

-RESEARCH ARTICLE-

A SYSTEMATIC REVIEW OF SUSTAINABLE INVESTMENT APPROACHES

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—Abstract—

The article examined three widely accepted sustainable investment strategies: Socially Responsible Investing (SRI), Environmental, Social, and Governance (ESG), and impact investing. However, these sustainable investment strategies are under-institutionalized, as evidenced by a lack of standardized terminology and variable return performance.

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Given the prevalence of these inconsistencies in academic research on sustainable investing, this paper aimed to conduct a systematic review of related studies to compare, contrast, and consolidate these sustainable investment approaches. Consequently, this paper seeks to elucidate further these sustainable investment approaches' scope, terminology, and application. This study reveals that the conceptual frameworks of SRI, ESG, and impact investing overlap. The paper suggests the development of a consistent conceptual framework and taxonomy to characterize the SRI field to promote the growth of the nascent investment management discipline.

Keywords: sustainable investments, literature review, ESG investing, socially responsible investing, impact investing

1. INTRODUCTION AND BACKGROUND

Globally, the notion of a social economy has existed for decades. Only recently has a distinct market segment in finance been developed to generate social and environmental returns (Nicholls, 2021). To this end, sustainable investing has thoroughly disrupted the financial industry's traditional value chain and ecosystem by challenging finance's fundamental premise, the maximization of wealth. The sustainable finance model's innovations include "shared value" and "blended value propositions" (Dyllick & Muff, 2016). These concepts imply incorporating ESG factors into financial decision-making and analysis, which are financial innovations that generate financial and societal returns (Yue et al., 2020). These sustainable investment strategies align closely with the achievement of sustainable development, exemplified by humanity's capacity to meet the requirements of the current generation without compromising future generations (Talan & Sharma, 2019).

In addition, the concept of sustainable development has resulted in a reallocation of capital towards achieving social and environmental outcomes. International agreements such as the United Nations Environment Programme (UNEP) Financial Initiative, the Millennium Development Goals (MDGs), the United Nations Principles for Responsible Investment (UNPRI), the Paris Agreement, and the Congress of the Parties (COP) 26 Pact demonstrate the acceptance of sustainable development concepts in international public policy circles (Claringbould et al., 2019). Collectively, these agreements require the financial industry, in its function as an economic intermediary, to close the financing gap for sustainable development (Peeters, 2005). In addition, these public initiatives place a responsibility on the financial industry to bring about societal and environmental change by collaborating with the public sector, Non-Governmental Organisations

(NGOs), and society at large to provide solutions to societal and environmental challenges such as climate change, poverty, and inequality (Claringbould et al., 2019). These ideas and notions have permeated investment management strategies such as SRI, impact investing, and ESG investing, which have garnered widespread acceptance in capital markets. However, these investment strategies are more prevalent in developed markets than in emergent and frontier markets. Corruption, political instability, and a lack of regulatory supervision are systemic ESG issues that impede the adoption of these sustainable investment strategies in emerging and frontier markets (Claringbould et al., 2019). Talan and Sharma (2019) and Ferreira et al. (2016) identify a lack of clarity and consistency in terminology, concepts, and theoretical frameworks as a cavity in the literature on sustainable investments. However, these investigations relied on a single database to gather the relevant articles.

Simultaneously, empirical studies evaluating the efficacy of these sustainable investment approaches have produced mixed results, which is problematic (Blankenberg & Gottschalk, 2018). The sample period has been identified as a critical determinant of the financial performance of these sustainable investment strategies (Pokorna, 2017). However, sample size limits the majority of studies. However, Cornel (2021) and Cappucci (2018) discuss and delineate the societal benefits of these investment strategies, alluding to a trade-off between societal and financial returns using conventional financial theories and concepts. Bernal et al. (2021) contend that traditional financial models are insufficient to explain the financial performance of these sustainable investment strategies.

