquisa – Os artigos incluídos no estudo foram obtidos de apenas um índice (Web of Science), limitando a capacidade de explorar várias literaturas disponíveis sobre investimento sustentável de outras fontes, especialmente em idiomas outros que não o inglês

Originalidade – Do melhor conhecimento do autor, este é o primeiro estudo a realizar uma revisão sistemática da literatura sobre os temas de investimento em ESG nos países em desenvolvimento.

Palavras-chave – Ambiental, ESG, Estratégia, Fundos, Governança, Investimento, Mercados emergentes, Países em desenvolvimento, Portfolio, revisão sistemática de literatura Social,

Categoria – Tese de Mestrado

Título – Temas de investimento ESG em países em desenvolvimento - Progresso da pesquisa e perspectivas futuras: uma revisão sistemática de literatura

Autor – Marcel Hadwiger

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IV. List of Abbreviations

CFP	Corporate Financial Performance
EBA	European Banking Authority
ESG	Environmental, Social, Governance
FDI	Foreign Direct Investment
GNI	Gross National Income
GRI	Global Sustainability Standards Board Global Reporting Initiative
HDI	Human Development Index
IFC	International Finance Corporation
IMF	International Monetary Fund
PRI	Principles of Responsible Investing
R&D	Research and Development
SASB	Sustainability Accounting Standards Board
SDGs	Sustainable Development Goals
SRI	Socially Responsible Investing
UN	United Nations
UNCAD	United Nations Conference on Trade and Development
UNEP FI	United Nations Environment Programme Finance Initiative
UNFCCC	United Nations Framework Convention on Climate Change
WEF	World Economic Forum

WESP	World Economic Situation and Prospect
WoS	Web of Science

1. Introduction

Human society ceaselessly strives for progress. In 1944, Karl Polanyi drew attention to the fact that markets had harmfully changed societies so that the rules of rationality and utility had replaced the norms of reciprocity (Polanyi, 2001). The consequences were unintended and fatal. Class differences grew, and labor was exploited. Market values determined society's values and structures so that markets no longer served society, but society served the markets. Framing this conversation as “corporate responsibility” originated in the terminology of economics, law, and business school professors in the 1950s. In the 1980s, another group of civil society actors and governments stated that economic development exceeded natural resource limits. These groups advocated sustainability and sustainable development (Bansal & Song, 2017). Although the concepts of responsibility and sustainability emerged at different times and responded to different corporate transgressions, both shared a common interest in the relationship between business and society and appealed to the same business audience. Today, managers and scholars use the terms "responsibility" and "sustainability" interchangeably, inconsistently, and ambiguously. Nevertheless, a new term has emerged that promises to incorporate those two aspects.

In 2004, Kofi Annan (Secretary of the United Nations) challenged significant financial institutions to work with the United Nations (UN) and the International Finance Corporation (IFC) to find ways to integrate environmental, social, and governance (ESG) concerns into capital markets. The resulting study (Compact, 2004), "Who Cares Wins," was the first to use the term ESG. The paper noted that incorporating ESG factors into investments would benefit the company and make good business sense.

ESG results from the idea of responsible investment. The Principles for Responsible Investment (PRI), a UN initiative, defines responsible investment as a strategy and practice for incorporating environmental, social and governance (ESG) factors into investment decision-making and active ownership (PRI, 2022). Therefore, ESG typically refers to a standard and strategy used by investors to evaluate corporate behavior and future financial performance.

This dissertation reviews the literature on investment practices that consider environmental, social, and corporate governance (ESG) factors in emerging or developing countries. These investment practices are known by many names, including ethical, sustainable, impact, green, or socially responsible investing (SRI). Because consideration of ESG factors in investing is no longer limited to SRI, the term ESG investing in this work refers to all investment practices that consider ESG factors. The work at hand identifies the current literature on ESG investing themes and gives directions for guiding future research.

1.1 Relevance, justification and objective of the research

Since the term ESG was coined, it has steadily grown in importance. For example, according to McKinsey (Pérez et al., 2022), the number of internet searches for ESG has increased fivefold since 2019, while searches for corporate social responsibility, a previous focus area reflecting corporate engagement rather than transformations of the core business model, have plunged. Across industries, regions and company sizes, organizations have devoted more resources to improving their ESG performance. More than 90 per cent of S&P 500 (a United States stock market index that tracks the financial performance of 500 publicly traded domestic companies) now publish some form of ESG report (Pérez et al., 2022). Integrating ESG factors remains the most popular and fastest-growing approach to sustainable investing, followed by negative screening, corporate engagement and shareholder action, norms-based screening and sustainability-themed investment (GSIA, 2021). Despite the growing popularity of sustainable and ESG-related investing worldwide, there is a lack of consistency across geographies, both in practice and in principle. While ESG investment and research have grown significantly in the United States of America, Europe and Australia, growth in developing countries has been slow (Talan & Sharma, 2019).

This thesis aims to assess the current scientific literature on ESG-related investment topics in developing countries, indexed on the Web of Science (WoS) database. Therefore, this section outlines the research objectives being addressed through this systematic literature review:

RO1: To systematically review the existing literature and identify thematic areas in which the literature on ESG in developing countries has focused.

Based on this, the research progress will be analyzed for future prospects and potential current gaps in the focus areas, resulting in the second research objective to be:

RO2: To identify the gaps in existing literature and define the potential focus areas for future researchers in the field of ESG in developing countries.

A systematic review of the literature published on the Web of Science database was conducted to achieve these research goals. According to Jabbour (Jabbour, 2013), this is a well-established method for gathering information on studies of emerging topics. To the best knowledge of the author, this is the first systematic literature review about ESG-related investment topics focusing on developing countries.

1.2 Research Structure

To answer the research questions above, the research initiates with a critical literature review (Chapter 2) on the topics of developing countries, the concept of ESG, ESG investing and the critiques and current weaknesses of ESG Approaches. In Chapter 3, the research methodology for this systematic literature review is stated. After the methodological procedure is explained, the findings (Chapter 4) are illustrated with its analysis and thematic discussion. Finally, conclusive remarks (Chapter 5), including the main findings as well as limitations and future research are displayed.

2. Literature Review

2.1 Developing Countries

The terminology of labelling countries as more or less developed is not universally agreed upon, changes its wording over time, and differs from indicator to indicator. This categorization is based on the distinction between developing and developed regions until recently embodied in their M49 standard. The classification of economies by level of development is for statistical simplification and does not represent a valuation of the level of development of any particular country or area. As of December 2021, UNSD no longer categorizes developing and developed regions per M49 (UNCAD, 2022).

Nevertheless, they continue to consider that this categorization can still be applied. According to the UNCAD (United Nations Conference on Trade and Development), the developing economies include Africa, Latin America and the Caribbean, Asia excluding Israel, Japan and the Republic of Korea, and Oceania excluding Australia and New Zealand (UNCAD, 2022). One of the most apparent indicators – the World Economic Situation and Prospect (WESP) – classifies a country's level of development as per capita gross national income (GNI) (WESP, 2022). The International Monetary Fund's (IMF) definition is based on per capita income, export diversification and interconnectedness with the global financial system (Nielsen, 2011).

2.2 The Concept of ESG

As an investment concept for assessing the sustainable development of companies, the three fundamental ESG factors are the essential points to consider in investment analysis and decision-making. In addition, environmental, social, and governance (ESG) factors help to measure the sustainability and social impact of corporate activities. As stated by the European Banking Authority (EBA), ESG factors are environmental, social or governance matters that can positively or negatively impact the financial performance or solvency of a company, state or individual (EBA, 2021). As a matter of sustainable and coordinated development that considers economic, environmental, social and governance benefits, ESG is an investment philosophy that seeks long-term value enhancement. It is a comprehensive, concrete, down-to-earth governance method (Li et al., 2021). Nevertheless, current policy frameworks still lack consistent definitions of ESG factors, so current market practices vary from institution to institution and country to country. This is true also to the EU, where the EU Taxonomy Regulation establishing a framework to facilitate sustainable investment is an essential milestone in defining legally sustainable activities. Especially in developing countries, there is a lack of common frameworks and regulations.

