Achieving Financial Success by Pursuing Environmental and Social Goals: A Comprehensive Literature Review and Research Agenda for Sustainable Investment

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ABSTRACT

This paper conducts a systematic review of the research work in the field of sustainable investment for identifying research gaps and laying down research agenda for the future. Articles on sustainable investment published in journals indexed at the Web of Science during 1989 and 2018 (so far) are reviewed for the purpose of this research. A total of 225 papers were found through the search criteria, out of which 213 papers were selected for review. The paper identifies gaps in the literature that can be considered as opportunities for future study. The analysis of these articles led us to note the need for an agenda that can present a holistic framework of sustainable investment with lesser variations and increased acceptability. The research agenda proposed by the paper may help researchers in framing their research problems around the gaps identified. Sustainable investment is a potential solution to social and ecological issues by transforming the financial markets to have more accountability for their impacts. Therefore, it is important to carry out extensive research in this field so as to develop it as an applied field of investment. There has so far been no attempt to perform a systematic review in the field of sustainable investment for a period of 20 years, as has been made in this paper.

KEYWORDS: acceptability, reject ability, stock market, classification discrimination, adverse selection

1.0 INTRODUCTION

This paper builds on the contribution by conducting a systematic review of the research work in the field of sustainable investment. Our methodology is inspired by the work of projects. Over the last few decades, modern capitalistic theory has undergone a legitimacy crisis and reduced acceptability. Traditional profit-aspiring companies have started to take more interest in understanding and managing the broader impacts of their businesses. However, the endeavors of corporations, Non-Governmental Organizations (NGOs), and governments have so far been insufficient in addressing social issues like inequality, poverty, and climate change. Sustainable investment has emerged as a potential solution to social and ecological issues by rendering the financial markets more accountable for such impacts. More investors today want their investments to reflect these broader values and provide solutions to the larger issues. This makes way for value-based investment or sustainable investment. Sustainable investment refers to the integration of environmental, social, and governance (ESG) factors in investment decision-making. Though evidence suggests that the origin of sustainable investing dates back to the 18th century, it has only gained popularity over the last two decades. The success of United Nations Principles for Responsible Investment (UNPRI)-which calls for the incorporation of ESG factors in investment and ownership decisions—is a significant indicator of the growth of sustainable investment [1-14].

2.0 LITERATURE REVIEW

The majority of researchers in the area of sustainable investment have shifted attention from theoretical articles focused on personal values like "sacrifice", "morality", and "religion" in the 1980s and 90s to empirical articles focused on "performance", "activism", "sustainability", "stakeholders", and "financial performance" in the 2000s. Most of the publications about sustainable investment—being data-driven—emphasize financial performance while overlooking the assessment of extra-financial

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returns ("extra-financial return" means the value sought by investors other than financial returns. ESG factors are commonly referred to as extra-financial issues) from such investments. The evolution of sustainable investment as an academic area in recent times is being witnessed by the emergence of journals, special issues, and academic conferences focusing around sustainable investment. In practice, indices and funds dedicated to sustainable investment have grown in the last few decades. The Morgan Stanley Capital International (MSCI) KLD 400 Social Index (launched in 1990), STOXX Global ESG Leaders Index, by STOXX Limited, a subsidiary of Deutsche Börse Group (launched in 1998), Dow Jones Sustainability Indices (DJSI) (launched in 1999), FTSE4Good Index by The Financial Times Stock Exchange (launched in 2001), and Johannesburg Stock Exchange (JSE) Socially Responsible Investment (SRI) Index (launched in 2004), are some examples of indices focusing on sustainable investment funds, like the Fidelity Select Environment and Alternative Energy Portfolio (FSLEX), The Teachers Insurance and Annuity Association of America-College Retirement Equities Fund (TIAA-CREF) Social Choice Bond Fund, Vanguard FTSE Social Index, and Parnassus Core Equity Fund have also been introduced in recent times [15-27].