In light of the subsequent discussion, it is evident that voids exist in the literature concerning the terminology and classification of sustainable investing approaches. Moreover, these conceptual and empirical issues hinder the sustainable finance industry's development. These issues affect the risk, return, and valuation of sustainable investments. This paper aims to build on the work of Talan and Sharma (2019) and Ferreira et al. (2016) by accumulating, codifying, and systematizing knowledge related to these sustainable investment approaches using multiple academic research and industry-leading sources. To unify these divergent perspectives and clarify these sustainable investment strategies' terminology, scope, and application. In turn, this will assist socially responsible investors in making investment decisions based on the theoretical and empirical applications of these sustainable investment approaches while contributing to the increasing body of work to institutionalize the sustainable investment field. By systematically reviewing the literature, this paper compared, contrasted and consolidated the conceptual frameworks and empirical evidence of these sustainable investment approaches.

2. RESEARCH OBJECTIVE

- To consolidate, compare and contrast existing literature on SRI, ESG and impact investing and identify research gaps.

To meet the purpose of this paper, a systematic literature review is conducted following [Talan and Sharma's \(2019\)](#) methodology. This is the preferred research methodology because it provides a framework for identifying, selecting, and evaluating the findings of the studies included in the literature review ([Rother, 2007](#)). This paper examines sustainable investment-related literature from sources including the United Nations (UN), Global Impact Investing Network (GIIN), Organisation for Economic Co-operation and Development (OECD), Taylor & Francis Group, Science Direct, and Springer Link. The paper is structured as follows: the introduction and historical context of SRI are discussed in the first section. Following the section on pertinent theoretical frameworks is the section on methodology. The paper concludes by discussing the results, conclusions, and implications.

3. LITERATURE REVIEW

Sustainable investing dates back to the 1700s when the Methodist Church advocated for an ethical approach to investing ([Caplan et al., 2013](#)). This conscientious approach involved a process of exclusion for businesses engaged in the slave trade, wagering, and selling tobacco and alcohol. Then, traces of this socially responsible investing strategy would evolve to meet the 20th century's social climate requirements. First, supporting post-World War II reconstruction efforts and implementing negative screening strategies against companies not supporting the Civil Rights Movement in the 1960s ([Jinga, 2021](#)). Additionally, companies that supported the Vietnam War in the 1960s and the Apartheid regime were subject to similar exclusionary measures ([Townsend, 2020](#)). The 2008 global financial crisis posed an existential threat to the global financial system and emphasized the need for effective corporate governance and risk management ([Jinga, 2021](#)). Due to the global financial crisis, which was primarily caused by unethical behavior, reckless lending practices, and malfeasance within the financial industry, corporate governance principles have gained popularity ([Hull, 2012; Townsend, 2020](#)). The emission of greenhouse gases exacerbates the existential peril posed by global warming and climate change to humanity ([Claringbould et al., 2019](#)). These occurrences illustrate the transition towards more progressive societal values that characterized the 20th century and their effects on investor preferences.

Despite this, the literature on sustainable finance is rooted in a Corporate Social Responsibility (CSR) component of the theory of the firm, which integrates ESG factors

that permeate management decision-making and financial performance (Liang & Renneboog, 2020).

Thus, CSR principles serve as the foundation for sustainable development principles. These studies demonstrate the influence and ability of enterprises to catalyze societal change (Carroll, 1999). Moir (2001) attributes the birth of these CSR ideals to the post-World War II era, which scrutinized the relationships between businesses, society, and government, emphasizing the firm's position in meeting the needs and desires of the community through the provision of goods and services, moreover, implying that a social contract exists between the company and society. Similarly, Ibanga (2018) defines the corporate social contract as an implicit or explicit agreement outlining the shared benefits between the company and society. Furthermore, Moir (2001) views society as a collection of contracts between members of society and society itself; when applied to concepts such as CSR and sustainable finance, this pertains to how society expects the firm to behave.