Table 1 lists examples of ESG factors (positive and negative) that are included in the most commonly used international frameworks (EBA, 2021). Examples of frameworks covering ESG principles would be the United Nations Sustainable Development Goals (SDGs), the Principles for Responsible Investment (PRI), the United Nations Environment Programme Finance Initiative's (UNEP FI) principles for responsible banking, the Global Sustainability Standards Board's Global Reporting Initiative (GRI), the World Economic Forum (WEF) report on Measuring Stakeholder Capitalism, and the standards of the International Finance Corporation Environmental and Social Performance Standards (IFC Performance Standards) and the Sustainability Accounting Standards Board (SASB) (EBA, 2021).

Table 1: Examples of ESG factors included in International ESG Frameworks (EBA, 2021)

Dimension	Factors that may have a positive or negative impact
Environmental (E)	• GHG emissions • Energy consumption and efficiency • Air pollutants • Water usage and recycling • Waste production and management (water, • solid, hazardous) • Impact and dependence on biodiversity • Impact and dependence on ecosystems • Innovation in environmentally friendly products and services
Social (S)	• Workforce freedom of association • Child labor • Forced and compulsory labor • Workplace health and safety • Customer health and safety • Discrimination, diversity, and equal Opportunity • Poverty and community impact

	• Supply chain management • Training and education • Customer privacy • Community impacts
Governance (G)	• Codes of conduct and business principles • Accountability • Transparency and disclosure • Executive pay • Board diversity and structure • Bribery and corruption • Stakeholder engagement • Shareholder rights

Corporate ESG adoption has several determinants and expected outcomes. Furthermore, corporate management may view ESG adoption as a strategic decision. A company's sustainability efforts can increase the firm value or shareholder value, promote sustainability (Freeman, 2010), and provide differentiation and cost savings (Porter et al., 2019). Moreover, it can positively impact employee work engagement (Agarwal et al., 2012) and improve productive employee behavior and customer loyalty (Kim & Park, 2017).

2.3 ESG Investing

In the context of sustainable finance, including ESG finance, we need to expand the definition of the investor to include all company stakeholders, i.e., people who invest in a company in some way or are interested in its results. Companies depend on investors to survive and grow, as these individuals are deciding whether and where to invest (Bloxham, 2011). Investors need to invest money and other resources to reduce social and environmental risks in the companies whose stock they own because events associated with these risks can cause significant damage. Social or environmental problems can affect investors' financial results and damage their reputations. Strategic decisions made by companies can have a significant impact on the public's perception of social and environmental issues. Therefore, it is vital to make sound strategic choices to maintain a status as being sustainable (Hamilton & Eriksson, 2011). Responsible and sustainable investing, taking into account ESG criteria, is no longer a side issue and has become a latent or crucial issue aimed at incorporating non-financial criteria into investment decisions. The statistics and market data company Statista proves that assumption by plotting the amount of investment on environmental, social, and corporate governance worldwide from 2012 to 2018. According to their data (Appendix 1), global ESG investments have increased significantly recently, from about USD $11.35 trillion in 2012 to about USD $30.7 trillion in 2018 (Statista, 2022).

2.4 Critiques and current weaknesses of ESG Approaches

Perhaps the most prominent objection to ESG is that it gets in the way of what critics see as the proper role of corporations. As Milton Friedman said in his much-quoted 1970 New York Times article, a corporate social responsibility is to increase profits (Friedman, 2007). From this perspective, ESG can be presented as a kind of sideshow or distraction. As a public relations measure of benefiting from the higher motives of customers, investors or employees. In doing so, it suggests ESG as something that strengthens a brand's reputation but is not essential to corporate strategy. Nevertheless, often overlooked, Friedman added to his headline statement, that this must be done in compliance with the basic rules of society, both those enshrined in law and those enshrined in ethical custom (Friedman, 2007). From this complementary perspective, Corporate Social Responsibility (CSR) has become the focus and center of discussion in the years afterwards. Although Friedman did not believe that a corporation should take over the state's role in providing public goods, society has changed as neoclassical economics has taken over the public imagination, resulting in a state shift from a welfare state to a regulatory state. These developments have led to more significant differentiation between the state and the private sector, emphasizing the role of business as a private enterprise tasked with creating wealth and the state withdrawing from providing goods and services and instead focusing on setting the society's rules (Sheehy & Farneti, 2021). Hence, it surely will not be negative for corporations to step in and take responsibility towards environmental, social and governance factors. Critiques remain if the ESG approach in its current perception is even designed to measure the impact of a corporation on the world and not oppositely the world's potential impact on the firm's financial performance and its shareholders profits (Simpson et al., 2021).

Another objection is that ESG, especially in the form of ESG scores, cannot be measured accurately. While individual E, S, and G dimensions can be assessed if the necessary verifiable data are collected, some critics argue that aggregate ESG ratings have little meaning. This shortcoming is exacerbated by differences in weighting and methodology among ESG rating and assessment providers (Pérez et al., 2022).

Furthermore, organizations that set frameworks and standards, such as the GRI and the SASB, may measure the same phenomena significantly differently, arriving at separate results (Pérez et al., 2022). Therefore, it is possible to obtain completely unlike ESG performance metrics depending on the provider, methodology and weighting of the factors used. Additionally, ESG ratings from different service providers lack comparison by region, industry and analyzed period. Leading to another objection to ESG, that positive correlations with outperformance, if they exist, could be explained by other factors and are not causal. This can also be observed throughout the studies included in this systematic literature review.

3. Methodology

3.1 Systematic Literature Review

A systematic literature review enriches knowledge about the state of research to date and helps discover areas that are still missing or are just beginning to attract attention. They closely follow a set of scientific methods that explicitly aim to limit systematic errors (biases), mainly by attempting to identify, assess, and summarize all relevant studies (regardless of design) in order to answer a particular question or set of questions (Petticrew & Roberts, 2008).

This systematic literature review is motivated by the need to obtain an overview of the form and composition of published ESG investment articles. The review serves the purpose of mapping the paths that publications have taken, thereby determining the main themes. Examining these themes will help identify gaps for future potential research. The gaps will either occur within established themes or represent new and emerging themes. The review will contribute to future research by uncovering the topics most relevant to ESG investing in developing countries.

The methodology of this dissertation was inspired by the work of Jabbour (2013), Lage Junior & Godinho Filho (2010), Ferreira et al. (2016) and Talan & Sharma (2019), which conducted systematic and integrative literature reviews using codes and categories for their analyses. During the systematic review process, the following steps according to the procedures of Lage Junior and Godinho Filho (2010) were taken:

1) Performed a literature review of research about ESG investment in developing countries;
2) Classified and coded the different features of the articles to summarize what is known about ESG investing in developing countries;
3) Analysis of the review;
4) Identification of gaps in the literature and recommendations

3.3 Data Collection

The literature search in this dissertation focuses on articles published in professional academic journals (as opposed to industry reports and published books) without a limitation from the earliest published to April 2022. The Web of Science (WoS) was selected as an appropriate database for the search because of its reputation for maintaining a comprehensive collection of published journal articles and their respective citations.

The keyword combinations (Figure 1) were constructed to bundle academic publications on ESG investing in developing and emerging countries. The search screen, therefore, has three criteria. The first is the concept, i.e., ESG with either environmental, social, or governance investing. This criterion is applied using a string of keywords to represent each concept. The second criterion is the investment management context. The third one included developing countries, emerging countries or emerging markets. Some obvious examples include investing, strategy, fund and portfolio management. Further, the asterisk (*) was used to broaden the search to retrieve all the variants of a word stem, for example, social* to capture both social and socially.