Integration of ESG factors remains the most popular and fastest-growing approach of sustainable investment. However, despite the growing popularity of sustainable investment and ESG-related investments across the globe, it lacks consistency across different geographical areas, both in practice and in principle. While sustainable investment has grown considerably in America, Europe, and Australia, growth has been rather slow in developing countries. ESG strategies have also led to inconsistency in sustainable investment decisions, due to a number of reasons. Investors and asset managers often give different emphasis on each criterion of ESG while creating portfolios; in addition, governance is not seen as a fundamental and integrating factor of ESG strategies, but just another pillar, like society and environment. Furthermore, researchers found that ESG-driven mutual funds added costly constraints to the investment process and charged higher expense ratios. Even though ESG presents a promising framework of sustainable investment, such issues raise questions over the legitimacy of this approach [28-36].

This paper is an attempt to take stock of the research undertaken in the field of sustainable investment so far. The paper is written in the form of a systematic review methodology, which has been advocated. The paper analyzes the research carried out in the field of sustainable investment in order to identify and highlight research gaps for laying down the research agenda for the future. The paper is organized as follows. The present section introduces the ideation of the study; the second section defines the research objectives being addressed in this review; the third section describes the methodology for the review; the fourth section discusses the results obtained through this systematic literature review; and the fifth section concludes by highlighting the research problems derived from the reviewed literature and proposing the research agenda in the field of sustainable investment [37-42].

3.0 RESEARCH METHODOLOGY

This section outlines the research objectives being addressed through this systematic literature review.

RO 1: To consolidate the existing literature and identify thematic areas in which the literature in
sustainablehasfocused.RO 2: To identify the gaps in existing literature and define the potential focus areas for future
researchers in the field of sustainable investment.focus areas for future

Flowchart Explaining Selection Process of Relevant Papers: To maintain the quality and consistency of the articles reviewed for this paper, the articles pertaining to sustainable investment published in journals indexed at the Web of Science were searched. The articles containing a keyword related to sustainable investing (Impact Investing/Investment, Responsible Investing/Investment, Socially Responsible Investing/Investment, Sustainable Investing/Investment, Ethical Investing/Investment, ESG/Environmental, Social, Governance) in their title were initially screened. In total, 225 research articles with these criteria were found. After removing two duplicate articles in both searches, a reviewers' panel was set up to select the articles relevant for this research. The reviewers' panel carefully examined the remaining 223 articles and rejected 10 articles irrelevant to the research. The remaining 213 articles were finally selected and reviewed.



Figure 1. Selection and rejection of papers for review.

The first classification relates to the context, for which codes A, B, and C were assigned to understand whether the study was conducted with a developed or a developing country as its focus. For studies not focusing on any specific region, a "not applicable" code was assigned. The second classification identifies the specific geographical area represented by codes A to G. The third classification refers to the methodology adopted by the papers. Codes A, B, C, and D were assigned for this classification. This classification helps in understanding the variation in the objectives of the articles. For example, papers suggesting a new model/framework of sustainable investment may be differentiated from those testing the existing models with a different dataset. This classification allows a deeper understanding of the approach adopted by the literature. This includes assessing the acceptability of the existing models, which is one of the major objectives of this paper. The term "sustainable investment" is often confused and interrelated with other similar terms, like Socially Responsible Investment (SRI) or Ethical Investment (EI), Responsible Investment (RI) or Impact Investment (II), and ESG-backed investment. The fourth classification attempts to identify such different terms (coded by letters A to D) used by the literature under reference. This classification is aimed at helping to understand the difference between these terms, which are, at times, confusingly used as synonyms of sustainable investment. Socially responsible investment (SRI) aims for long-term returns by investing in organizations that meet certain baseline standards of social and environmental responsibilities. Socially responsible investment typically attracts investors who not only aim to receive good monetary returns, but also feel strongly about several core values, such as environmental friendliness and human rights [9]. While socially responsible investors avoid companies engaged in irresponsible or unethical business practices, impact investors aim to achieve both financial and environmental/societal returns [24]. The difference between ethical and socially responsible investment is primarily down to the investors' preferences with respect to terminology. For example, the term "ethical investment" is generally favored in the United Kingdom, while "socially responsible investment" is used more in United States [25]. Responsible or impact investors, on the other hand, recognize that well-defined social or environmental goals are critical for their portfolios. The measurability of the value sets of impact investors defines these wellarticulated impact goals [26].