Nonetheless, the central tenet of finance is the Efficient Market Hypothesis (EMH), which states that investors are rational by nature, pursue their self-interests, and have access to all available information when making investment decisions (Ceren & Akkaya, 2013). In addition, a fundamental tenet of the EMH is the economic concept of rational self-interest, when applied to finance via the expected utility model under the assumptions of investment choices and risk, whereby an optimal investment decision maximizes the expected satisfaction or utility over an investment horizon (Mehran & Muhammad, 2009). In addition, Modern Portfolio Theory (MPT) concepts like the Capital Asset Pricing Model (CAPM) characterize the risk-return trade-off, risk optimization to generate returns, and the implications for investment decisions (Sharpe, 1964). Investment decisions should maximize shareholder wealth or the present value of a shareholder's lifetime consumption (Copeland et al., 2005).

On the other hand, sustainable investing necessitates a shift in investor preferences toward achieving societal goals while pursuing financial returns (Claringbould et al., 2019). Moreover, investors better understand qualitative sustainability issues such as water use, carbon dioxide emissions, labor relations, and supply chain management, as well as their implications for company valuation, cost savings, and risk management (Chouinard et al., 2011). Recently, economists have begun investigating the idea that investors pursue financial and societal returns. This concept represents a departure from traditional financial theories, such as the Efficient Market Hypothesis (EMH), which asserts that investors are primarily motivated by rational self-interest and wealth maximization (Barber et al., 2021). In addition, this concept implies that investors are willing to forego higher financial returns in exchange for societal and environmental

benefits (Kollenda, 2021). In Table 1, Schoenmaker and Schramade (2018) provide a complete classification system for sustainable finance. This typology illustrates the transition from maximizing shareholder value in traditional finance to prioritizing environmental and societal impact over financial returns. To increase shareholder value, Sustainable Finance 1.0 entails an exclusionary screening procedure for firms posing ESG risks. Second, Sustainable Finance 2.0 integrates environmental, social, and governance (ESG) factors into financial analysis and decision-making, resulting in an integrated shareholder value proposition compared to the Triple or Double Bottom Line approach. (Dyllick & Muff, 2016) Sustainable Finance 3.0 is geared toward addressing ESG externalities to generate a positive social impact.

Schoenmaker and Schramade (2018) present in Table 1 the progression of Sustainable Finance terminology in the context of financial market segments, instruments, and socially responsible investing strategies.

Table 1. Sustainable Finance Typology

Sustainable Finance Typology	Equity	Bonds	Banking	Insurance
Sustainable Finance 1.0	Exclusion			
Sustainable Finance 2.0	ESG integration			
Sustainable Finance 3.0	Impact investing	Green bonds Social bonds	Impact lending Microfinance	Microinsurance

Source: Adapted from Schoenmaker and Schramade (2018).

To characterize sustainable finance, however, various definitions and terminology exist in the literature; these include SRI, ESG investing, development finance, green finance, impact investing, and ethical finance (Hochstadter & Scheck, 2015). Incorporating environmental, social, and governance (ESG) factors into financial decision-making and analysis (Yue et al., 2020). Although these terms differ greatly in specificity and scope, they share a common thread that involves incorporating ESG factors into financial decision-making and analysis. The shortage of terminology clarity can be attributed to the absence of research, legal, and regulatory frameworks in sustainable finance. These structural and conceptual issues prompted stakeholders such as the United Nations, the European Union, and the Global Information Infrastructure Network (GIIN) to develop terminology, infrastructure, and regulations to facilitate the growth of the sustainable finance initiative (Pokorny, 2017).

Responsible Investment (RI) is defined by the UNPRI as an investment strategy that

integrates ESG factors into financial decision-making, active ownership, and sustainable finance (Yue et al., 2020). The UNPRI classifies Responsible Investment (RI) into five primary categories: exclusionary screening, ESG integration, positive screening, impact investing, and active ownership (UNEP and UN Global Compact, 2022). Similarly, the EU defines sustainable finance as incorporating ESG factors into financial sector decision-making to support economic development and reduce environmental pressure. (Claringbould et al., 2019) The EU emphasizes greater transparency regarding ESG risks and efforts to mitigate them through effective corporate governance structures.