Keywords for ESG integration and investing concepts
(ESG AND invest*) OR (ESG AND strateg*) OR (ESG AND fund*) OR (ESG AND portfolio*) AND
(environment* AND invest*) OR (environment* AND strateg*) OR (environment* AND fund*) OR (environment* AND portfolio*) OR
(social* AND invest*) OR (social* AND strateg*) OR (social* AND fund*) OR (social* AND portfolio*) OR
(govern* AND invest*) OR (govern* AND strateg*) OR (govern* AND fund*) OR (govern* AND portfolio*) AND ("developing countr*" OR "emerging countr*" OR "emerging mark*")

Figure 1: Keywords for ESG integration and investing themes in developing countries

3.4 Search Results and Data Clearing

In total, 79 research articles with these criteria were found on the April 7th in 2022. All these articles were checked for relevance to the critical focus of ESG investment, meaning that neither articles that dealt with ESG issues but were not really associated with investment management, nor articles not necessarily focusing on developing countries, were excluded. For the analysis of this thesis, papers regarding all countries that matched the keyword search of developing and emerging countries were considered for the systematic review. The articles were reviewed by reference to their titles, keywords, publishing journal, abstracts, and, in the cases where further details were required to distinguish their relevance, the full text of the article. After rejecting 30 articles irrelevant to the research and excluding the three articles unavailable or accessible to the author, the remaining 46 articles were finally selected and reviewed for the study. Similar designed studies, including Junior & Godinho Filho, (2010) and Jabbour (2013) have used and proposed a comparable number of articles for systematization. The classification and coding of these items were performed as described in the next section. Figure 2 illustrates the details of the selection and rejection of papers for review using a flowchart process.

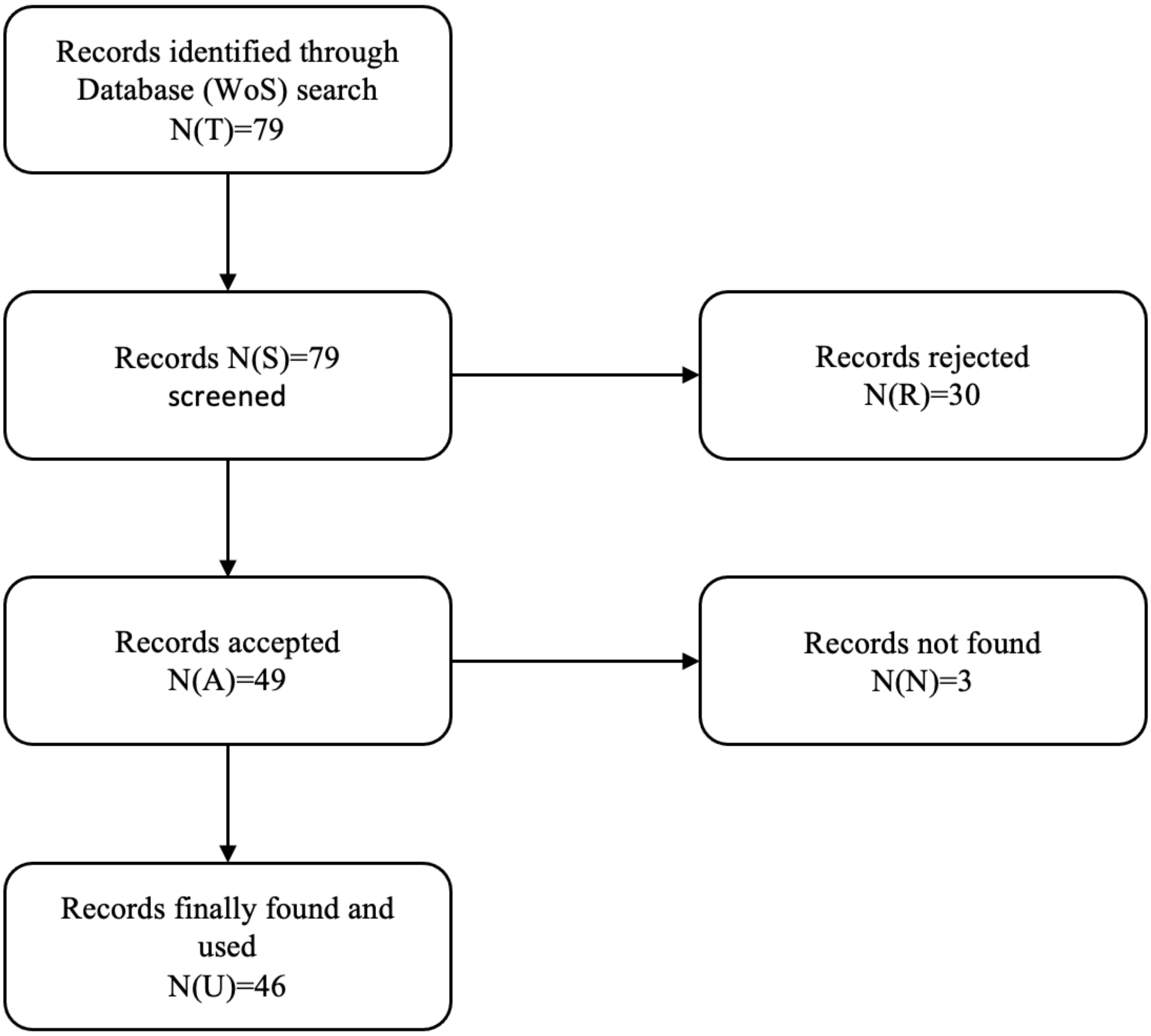

Figure 2: Flowchart Explaining Selection Process of Relevant Papers

The order and numbering of the articles followed is presented in Table 2. It lists all the studies used for the systematic review, including the three papers that were not available for download, describing the goals and results of each reviewed study in a brief summary. Papers unavailable for download were mentioned by authors and title.

Table 2: Brief descriptions of the goals and results of each analyzes study

Nr.	Study	Brief Summary
1	Ting et al. (2019)	The underlying premise of this research is to examine corporate social performance (CSP) as a determinant of corporate financial performance (CFP). It examines the impact of corporate ESG initiatives on financial performance. It also compares the valuation effects of CSP initiatives in companies from developed and emerging markets. Compared to developed countries, companies from emerging markets had higher ESG combination scores, ESG controversy scores, category scores for resource use, workforce, human rights, and corporate social responsibility strategy scores. The presence of independent board members and investor participation positively determines value creation.
2	Disli et al. (2022)	This study analyzes the impact of board characteristics such as board independence, gender diversity, the board size, and board activity on the sustainability performance of 439 listed non-financial companies in 20 emerging markets from 2010 to 2019. The overall results suggest that smaller, gender-mixed, and independent boards that meet frequently achieve better sustainability performance.
3	Bahadori et al. (2021)	This paper examines whether firm-level financial performance is positively associated with environmental, social, and governance (ESG) values in emerging markets. The results suggest that firms with higher ESG scores have higher profitability after controlling for firm size and debt.
4	Chauhan & Kumar (2018)	This paper examines the impact of non-financial disclosure on firm value for a large sample of Indian firms, an arguably emerging market with low investor protection and poor enforcement. The paper shows that the positive valuation effects associated with non-financial disclosure are lower cost of capital and higher operating cash flows.
5	El-Bassiouny et al. (2018)	This paper aims to investigate the concept of corporate social responsibility (CSR) communication. This paper specifically aims to investigate the CSR communication patterns in the Egyptian context, sampling the top ten companies in the Egyptian Stock Exchange Environmental, Social and Governance Index (EGX-ESG). The results show that most companies use the "stakeholder information" strategy, while the "stakeholder involvement" strategy is the least used.
6	Mobius & Ali (2021)	The case study by Mobius Capital was founded in 2018 to invest in a portfolio of 20 to 30 listed companies in emerging and frontier markets. They argue that successful ESG integration in emerging and frontier markets has little in common with the generalist approach to ESG issues used by many passive emerging market investors. ESG ratings tend to be backwards-looking and, even when analyzed independently, often fail to assess a company's ESG concerns and future potential.
7	Fahad & Busru (2021)	This study aims to investigate the impact of corporate social responsibility (CSR) disclosure on firm performance, considering both firm profitability and firm value in an emerging market (India). The result shows a negative impact of CSR disclosure on corporate profitability and corporate value in India, mainly influenced by environmental disclosure value and social disclosure value. A negative impact of corporate profitability and corporate value on CSR disclosure is also observed to highlight the inverse relationship.
8	Amin, N., & Tauseef, S. (2022).	Title: Does an optimal ESG score exist? Evidence from China. Macroeconomics and Finance in Emerging Market Economies.
9	Umar & Gubareva (2021)	The study used wavelet analysis to examine how social media coverage of the Covid 19 pandemic affected the volatility of ESG (environmental, social and governance) leading indices spanning the world, the U.S.,