4.0 RESULT

Integration and implementation of environment, society, and governance (ESG) strategies is a common approach adopted by sustainable investors [27]. The fifth classification specifically helps us understand the popularity and acceptability of the ESG approach in the existing literature. This classification segregates the papers which advocate the ESG approach from those that deliver a critique of this

approach, as well as those that present a new approach altogether. This classification is coded by letters A to E. The sixth classification highlights the results presented by the articles, and are classified with letters from A to D. This classification helps us understand whether the selected papers present new discourses in the area of sustainable investment, and also helps us differentiate the scope and acceptability of sustainable investment in different areas and time periods. Finally, the seventh classification analyses the period studied by the existing literature, and is coded by letters A to E. Table 1 enlists the coding and categorization criteria of the paper.

| Category | Significance | Codes | Significance | | | |
|----------|----------------------|----------------------------------|---|--|--|--|
| | | А | Developed Countries | | | |
| 1 | Context | в | Developing Countries | | | |
| | | С | Not Specified | | | |
| 2 | | А | USA and Canada | | | |
| | Geographic Region | в | Europe | | | |
| | | С | Japan, South Korea, Taiwan, and Singapore | | | |
| | | D | Rest of Asia | | | |
| | | E | Oceania | | | |
| | | F | Rest of the world | | | |
| | | G | Not Specified | | | |
| | | Α | Concept/Model Building | | | |
| 3 | Methodology | в | Case Study | | | |
| | | С | Empirical Testing | | | |
| | | D | Review Paper | | | |
| 4 | Topic | Α | Socially Responsible/Ethical Investment | | | |
| | | в | Responsible/Impact Investment | | | |
| | | С | Sustainable Investment | | | |
| | | D | ESG-based Investment | | | |
| 5 | Approach D E | Α | Advocates ESG approach | | | |
| | | в | Gives a critique of ESG approach | | | |
| | | С | Takes a neutral approach on ESG | | | |
| | | D | Suggests a new approach other than ESG | | | |
| | | Does not talk about ESG approach | | | | |
| 6 | Results | Α | New Perspectives | | | |
| | | в | Consistent with Literature | | | |
| | | С | Reviews model with different dataset/time | | | |
| | | - | period | | | |
| | | D | Comparative Study | | | |
| | Analysis Period | Α | Less than 3 years | | | |
| | | В | Between 3 and 5 years | | | |
| 7 | | C | Between 5 and 10 years | | | |
| | | D | More than 10 Years | | | |
| | | Е | Not Applicable | | | |

Table 1. Coding and categorization criteria.

5.0 DISCUSSION

The 213 articles on sustainable investment and ESG were categorized in regard to each of the classifications, as presented in Table 1. This section presents the descriptive analysis and interpretation of the results, as summarized in Table 2. Table 2 shows the number of papers belonging to each category, as described in Table 1. The numbers in parentheses show the percentage of papers falling into the respective categories. The codes which are not applicable in some categories have been marked as N/A. The papers having strong arguments in relation to the themes are discussed further in this section.

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Table 2. Descriptive analysis of papers reviewed.

| Code(s) | Context | Geographic Region | Methodology | Topic | Approach | Results | Analysis Period |
|----------|------------|----------------------|-------------|------------|------------|------------|--------------------|
| Α | 124 (58%) | 31 (15%) | 25 (12%) | 110 (52%) | 56 (26%) | 55 (26%) | 11 (5%) |
| в | 19 (9%) | 41 (19%) | 25 (12%) | 23 (11%) | 32 (15%) | 69 (32%) | 10 (5%) |
| С | 69 (32%) | 8 (4%) | 60 (28%) | 12 (6%) | 19 (9%) | 44 (21%) | 23 (11%) |
| D | N/A | 11 (5%) | 35 (16%) | 21 (10%) | 5 (2%) | 45 (21%) | 101 (47%) |
| E | N/A | 12 (6%) | N/A | N/A | 101 (47%) | N/A | 68 (32%) |
| F | N/A | 6 (3%) | N/A | N/A | N/A | N/A | N/A |
| G | N/A | 70 (33%) | N/A | N/A | N/A | N/A | N/A |
| Multiple | 1 (0%) | 34 (16%) | 68 (32%) | 47 (22%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Total | 213 (100%) | 213 (100%) | 213 (100%) | 213 (100%) | 213 (100%) | 213 (100%) | 213 (100%) |