The rise in ESG integration into the investment management process via ESG ratings and research can be ascribed to the significance of ESG concerns on valuation and financial performance to mitigate risks (Schramade, 2016). In addition, ESG indices such as the Dow Jones Sustainability Index (DJSI), the Morgan Stanley Capital International (MSCI) KLD 400, and the Stoxx Global ESG Leaders are gaining traction in the capital markets. However, sustainable financial instruments, including green equities, green bonds, Social Impact Bonds(SIBs), and social stocks, contribute to the struggle against climate change and sustainable development (Albuquerque et al., 2020; Roy, 2015). In addition, ESG ratings serve as a quantitative indicator to measure non-quantifiable ESG performance and hazards based on the UNPRI's sustainability principles (Escrig-Ormedo et al., 2019). As evidenced by the rapid development of the market, capital markets have adopted and incorporated these ESG ratings, as vendors of ESG ratings provide ESG data to assess the "ESG quality" of securities, firms, and mutual funds. These organizations include Thomson Reuters Refinitiv, MSCI, Sustainalytics, and S&P Global (Berg et al., 2020). These ESG rating agencies collect, aggregate, and quantify publicly available information from data sources, sustainability disclosures, company websites, company filings, and non-governmental organizations (NGOs) and systemically disseminate this information (Li & Polychronopoulos, 2020). However, ESG rating methodologies differ among ESG rating providers (Swiss Sustainable Finance, 2017). Further research is being conducted toward a unified ESG reporting framework that includes mandatory investment grade metrics and ESG disclosures (Esty & Cort, 2020).

Similarly, the GIIN defined impact investing to differentiate the investment strategy from comparable investments such as venture capital and private equity (Agrawal & Hockerts, 2021). This term was first used in 2007 at a Rockefeller Foundation conference on philanthropy and development financing (OECD, 2015). Impact investing refers to investments in companies that pursue financial returns and social and environmental outcomes, providing a blended value proposition (Bernal et al., 2021). Comparatively, empirical research on sustainable investments yields conflicting results.

Kempf and Osthoff (2007) and Statman and Glushkov (2009) found positive effects of a constrained portfolio in their prior research. However, most later studies, such as those conducted by Pedersen et al. (2021) and Auer and Schuhmacher (2016), discovered predominantly negative outcomes. Intriguingly, both Naffa and Hain (2018) and Blankenberg and Gottschalk (2018) concluded that there is no effect.

Despite this, qualitative research on sustainable investment approaches is relatively scarce. Despite this, Talan & Sharma (2019), Ferreira et al. (2016), Alshhi et al. (2018), and Jabbour (2013) conducted systematic literature reviews. While Talan & Sharma (2019), Ferreira et al. (2016), and Jabbour (2013) utilized literature from a single source, this paper, following Alshehhi et al. (2018), preferred multiple sources. However, both techniques required the classification and codification of the collected items. The descriptive statistics of these articles were subsequently recorded. Therefore, the categorization and codification of articles into subdivided categories facilitated the review of the relevant literature.

4. METHODOLOGY

The methodology of this paper is based on Talan and Sharma (2019). The paper utilized an inductive research paradigm to observe phenomena, identify patterns, and form a general proposition based on the study's results (Venter et al., 2017). The paper took the following steps to address the paper's objective:

- Performed a literature review of research about SRI, ESG, and impact investing
- Developing a classification framework to codify papers analyzed
- Analysis of the literature reviewed
- Identifying research gaps and overlapping frameworks.

4.1 Selection Process of Relevant Papers

UN, GIIN, International Finance Corporation (IFC), OECD, Science Direct, SSRN, Taylor Francis Group, and Springer Link will be consulted for sustainable investment policy documents and academic articles. First, Springer Link, SSRN, Taylor Francis Group, Science Direct, and SSRN databases were chosen because they provide access to various scientific journals, articles, and books. In addition, these databases provide access to credible traditional financial journal publications, including the Journal of Applied Corporate Finance, The Journal of Banking and Finance, and The Journal of Portfolio Management, which contain articles on sustainable finance (Currie & Pandher, 2011). The Journal of Sustainable Finance & Investment was also utilized as a scholarly