		Europe, China and emerging markets. The results show that ESG indexes offer diversification benefits and can serve as a potential haven even in the face of a global disaster like the Covid-19 pandemic.
10	Linnenluecke (2022)	This article reviews the state of research on environmental, social, and governance (ESG) issues in the context of multinational enterprise research. The article discusses research progress and various issues and complexities related to using ESG ratings in cross-national studies and assessing the performance of multinational enterprises (MNEs) and emerging market multinationals (EMUs).SG frameworks have been developed to assess companies' sustainability in their "home" countries (usually focusing on developed countries), with limited applicability and transferability to emerging markets. International corporate activities are often not captured in detail or mapped comprehensively across a company's subsidiaries and supply chain, where ESG issues may arise. ESG assessments do not fully consider the views and voices of various local stakeholders affected by corporate activities, particularly indigenous communities.
11	Yamahaki & Frynas (2016)	This study examines how legislation promotes private shareholder attitudes and behaviors of pension funds and asset managers with listed companies on ESG issues in Brazil and South Africa. The findings suggest that legislation has limited direct support for a private engagement. This study alerts investors to the importance of understanding the national legal environment of the companies they work with and offers insights to governments interested in promoting ESG engagement.
12	Khaled et al. (2021)	This study develops a novel framework by comparing the Sustainable Development Goals (SDGs) and their targets with a company's sustainability practices reflected in its environmental, social and governance (ESG) ratings. The study shows that some SDGs and targets are more relevant to the corporate sector than others. It found that only 40 goals (out of 169) could be captured by relevant ESG indicators, which should not be surprising given that many goals focus on government rather than corporate actions.
13	Yoon et al. (2018)	This study examines whether corporate social responsibility (CSR) is vital in promoting market value in Korea's emerging market. We find that CSR practices have a positive and significant impact on a firm's market, consistent with previous studies on developed countries.
14	Moikwatlhai et al. (2019)	This study aimed to examine the relationship between the integration of environmental, social and governance (ESG) factors into investor decision-making and to assess whether institutional investors hold investments in companies listed on the Johannesburg Stock Exchange (JSE) over the long term. The results suggest that institutional investors' commitment to the United Nations Principles for Responsible Investment (UN PRI) and the Code for Responsible Investing in South Africa (CRISA) has not yet led to long-term investment in JSE companies.
15	Umar et al. (2021)	The study applies wavelet analysis to examine how the Covid-19-induced panic affected the volatility of environmental, social, and governance (ESG) indexes spanning the world, the U.S., Europe, China, and emerging markets. The low coherence intervals show that ESG indexes have some diversification benefits and can serve as a potential haven even in the face of a global catastrophe like Covid-19.
16	Garcia & Orsato (2020)	This study examines the relationship between ESG performance and the financial performance of companies from emerging and developed economies. Its findings suggest that the institutional environment plays an essential role in corporate financial and ESG performance.
17	Singhania, M., & Saini, N. (2021)	Title: Institutional framework of ESG disclosures: comparative analysis of developed and developing countries. Journal of Sustainable Finance & Investment
18	Tanjung, (2021)	By applying 2SLS estimates from 2010 to 2018, this study examines the relationship between the ESG index, GDP growth, and HDI of nine countries ranked in the MSCI ESG index. The post-estimates show a strong relationship between the ESG index and GDP growth. However, the index is not an effective tool for measuring the relationship between HDI and ESG, as it has not yet directly impacted HDI.
19	Xu et al. (2020)	This paper examines the impact of research and development (R&D) investment and ESG performance on green innovation performance. The results show that R&D investment positively impacts green innovation performance, and ESG performance can increase the number of patents for green inventions.
20	Wasiuzzaman & Wan Mohammad (2020)	This study aims to examine the impact of board gender diversity on environmental, social, and governance (ESG) information transparency in an emerging market such as Malaysia. The data show that ESG disclosure scores improve significantly as the presence of women on corporate boards increases.
21	Aboud & Diab (2018)	This paper examines the impact of environmental, social and governance (ESG) disclosure on firm value in the Egyptian context. The authors find that companies listed in the ESG index have higher firm value and that there is a positive relationship between companies' higher rankings in the index and firm value as measured by Tobin's q.
22	Mohmed et al. (2019)	This paper investigates the relationship between corporate social responsibility (CSR) and earnings quality in Egyptian companies, as represented by accrual earnings management. The results indicate that CSR has a positive relationship with earnings quality only in the companies with the highest CSR scores (the 30

		companies with the highest scores according to the index). CSR engagement in these companies improves the quality of their earnings.
23	Park & Jang (2021)	This study presents an ESG framework tailored explicitly to South Korea, including global and country-specific factors in all three categories. The results of this study show that institutional investors attach more importance to environmental and governance factors than social factors.
24	Lavin & Montecinos-Pearce (2021b)	The paper examines how board heterogeneity between the interests of controlling groups and the interests of institutional investors affects corporate ESG disclosure in the Latin American context.
25	Naimy et al. (2021)	This paper pioneers the study of this relationship for 108 East Asian listed companies in the industrial sector from 2011 to 2017. Considering the unexplained ESG-CFP (environmental, social, governance - corporate financial performance) relationship combined with the lack of studies focusing on emerging market companies and the impact of each ESG pillar on CFP considering industry categories. Our results show that the relationship between ESG and CFP depends on the ESG pillars, the type of CFP measures, and the type of industry.
26	Garcia et al. (2017)	This paper examines whether a company's financial profile is associated with above-average environmental, social, and governance (ESG) performance, considering companies from Brazil, Russia, India, China, and South Africa (the so-called BRICS countries). The results suggest that companies in sensitive industries have above-average environmental performance, even when the size and country of the company are taken into account.
27	Chipalkatti et al. (2021)	The study examines the role of ESG factors in attracting FDI and enabling progress on the SDGs. We find that good Human Development Index (HDI) scores discourage FDI and that higher FDI flows are associated with higher carbon emissions in the case of emerging economies.
28	Hasan et al. (2021)	This study attempts to investigate the strength of the relationship between CSRD and CFP of Indian firms.
29	Atnashev et al. (2015)	This paper seeks to trace the evolution of SRI practices and then examine how adopting ESG measures can affect company valuation in the marketplace and how it impacts financial performance, risk management, and share prices. They conclude that while financial instruments are already demonstrating the benefits of SRI in Russia, the social pressure placed on companies is insufficient for the widespread adoption of ESG principles by both management and investors. This gap suggests that there are opportunities for investors and stakeholders willing to create value based on the principles of socially responsible action and investing before the market.
30	Aboud & Diab (2019)	This study examines the combined impact of environmental, social, and governance (ESG) ratings on Egyptian companies' market and financial performance from 2007 to 2016. It does so by determining the impact of the recent political revolutions in the MENA region in early 2011 on the relationship between ESG practices and firm performance. It is found that companies with high ESG scores have better financial and market performance. These findings support the view that economic benefits are linked to environmental, social, and governance practices.
31	Lavin & Montecinos-Pearce (2021a)	The authors examine the impact of board heterogeneity and ownership structure on strategic corporate decisions such as ESG indicator disclosure in developing countries, particularly in Chilean firms. Our main results suggest that board independence and gender diversity positively affect the extent of ESG indicator disclosure.
32	Martínez-Ferrero & Lozano (2021)	This paper examines how the level of institutional ownership affects environmental, social, and governance (ESG) performance in emerging markets. The results show that corporate ESG performance in emerging markets depends on the level of influential institutional ownership and exhibits a U-shaped relationship, especially in environmental disclosure. Institutional investors with low ownership levels are less likely to promote better ESG performance in emerging markets. However, this effect is weakened when institutional ownership reaches a significant percentage that constitutes critical mass.
33	Chauhan & Kumar (2019)	The paper examines the impact of environmental, social, and governance (ESG) disclosure on foreign investment for Indian companies whose financial reporting does not provide adequate and reliable information. Our results suggest that ESG-related disclosure is beneficial for firms with information problems. Finally, we find that the effect of ESG-related disclosure is minor for domestic investors.
34	Khemir (2019)	This paper aims to investigate mainstream investors' perceptions of environmental, social and governance (ESG) criteria in an emerging financial market, namely Tunisia, the country of origin of the Arab Spring. Despite the efforts of the Tunisian state to promote CSR and ESG criteria since the outbreak of the January 14, 2011 revolution, the results show that our interviewees quite well know these criteria. In an investment decision, ESG criteria are considered secondary to financial criteria.