The first classification categorizes the papers on the basis of their context. A majority of the papers (58%) focus on developed countries, while only 9% of papers focus on developing countries. 32% of papers do not focus on a specific geographical region. Noticeably, there is a lack of sustainable investment-related research which focus on developing countries. Not only is the sustainable investment-related research focused on the developed world, but a major chunk of sustainable investment funds are also being invested in developed countries [28]. The overall size of sustainable investment in developing economies remains insignificant [28]. Kurtz, Cooper, & Shimada [29] point toward a preference for rapid growth over management quality in emerging markets as a potential reason for this bias, but there is a need to dig deeper and explore the causes for the same. The scope and importance of sustainable investment in developing countries also need to be identified by future researchers. A majority of the sustainable investment-related research (\approx 35%) focuses on Europe, the US, and Canada only. The disparity, reflected in the concentration of research, is also supported by the amount of sustainable investment in these regions. The Global Sustainable Investment Alliance [10] confirms that Europe and the United States together constitute more than 94% of the Global Socially Responsible Investment (SRI) assets, while Asia's share is only 0.2%. Also in terms of growth, the United States is the fastest-growing region for sustainable investment, followed by Canada and Europe [30]. Apart from Europe, USA, and Canada, sustainable investment has grown substantially in Australia [31]. Sustainable investment has got the potential to help developing countries in terms of literacy, health, and employment [32]. There is a need for future researchers in the field to focus on geographical areas outside North America and Europe, and to identify the reasons behind the lack of acceptance of sustainable investment therein. This classification attempts to understand the methodology adopted by the existing literature. A majority of the articles either use quantitative data to empirically test the significance of sustainable investment ($\approx 27\%$), or rely on existing literature to form an opinion ($\approx 22\%$). Some papers propose new frameworks or approaches to studying sustainable investment ($\approx 12\%$). Both conventional and socially responsible investors have varied expectations from their investments, and it is a challenging task to integrate the preferences of heterogeneous investors [33]. There is a need for future research that explore the possibility of introducing integrated frameworks of sustainable investment and employing multidimensional methods to cater the needs of diverse investors. Existing literature uses different terminologies when discussing sustainable investment strategies. Even though the strategies are different from each other, there is a lot of intersection amongst these strategies. Höchstädter & Scheck [34] highlight that there is a lack of conceptual clarity and a uniform definition of sustainable investment. Höchstädter & Scheck [34] further argue that the interchangeability of alternative terms and unclear boundaries to sustainable investment cause confusion. Eccles & Viviers [35] observed that associations and disassociations between different terms used for sustainable investment depended on various factors, like the ethical position of investors, investment strategy, time horizon, and geographical regions. Though the majority of the extant literature focuses on socially responsible investment (≈52%), the reason for a preference in regard to this term over others is not entirely clear [35]. Despite ambiguity and overlap in the terms used for sustainable investment, heterogeneity of these terms is possible on terminological, definitional, strategic, and practical levels [36]. There is a need to understand the diversity among papers in terms of the topic and interchangeability of the terms-namely, sustainable investment/socially responsible investment/ethical investment/responsible investment/ESG-based investment. This classification attempts to understand the importance of ESG-based strategies among sustainable investment research. A majority of the papers ($\approx 47\%$) do not highlight ESG as an important approach, and $\approx 17\%$ of articles critically examine the relevance of this approach. The rest of the papers