publication devoted to sustainable investing. This method exceeds those of [Talan and Sharma \(2019\)](#) and [Ferreira et al. \(2016\)](#), who used a single database and focused their research on academic studies. This paper also incorporated policy documents, articles, and empirical studies from key industry stakeholders such as the UN, IFC, OECD, and GIIN to strengthen further the frameworks associated with these sustainable investment approaches. Sustainable investing, sustainable finance, SRI, ESG investing, and impact investing were the primary keywords used to select articles from these sources. During the analysis period of 2010 to 2022, academic interest in socially responsible investing crested in the wake of the global financial crisis ([Jinga, 2022](#)). These articles were then evaluated based on their relevance to the paper, and duplicates were eliminated to produce a sample of forty articles.

4.2 Classification of Articles

The classification framework of [Talan and Sharma \(2019\)](#) and [Jabbour \(2013\)](#) is utilized in this paper, as shown in the table below. The articles were coded with the letters A through D based on four main categories. This classification scheme used to codify articles is presented in [Table 2](#).

Table 2. Classification of Articles

Category	Significance	Code	Significance
1	Approach to Sustainable Investing	<ul style="list-style-type: none"> • A • B • C 	<ul style="list-style-type: none"> • SRI • ESG investing • Impact investing
2	Geographical Focus	<ul style="list-style-type: none"> • A • B • C • D 	<ul style="list-style-type: none"> • Developed Markets • Emerging Markets • Global • N/A
3	Methodology	<ul style="list-style-type: none"> • A • B • C 	<ul style="list-style-type: none"> • Empirical studies • Review Paper • Policy paper
4	Findings	<ul style="list-style-type: none"> • A • B • C 	<ul style="list-style-type: none"> • New Perspectives • Divergent perspective • Consistent with literature

Source: Adapted from [Talan and Sharma \(2019\)](#).

The articles were codified following [Table 2's](#) criteria. Given the paper's objectives, the first classification pertains to the sustainable investing approach utilized in the literature. First, SRI is a values-based approach based on an investor's beliefs that typically

involves a negative screening procedure (Caplan et al., 2013). Second, ESG investing necessitates incorporating ESG factors and sustainability data into investment management decisions (Giese et al., 2019). In addition to a financial return, impact investing is distinguished by its capacity to generate a positive social impact (Reeder & Colantonio, 2013). These investment strategies are designated A through C.

The second classification pertains to the geographic focus, which can be developed or emergent markets, global or Not Applicable (N/A). These geographical regions were assigned the codes (A to D). The third classification pertains to the methodologies employed by the selected articles. The paper can understand these approaches more deeply by analyzing the various methods prevalent in the literature on sustainable investment approaches (Talan & Sharma, 2019).

In addition, this paper aimed to take advantage of divergent perspectives, methodologies, and findings regarding sustainable investing. Likewise, classifications (A to C) were used to classify these distinct methodologies. The final classification pertains to the articles' findings and whether they offer novel and divergent perspectives or are consistent with the literature coded as (A to C).

5. RESULTS AND DISCUSSION

5.1 Descriptive Analysis

The articles were selected, classified, and coded following Table 2's criteria. The descriptive analysis and interpretation of the results are shown in Table 3.

Table 3. Descriptive Analysis of the Papers

Code	Sustainable Investing Approach	Geographic Focus	Methodology	Findings
A	11	16	26	9
B	14	2	10	7
C	15	16	4	21
D	N/A	6	N/A	3
Total	40	40	40	40

Source: Author's Own.

5.2 Sustainable Investment Approach

While most articles relate to impact investing, as shown in Table 4.1, the frameworks, terminology, and subject matter of ESG and SRI articles overlap. According to Talan and Sharma (2019), terminology such as ethical investing is more prevalent in the United