35	Yamahaki (2019)	This study examines how investor associations promote responsible investment behavior in Brazil and South Africa. The findings suggest that investor associations promote responsible investing through three types of institutional work: they educate by raising investor awareness of responsible investing, embed normative foundations in daily practice by providing responsible investing tools to integrate ESG considerations, and by providing a forum for investors to engage with companies in which they invest, and they decouple sanctions from rules by clarifying legislation for concerted investor action.
36	Buallay, Fadel, Alajmi, et al. (2020)	This study investigates the relationship between sustainability reporting and bank performance in developed and developing countries after the financial crisis. The evidence derived from the empirical results shows that ESG improves banks' accounting and market-based performance in developed countries, which supports the value creation theory. This study shows that ESG weakens the performance of banks in developed and developing countries by using the pooling regression and the generalized method of moments with instrumental variables.
37	Spulbar et al. (2019)	This research article examines the profitability of momentum portfolios using the emerging Indian stock market, i.e., the Bombay Stock Exchange (BSE), as an example. The theoretical and empirical analysis conducted in this research article shows the status of the BSE in India in this regard.
38	Lindrianasari et al. (2018)	This study aims to analyze and describe the social and environmental responsibility of listed companies in three developing countries, Indonesia, Malaysia and Thailand, before and after 2007. The results show that environmental costs, environmental and social disclosure and ESG increased significantly in the three developing countries after 2007. However, no significant increase in environmental costs was found in Indonesia.
39	Khemir et al. (2019)	This paper has two objectives. First, to investigate whether investors incorporate ESG information into their investment decisions in the Tunisian capital market. Second, identify the information dimension that has the most significant influence on investment decisions. The factorial mixed variance analysis results show that ESG information influences investment decisions in Tunisia. In addition, the post hoc test results indicate that governance and social information had a more significant influence than environmental information.
40	Zhang, X., Zhao, X., & He, Y. (2022)	Title: Does it pay to be responsible? The performance of ESG investing in China. Emerging Markets Finance and Trade
41	Sultana et al. (2017)	This study examines individual stock market investors' preferences for ESG issues and the influence of investment purpose on investment decisions by testing the investment horizon as a moderator.
42	Yu et al. (2018)	We investigate whether environmental, social and governance (ESG) transparency, i.e., the extent of ESG disclosure, impacts firm value. Our empirical analyses suggest that the benefits of ESG disclosure to the average listed firm outweigh its costs.
43	Bing & Li (2019)	This paper examines the relationship between CSR and enterprise value of listed Chinese companies from 2010 to 2017. The results for the entire sample show that CSR significantly reduces enterprise value.
44	Zhan & Santos-Paulino (2021)	This paper assesses global trends in SDG investments and financing, including the various financing instruments introduced in response to the COVID-19 health crisis and its economic and social impacts.
45	Miralles-Quirós et al. (2018)	In this context, this study aims to investigate whether the activities of companies listed on the São Paulo Stock Exchange play an essential role in increasing the value of companies during the period 2010-2015. Their overall results support the theory of value enhancement rather than the theory of shareholder costs.
46	Lukšić et al. (2022)	This paper relates to the current state of development in the Western Balkans. The authors derive recommendations for policymakers in designing future green bonds and debt-for-nature swaps and apply them to national circumstances in the six Western Balkan countries.
47	Bodhanwala & Bodhanwala (2019)	This study examines whether sustainable and responsible investing (SRI) outperforms its benchmark index globally over different periods. The study finds that SRI portfolios in developing countries perform significantly worse than their benchmark index but have a significantly lower risk. Results for developed countries oppose the opposite.
48	Buallay, Fadel, Al-Ajmi, et al. (2020)	This study examines the relationship between ESG and banks' operational, financial, and market performance in a group of emerging markets in the Middle East and North Africa (MENA). The empirical results show a significant positive impact of ESG on performance and economic benefits to shareholders. However, the relationship between ESG scores varies across individuals; contrary to most published research, the authors found that social performance negatively determines bank profitability and value. In addition, the authors present evidence of the impact of a bank- and country-specific factors in determining bank performance.

49	Maama (2020)	This study examined the influence of the institutional environment on the environmental, social, and governance (ESG) accounting practices of banks in West Africa. The objective of this study is to investigate whether the size of an economy and the governance structure of a country is relevant to ESG accounting practices. The results show that GDP has a positive and non-significant relationship with ESG reporting, suggesting that an economy's size is irrelevant to ESG accounting.

3.5 Codes and Categories

After the collection and screening of the chosen articles, characterization techniques used by Jabbour (2013), Ferreira et al. (2016) and Talan & Sharma (2019) were constructed to create a classification framework that allows putting the data collected from the analysis of the articles in classifications and codes, in order to clearly identify the current themes and understand the relevance of the ESG investing approach. This classification scheme included nine major themes numbered from 1 to 9. Each classification number was coded using alphabetical letters that can go from A to F, as shown in Table 3). This classification, therefore, involved a combination of numbers and letters.

The starting classification assigns the codes A, B, and C to understand whether the study focused on a developed or developing country context. A "mixed" code was assigned for studies not applicable to one of the specific regions. The following classification regards the geographic region within the context. Therefore, code A was assigned to Africa, B to South America, C to Asia, D to geographic regions outside the earlier mentioned, here labelled as the "Rest of the world", and finally, E for mixed or not precisely specified regions. Category 3 classifies the methodology used in the reviewed papers by assigning A to conceptual or model-building work, B to case studies, C to articles containing some empirical testing, and D for articles with a mainly reviewing character. The methodology classification helps to understand the different objectives of the articles. For example, papers that propose a new model/framework for ESG investment can be distinguished from those that test existing models with a different data set. Thus, the classification allows for a deeper understanding of the approach taken in the literature, including assessing the acceptability of existing models. For the category dealing with the article's main topic, A represents a focus on ESG effects on firm value or performance, B ESG frameworks or regulations, C ESG ratings, scores and performance indicators, including ESG reporting, and D the topics covering sustainable development or the Sustainable Development Goals (SDGs). In the case of ESG and investments, it is interesting looking into the sector dealing with the topic in the articles. Therefore, the fifth category distinguishes between A private sector, B public sector, and C for a mixed analysis. The following category named industry gives further insights by the codes A for Banking and Finance, B for not specified or multiple sectors, C for industrial sectors and D for sensitive sectors. In particular, the seventh classification helps us to identify the popularity and acceptance of the ESG approach in the existing literature. This classification separates papers endorsing the ESG approach from those criticizing it and those with a neutral view, coded by letters A to C. That helps to understand whether the selected papers represent new discourses in the field of ESG and also helps to differentiate the scope and acceptance of ESG in different fields, geographies and periods. The eighth classification emphasizes the dimension of the results of the articles, classified with letters A for new perspectives, insights or stream of research given, B for consistent with the literature, C for reviewing existing models with different datasets/periods or papers that seek to answer questions previously presented, D for comparative studies and E for not applicable to one of them. Finally, the ninth classification analyzes the period that the articles considered in developing the analysis in the articles, coded with the letters A for analysis periods less than three years, B for periods from 3 up to 5 years, C between 6 and 10 years and D for a more than ten years period. This criterion evaluates the scope of the data and the historical period developed in the article. For the thesis at hand, a mutually exclusive approach was taken, where each paper got categorized by using only one single most suitable code in each category.