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(\approx 35%) either advocate or take a neutral stance on the ESG approach. Jitmaneeroj [37] found that ESG pillars had unequal effects on overall corporate sustainability. Giamporcaro & Pretorius [38] highlight that most ESG-based investments in South Africa focus on social development goals, while the environment criteria does not receive much attention. The valuation of a company based on ESG information is often unreliable, as the overall level of non-financial ESG data-reporting is low. Tamimi & Sebastianelli [39] highlight that Standard & Poor's (S&P) 500 companies differ in their level of disclosure across the three pillars of ESG. The vast majority of companies do not disclose data on environmental and social responsibility policies [40]. There is a need to critically evaluate the ESG approach of sustainable investment, when less than one third of articles advocate the approach. A majority of the papers (\approx 47%) presented results which were either consistent with the existing literature or reviewed the existing models with a different dataset/time period. Dumas & Louche [41] asserted that the existing sustainable investment beliefs did not provide a favorable environment for its mainstreaming. Hasty attempts to mainstream sustainable investment have distorted its original goal of sustainable development to a quest of profitability [42]. ESG emerged as a reliable tool to measure the social performance of firms, and has witnessed considerable growth since 2005. However, consolidation of ESG ratings has reaffirmed the traditional norms of investing, and has negated the institutional change promised by sustainable investment [43]. Lokuwaduge & Heenetigala [44] confirm that due to diversity in ESG reporting, it is problematic to compare ESG strategic performance and there is a need for more empirical research on sustainable investment practices. There is also a need to understand whether the models/tools employed in the sustainable investment articles are sufficient to address the problem of dearth of an approach which fulfils the needs of business, investors, and the society.

6.0 CONCLUSION

By systematically reviewing 213 papers in the field of sustainable investment, we identified gaps in the existing literature with a special focus on the efficacy of ESG as a tool of sustainable investment, and explored the possibility of further research to bridge the gaps in the existing literature. ESG integration is the second largest sustainable investment strategy globally, and the largest in the United States, Oceania, and Asia. It is also one of the fastest-growing strategies of sustainable investment [10]. Other important approaches of sustainable investment include negative screening, corporate engagement, positive screening, norms-based screening, sustainability themed reporting, and community investing [10]. The articles reviewed in this paper reveal that the ESG approach is central to investments related to sustainable investment, socially responsible investment, ethical investment, and impact investment are some of the terms used for such investments. However, there is evidence of inconsistency in the implementation of ESG strategies by different companies and investors.

Our analysis was based on seven categories in which the selected papers were coded and categorized. This helped us identify gaps in the literature, which could be considered as opportunities for future study. The analysis of these articles led us to note the need for an agenda that could present a holistic framework of sustainable investment with lesser variations and increased acceptability. The articles selected for this review also led to the identification of certain research problems which could be pursued by researchers in the future. Table 3 presents the research gaps and research problems identified from the relevant studies out of the literature studied in this review. All the 213 articles reviewed in this study are included in the discussion, and were the basis of identifying the research gaps; the articles with strong arguments related to these research gaps and research problems are mentioned in Table 3. All 213 articles reviewed in this study (including the ones presented in Table 3) are shown in Table S2, while their coding and categorization is exhibited in Table S3. The research problems highlighted in Table 3 were derived from the review in order to address the research objectives stated in Section 2 of this paper. Based on the review conducted for the purposes of this paper, we identified research gaps which have not been addressed to date and need to be taken up in future research. Subsequently, this review suggests an addressal mechanism for the problems of reliability, inconsistency, institutional retrogression, and other barriers being faced by existing sustainable investment strategies. It is suggested that a more holistic approach of sustainable investment may be developed as an alternative to the existing ESG framework. Furthermore, the impact of this alternative framework vis-à-vis the existing ESG framework can be studied by

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measuring financial and extra-financial returns obtained out of companies screened through these approaches. This study is not free of limitations. Firstly, the articles included in the study were sourced from only one index (Web of Science) which limits our capacity of exploring various kinds of literature available on sustainable investment from other sources. The choice of including articles from this index was made in order to maintain consistency in the quality of articles. The study has scope to be further extended by including more literature from other sources as well. Secondly, not all articles reviewed in the study directly helped us address the specific issues identified in this paper. Reports and articles published outside the purposes of this review may also be reviewed by future researchers in order to further validate the results of this paper and draw our attention to new perspectives in the area of sustainable investment.

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