Table 3: Coding and categorization criteria used in this thesis

Category	Meaning	Code	Meaning
1	Context	A	Developing County
		B	Developed Country
		C	Mixed
2	Geographic Region	A	Africa
		B	South-America
		C	Asia
		D	Rest of the World
		E	Mixed / Not Specified
3	Methodology	A	Concept/Model Building

		B	Case Study
		C	Empirical Testing Quantitative
		D	Empirical Testing Qualitative
		E	Empirical Testing Mixed Methods
		F	Review Paper
4	Main Topic	A	ESG effect on firm value/performance
		B	ESG Framework/Regulations
		C	ESG ratings, scores, performance indicators
		D	Sustainable Development Goals
5	Sector	A	Private Sector
		B	Public Sector
		C	Mixed
6	Industry	A	Banking and Finance
		B	Not specified/multiple
		C	Industrials Sector
		D	Sensitive Industries
7	Approach	A	Advocates ESG Approach
		B	Gives a critique of ESG approach
		C	Takes a neutral approach on ESG
8	Results	A	New Perspectives
		B	Consistent with Literature
		C	Reviews models with different dataset/time period
		D	Comparative Study
		E	Not applicable
9	Analysis Period	A	Less than 3 years
		B	Between 3 to 5 years
		C	Between 6 to 10 years
		D	More than 10 years

4. Analysis of the Results

This section presents the article's overall categorization concerning each of the classifications and coding's, as shown in Table 4. Then, descriptive statistics were performed in the subsections, and the results were analyzed through these general classifications.

Table 4: Data classification and categorization for each paper

Paper	Context	Region	Method.	Topic	Sector	Industry	Approach	Results	Period
1	C	E	C	A	A	B	A	D	C
2	A	E	C	C	A	B	A	B	C
3	A	E	C	A	A	B	A	B	B
4	A	C	C	A	A	B	A	B	C
5	A	A	D	C	A	B	A	A	A
6	A	E	B	C	A	A	B	E	C
7	A	C	C	A	A	B	B	E	C
9	C	E	C	C	A	B	A	A	A
10	C	E	F	B	A	B	B	E	D
11	A	E	D	B	A	B	A	B	A
12	A	E	A	D	A	B	C	A	D
13	A	C	C	A	A	B	C	B	B
14	A	A	C	C	A	B	B	A	B
15	C	E	C	C	A	B	A	A	A
16	C	E	C	A	A	B	C	D	C
18	A	E	C	D	B	B	A	A	C
19	A	C	C	C	A	B	A	A	B
20	A	C	C	D	A	B	A	A	D
21	A	A	C	A	A	B	A	B	C

22	A	A	C	A	A	B	A	A	C
23	A	C	A	B	A	A	A	A	A
24	A	B	C	C	A	B	A	B	A
25	A	C	C	A	A	C	A	B	B
26	A	E	C	A	A	D	A	B	A
27	A	E	C	D	B	B	A	A	D
28	A	C	C	A	A	B	A	B	B
29	A	D	F	A	A	B	A	B	A
30	A	A	C	A	A	B	A	B	C
31	A	B	C	C	A	B	A	B	B
32	A	E	C	C	A	B	A	A	B
33	A	C	C	C	A	B	A	B	C
34	A	A	B	C	A	A	A	A	A
35	A	E	B	C	A	A	A	A	A
36	C	E	C	A	A	A	B	A	D
37	A	C	C	A	A	B	A	B	D
38	A	C	C	C	A	B	A	B	D
39	A	A	D	C	A	A	A	B	A
41	A	C	E	C	A	A	A	B	A
42	C	E	C	A	A	B	A	B	B
43	A	C	C	A	A	B	A	A	C
44	A	E	F	D	C	B	A	A	C
45	A	B	C	A	A	B	A	A	B
46	A	D	B	D	A	A	A	A	A
47	C	E	C	C	A	B	A	B	C
48	A	A	C	C	A	A	A	A	C
49	A	A	C	C	A	A	A	A	C

4.1 Descriptive Analysis and thematic discussions

Table 5 shows the number and percentage of papers belonging to each category and code, as defined in Table 3. The percentages do not have decimal points, since in case the previous rounding did not add up to 100%, the closest to round code in each category was rounded. The codes that are not applicable in some categories have been marked as N/A. The contributions with solid arguments related to the topics are discussed further in this section.

Table 5: Descriptive statistics of reviewed papers

Code(s)	Context	Region	Method.	Topic	Sector	Industry	Approach	Results	Period
A	38 **(83%)**	9 **(20%)**	2 **(4%)**	18 **(39%)**	43 **(94%)**	10 **(22%)**	38 **(82%)**	21 **(46%)**	13 **(28%)**
B	N/A	3 **(7%)**	4 **(8%)**	3 **(7%)**	2 **(4%)**	34 **(74%)**	5 **(11%)**	20 **(43%)**	10 **(22%)**
C	8 **(17%)**	13 **(28%)**	33 **(72%)**	19 **(41%)**	1 **(2%)**	1 **(2%)**	3 **(7%)**	0 **(0%)**	16 **(35%)**
D	N/A	2 **(4%)**	3 **(7%)**	6 **(13%)**	N/A	1 **(2%)**	N/A	2 **(4%)**	7 **(15%)**
E	N/A	19 **(41%)**	1 **(2%)**	N/A	N/A	N/A	N/A	3 **(7%)**	N/A
F	N/A	N/A	3 **(7%)**	N/A	N/A	N/A	N/A	N/A	N/A
Total	46 **(100%)**	46 **(100%)**	46 **(100%)**	46 **(100%)**	46 **(100%)**	46 **(100%)**	46 **(100%)**	46 **(100%)**	46 **(100%)**

4.1.1 Context

The vast majority (83%) of the papers analyzed concentrate on developing countries, while 17% put their focus on a mixture between developing and developed countries (none solely on developed countries due to our keyword search and filtering). Out of the eight papers dealing with developing and developed countries, four (Bodhanwala & Bodhanwala, 2019) (Ting et al., 2019), (Singhania & Saini, 2021), (Linnenluecke, 2022), take on a comparative approach trying to spot differences between those two contexts, whilst the other four take an approach across multiple geographies.

- Gap 1: When not taking a mutually exhaustive approach, there is a lack of research investigating potential knowledge gaps or differences in data between the context of developing and developed countries.

4.1.2 Geographic Region

Most (41%) papers includes mixed geographies, dealing with both developed and developing countries, as well as papers researching about developing countries in general by analyzing multiple indices. (Yamahaki & Frynas, 2016) and (Yamahaki, 2019) focus on Africa and Brazil. When the geographic region can be specified, Asia takes the biggest bulk of research papers (28%). Interestingly, five out of these 13 are focused on India (Chauhan & Kumar, 2018, Fahad & Busru, 2021, Hasan et al., 2021, Chauhan & Kumar, 2019, Spulbar et al. 2019). The others are either covering multiple Asian countries or focusing either on Korea (Yoon et al., 2018) (Park & Jang, 2021), China (Xu et al., 2020), Malaysia (Wasiuzzaman & Wan Mohammad, 2020) or Bangladesh (Sultana et al., 2017). Nine papers (20%) address Africa. Hereby notably, four devoting specifically to Egypt (El-Bassiouny et al., 2018) (Aboud & Diab, 2018) (Mohmed et al., 2019) (Aboud & Diab, 2019), and two to Tunisia (Khemir, 2019) (Khemir et al., 2019). Out of the tree South-America centered papers, two focus on Chile (Lavin & Montecinos-Pearce, 2021b) (Lavin & Montecinos-Pearce, 2021a), and one on Brazil (Miralles-Quirós et al., 2018). Categorized as Rest of the World includes one paper about Russia (Atnashev et al., 2015) and one about the Western Balkans (Lukšić et al., 2022).

- Gap 2: There is a gap across regions in developing countries and therefore a need to expand the research across all continents and countries.

4.1.3 Methodology

72% of the analyzed papers applied quantitative empirical testing. Most use existing quantitative data to run regression models. The rest of the papers use a case study approach (8%) (Mobius & Ali, 2021) (Khemir, 2019) (Yamahaki, 2019) (Lukšić et al., 2022), develop a concept or build a model (4%) (Khaled et al., 2021) (Park & Jang, 2021), do some sort of qualitative empirical testing (7%) (El-Bassiouny et al., 2018) (Yamahaki & Frynas, 2016) (Khemir et al., 2019), use quantitative and qualitative empirical testing (Sultana et al., 2017), or simply review already existing papers (7%) (Atnashev et al., 2015) (Zhan & Santos-Paulino, 2021) (Linnenluecke, 2022). Two of the papers developing a case study gather their primary data by conducting focus groups and semi-structured interviews (Khemir, 2019), or solely conducting semi-structured interviews (Yamahaki, 2019). Looking at the papers adopting quantitative empirical testing, they apply qualitative content analysis methodology (El-Bassiouny et al., 2018), interviews (Yamahaki & Frynas, 2016), or a field experiment survey (Khemir et al., 2019).

- Gap 3: Even if there can be presented correlations between ESG and Corporate Financial Performance (CFP) for example, there is no proof of causality. Hence, there is a need for qualitative empirical research to gain insights into causal relationships of ESG efficiency.

4.1.4 Main Topic

One of the following two main topics are discussed in most papers. The first investigates the effects of ESG on the firm value or vice versa (39%). The second one (41%) examines ESG ratings, scores and performance indicators, and bundles similar topics. Thus, it can be reasoned that the current central question in the field is if and how ESG affects the CFP or firm value. That supports the critique, also pinned out by Simpson et al. (2021) and Pucker & King (2022), as ESG being a measurement to assess the possible impact of the world (external risks) on the companies' financial performance. Another topic block combines or connects ESG with the SDGs (13%). In general, existing ESG measurements are primarily limited to large listed companies and potentially biased by country-specific regulations and standards and industry characteristics. ESG ratings from different rating providers are strikingly inconsistent. As a result, ESG characteristics need to be measured more accurately by focusing on genuine ESG investments linked to the United Nations SDGs (Liang & Renneboog, 2020). The smallest part of the topics (7%) aims to probe for ESG frameworks and regulations and therefore represents the drivers towards improving ESG in a specific context or region (Yamahaki & Frynas, 2016) (Park & Jang, 2021) (Linnenluecke, 2022). Future research in that direction might especially pay off in developing countries, as empirical evidence on the ESG-CFP relationship around the world is primarily based on evidence and frameworks developed for North American and European or UK markets. Hence, leading to the question of whether it is practical or even appropriate to "export" ESG frameworks to assess ESG performance outside of Western markets (Linnenluecke, 2022).

- Gap 4: Currently, most of the research concentrates on the effects of ESG on CFP and vice versa. As the data used differs depending on the providers of that data, future research should compare the effects by using data from multiple sources.
- Gap 5: Specifically designed frameworks for the characteristics of each country and market, instead of exporting frameworks from developed countries.

4.1.5 Sector

94% of the studies based their research on the private sector. The rest of the papers focused solely on the public sector (Tanjung, 2021) (Chipalkatti et al., 2021), or included both the private and public sector (Zhan & Santos-Paulino, 2021). As a result, it is worth mentioning that all the papers not purely investigating the private sector connected the main research topic around the SDGs. For this thesis, it can be stated that ESG investment topics in developing countries are exclusively dealing with the private sector, when the SDGs are out of scope.

- Gap 6: ESG effects gain legitimacy when they are connected to the SDGs. Future research should explore public sector ESG initiatives and investments and investigate their affects towards the achievement of the SDGs.

4.1.6 Industry

As most of the studies in this systematic review investigate ESG factors in the private sector, it is worth narrowing it down to specific industries. Thereby, this classification aims to put the research into different industry categories. Nevertheless, the results are not precise, as the highest portion of studies had to be coded as multiple industries or not specified to a specific industry (74%). Extracting all the industries of the datasets used in the papers would most probably mirror the country's leading indices since they are the most common data source. However, some papers could be assigned to a specific industry. The Banking and Finance industry was the most studied, representing 22% of the studies. Of all the previously mentioned industries, only one assigned to the industrial (Naimy et al., 2021) and sensible industries (Garcia et al., 2017) could be identified.

- Gap 7: Future research should aim to analyze the ESG efficiency in specific sectors, in order to gain specific insights regarding the efficiency and framework adaptation for distinct industries. Ideally the research either focuses on a single country or compares the same industry across countries.

4.1.7 Approach

The results indicate a positive outlook for ESG in developing countries as 82% of the studies advocate an ESG approach, whilst only 7% take a neutral stance, and 11% give critiques. In the case of the neutral perspectives and critiques, Khaled (Khaled et al., 2021) found that larger companies are more likely to have better sustainability performances. Their general findings show that only 40 out of 169 SDG targets could be captured by relevant ESG indicators. In contrast, Yoon et al. (2018) found that the effects are weaker for environmental sensitive industries in the Korean financial market. Further, Garcia & Orsato (2020) argue that ESG performance and corporate financial performance depend on the context. Hence, developed countries have a significant relationship between those indicators, while developing countries do not.

Of those stating critiques on the ESG approach, Mobius & Ali (2021) argue that, especially in emerging markets, the box-ticking, backwards-looking ESG approach often fails to provide a clear assessment of a company's ESG credentials and future potential. Furthermore, emerging markets pose additional challenges due to limited access to information and an opaque environment, meaning that reliable information on corporate ESG performance is often unavailable or not easily accessible. Nevertheless, this might improve by the extent of sustainability indicator disclosure (Mobius & Ali, 2021). Fahad & Busru (2021) further state that in the case of India, CSR activities on average decrease CFP and firm value, referring to Friedman's (2007) argument that firms' social responsibility is to increase profits. Buallay, Fadel, Alajmi, et al. (2020), although referring to other studies that suppose the opposite, support those findings by stating that relying on ESG ratings and disclosure is likely to lower performance and value. Moikwatlhai et al. (2019) goes beyond that argument by concluding that their research showed no statistically significant relationship between ESG reporting scores and long-term institutional investment at all.

Nevertheless, those exceptions in this analysis confirm the expected conclusion of the 85% that observe positive outcomes regarding ESG factors (not necessarily regarding CFP). The unique study of Khemir (2019) consisted of a series of focus groups and semi-structured interviews with financial professionals, to examine mainstream investors' perceptions of ESG criteria in Tunisia. The country is an emerging financial market, and the original location of the Arab Spring. Such a research approach bears the potential to bridge the gap between academic literature and practical use cases, by simultaneously enhancing the development of both.

- Gap 8: As only one paper included the perception of professionals dealing with ESG investing, including multiple sectors and countries, there is room in future research to gain qualitative insights to bridge the gap between scientific literature and practical use.

4.1.8 Results

A majority of the papers (46%) presented new results to the preexisting literature about ESG investing, although that does not necessarily mean that they presented groundbreaking new insights. They frequently investigated previously known perspectives in a different context or used different evaluation criteria to prove similar findings. Another significant stake of the reviewed papers (43%) produced findings that were consistent with the existing literature, which does not mean that they had the same results. However, they were at least confirming their assumptions and endorsing their own reviewed literature.

(Ting et al., 2019) and (Garcia & Orsato, 2020) took a comparative study approach between developed and developing countries. As described in the previous subsection about the approach, (Garcia & Orsato, 2020) argued that developed countries have a significant relationship between ESG performance and CFP, while developing countries do not. On the other hand, (Ting et al., 2019) generally states that the significance of the positive valuation effects of ESG initiatives suggests that ESG practices as part of a company's business strategy. Additional findings are as follows. First, emerging-market companies had higher ESG initiatives related to resource use, workforce, human rights, and CSR strategies. In contrast, companies from developed countries had significantly higher community values, reflecting the company's initiatives to maintain public health and business ethics. Thus, according to the findings, maintaining these initiatives is vital for value creation (Ting et al., 2019). Although taken into this systematic review, there is no study in this dataset about ESG in developing countries that reviews existing models with different datasets or time periods. This can be explained by the rare and young literature in that field, as will be discussed in the following subsection.

Additionally, there are three studies that do not fall in either of the before mentioned category and therefore they are labeled as not applicable. Both of them give critiques to the ESG approach in general, as stated in subsection approach. Mobius & Ali (2021) and Fahad & Busru (2021) doubt the efficiency and purpose of ESG in its current form. (Mobius & Ali, 2021) findings impose that improvements in ESG disclosure do not necessarily correspond with improvements in ESG credentials from an operational or strategic standpoint (given the record number of greenwashing that they argue we are currently seeing companies in emerging markets make), while Fahad (Fahad & Busru, 2021) generally supports shareholder value maximization. The third paper in this group, (Linnenluecke, 2022), by analyzing previous research (including Mobius & Ali 2021), argues that some main issues with ESG in developing countries are the urge to transfer frameworks from developed to developing countries (without adjusting them), the neglection of supply-chain activities (especially far upstream) and the non-compliance towards indigenous rights. Given the weight of all the studies included in this systemic review, most of the papers either bring new perspectives to ESG literature in developing countries, align with previous findings and advocate the ESG approach.

- Gap 9: Since this systematic review could not spot papers that reviewed existing models with different datasets or time periods, there is a need to do so in future research.
- Gap 10: Especially in developing countries it is crucial to involve firms activities on local stakeholders, especially indigenous people. Therefore, future research should address those needs in the specific settings.

4.1.9 Analysis Period

As ESG, non-financial and sustainable investment decisions by nature usually have a long-term investment perspective, it is important to analyze the analysis period of the reviewed papers. The biggest cluster of the papers (35%) observe their research or data over a time horizon of between six to ten years. Followed by papers (28%) doing that over a period of below three years, which can arguably be seen as a bottleneck towards significance of the research. 22% of the studies have a analyzed period from three to five years, while the rest 15% analyze their data or research over a time period of above ten years. (Bing & Li, 2019) contribute interesting findings to that debate by concluding that in their analysis period from between six to ten years from 2012 to 2017, the first period up to 2015 found that the CSR of Chinese listed companies reduces firm value, while the estimation results change significantly over the two sub-periods taking the year 2015 as the dividing point. More specifically, the negative and significant relationship between CSR and firm value in the first subperiod becomes non-significant in the second subperiod (Bing & Li, 2019). These results result from significant changes in the economic environment, regulatory policies, and capital markets after 2015. This also marks the year when 196 Parties adopted the Paris agreement at the 21st UN Conference of Parties in Paris (COP21) (UNFCCC, 2015). This legally binding international treaty on climate change was adopted on 12 December 2015 and entered into force on 4 November 2016. China for its part signed the Paris Agreement on the 22nd of April 2016 (UNFCCC, 2016). This is the first time such a result has been reported in developing countries, which supports research on the dynamic impact of CSR on firm value (Bing & Li, 2019). Given that, it can be assumed that future research, covering long time periods, especially including the years after 2015, will have a significant impact on ESG research in general, including ESG practices in developing countries. As the oldest paper included in this systematic literature was published in 2015, followed by one published in 2016 and two in 2017, and the rest started popping up exponentially from 2018 onwards, there is room for optimism.

- Gaps 10: Due to its long-term view, ESG investing data should be analyzed over a long time horizon and particularly investigate the results after crucial regulatory events like the Paris Agreement and its aftermaths from 2015 onwards.

5. Conclusion

5.1 Main Findings

Initial descriptive results show that current research mainly focuses on developing countries alone while only a fraction aims to compare developed and developing countries. When narrowing it down to specific regions, Asia takes the spotlight, while most of the research analyses developing countries in general by including multiple geographic regions. Regarding the methodology used, it becomes evident that quantitative empirical testing is predominant as the main research type. Private sector analysis takes the most extensive portion, as ESG currently targets private companies over public sector institutions. However, current research does not narrow down into specific industries but takes a broad approach by combining multiple sectors for a single analysis. The rising importance of ESG integration and investing indicates a positive outlook toward ESG in developing countries. At the same time, some papers mention critiques that should be kept in mind regarding the efficiency of the approach. Nearly half of the research generated new approaches and insights about the topic, while approximately the exact proportions of findings align with preexisting literature. Due to its rising interest, ESG research and data are rarely observed for ten years or above and often miss critical regulatory changes that have increased their frequency in recent years. When breaking it down to a single research purpose, most papers aim to find correlations between ESG integration and CFP using data from the most common ESG data provider and stock indices.

5.2 Limitations and Future Research

The present study has limitations in the research that must be taken into consideration.

Limitation 1

This study focuses purely on ESG-related research retrieved from a single source, namely the Web of Science database. However, this database is widely known for publishing peer-reviewed and high-quality research and therefore represents a trustful source of information.

Further, the author of the thesis filtered the output of the performed keyword search, which makes it a subjective judgement nevertheless, as objective as the possible view was intended.

Limitation 2

Categorizing and coding to decompose the papers' findings is subjective. By leaning on prior frameworks of similar character, this subjection was intended to be kept at a possible minimum.

Future Research

The research gaps found in this survey suggest that future research should explore potential differences in the data and approaches taken to analyze ESG effects between developing and developed countries. When focusing solely on developing countries, there are still many unexplored regions; therefore, future research should cover more developing countries. There is a need for qualitative empirical research to gain insights into causal relationships of ESG efficiency, especially the effects of ESG on CFP and vice versa. To test the validity for the latter, future research should compare the effects using data from multiple sources instead of relying on a single provider. In order to gain legitimacy of ESG in the field of sustainable development, future studies should test the relationship to the SDGs and include more research regarding the public sector. ESG has practical use cases, so bridging the gap between research and real-world perception of ESG efficiency is crucial. Future research should test existing results by analyzing existing results using different datasets or periods to gain legitimacy. Especially in developing countries, research has to integrate effects regarding stakeholders, especially indigenous people, into the ESG evaluation. As regulatory changes arise more frequently and strictly, testing for their effect is essential. Further, future research should test their assumptions over long periods to increase the findings' validity.

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Appendices

Appendix 1: Investment on environmental, social, and corporate governance worldwide from 2012 to 2018 (in billion U.S. dollars)

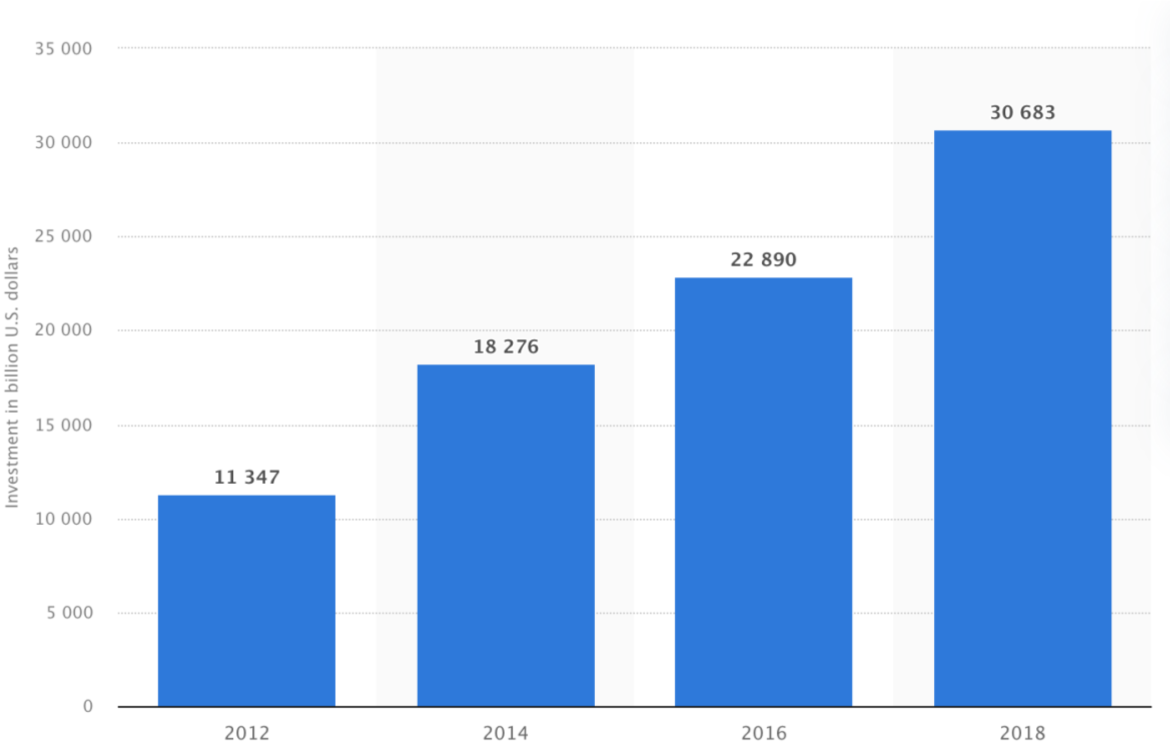

Figure 3: Source: (Statista, 2022)