Kingdom (UK), whereas SRI is more prevalent in the United States (USA). Nevertheless, according to [Rizzi et al. \(2018\)](#), ethical investing is characterized by investing financial resources following ethical principles. SRI frequently correlates with CSR and sustainability practices in studies ([Alshehhi et al., 2018](#); [Oh et al., 2013](#)). Nonetheless, the UNPRI introduces RI as a catch-all term for all varieties of SRI, as described previously. In contrast, studies ([Blankenberg & Gottschalk, 2018](#); [Yue et al., 2020](#)) use terms such as sustainable finance, ethical finance, and sustainable investment interchangeably. Nonetheless, the majority of articles characterize SRI as incorporating ESG factors into investment decisions, including investment strategies such as negative screening, ESG investing, and impact investing, which is consistent with key stakeholders such as the UN and IFC ([Jain et al., 2019](#); [Blankenberg and Gottschalk, 2018](#); [Yue et al., 2020](#)). This definition is problematic because studies ([Pedersen et al., 2021](#); [Auer & Schuhmacher, 2016](#); [Naffa & Fain, 2020](#)) characterize ESG investing similarly. Nonetheless, studies ([Cornell, 2020](#); [Cornell, 2021](#), and [Matos, 2020](#)) use ESG investing terminology to characterize the SRI universe of assets. The conceptual frameworks of SRI and ESG investing overlap, whereas the scopes of these sustainable investment strategies are distinct. SRI is commonly associated with negative screening and an industry-leading methodology. The former refers to the portfolio's alignment with an investor's ethics, beliefs, and values while mitigating ESG risks and exerting pressure on companies with questionable business practices ([Kumar et al., 2016](#); [Trinks & Scholtens, 2017](#)). The latter entails selecting the best operators within a given sector or industry based on ESG standards and considering the best businesses to address sustainable development challenges while balancing shareholder interests ([Rayer, 2019](#); [Swiss Sustainable Finance, 2017](#)). In contrast, ESG momentum and ESG tilting are popular variations of ESG investment strategies that involve selecting companies whose ESG quality has improved in recent years. In contrast, ESG tilting refers to the overweighting of ESG-rated securities in a portfolio ([Nagy et al., 2015](#)).

However, [Cappucci \(2018\)](#) proposes a progression from values-based ethical investing to SRI with more complex ethical screens before ESG integration. This viewpoint is consistent with [Schoenmaker and Schramade's \(2018\)](#) classification of sustainable investment strategy advancements by exclusion, ESG integration, and contribution to sustainable development. Most studies concur on the character and typology of impact investing proposed by GIIN and the trade-off between societal and financial returns ([Barber et al., 2021](#); [Bernal et al., 2021](#)). In addition, these studies concur that impact investments constitute a subset of SRI. Impact investing is also called ethical investing, social impact investment, and social finance ([Rizzi et al., 2018](#); [Matos, 2020](#); [OECD, 2015](#)).

The broad spectrum of impact capital, which includes for-profit businesses, development banks, and grant organizations, makes the classification of impact investing problematic, as this capital is categorized as philanthropy, venture capital, and microfinance (Agrawal & Hockerts, 2021; Schoenmaker & Schramade, 2018). Nonetheless, there is some overlap between sustainable thematic investing and impact investing. The fundamental premise of thematic investments is the identification of key themes that play a greater role in explaining the risk-return characteristics of investments, such as demographic shifts and societal changes and attitudes, than more conventional elements rooted in financial theory (Somefun et al., 2021). Common topics include water, security, clean energy, and nutrition (Morrow & Vezér, 2020). Typically, these themes are structured around achieving the UN's Sustainable development objectives. However, thematic investing is frequently implemented with impact investing and represents a new building element in institutional investors' portfolios, which has repercussions for traditional asset allocation (Swiss Sustainable Finance, 2017).

5.3 Geographic Focus

As shown in Table 4.1, most SRI, ESG, and impact investment studies are conducted in developed markets or have a global scope. Even within global studies, developed markets such as Europe and the United States receive the most attention and capital (Auer & Schuhmacher, 2016; Yue et al., 2020; GIIN, 2020). This finding is supported by Talan & Sharma (2019), who contend that the aggregate size of the sustainable investing market in emerging markets is negligible compared to developed markets, thereby impeding the development of literature. Notably, SRI's prevalence has increased in the United States, Canada, Europe, and Australia (Talan & Sharma, 2019). Compared to emerging markets, these sustainable investment strategies were adopted due to a transparent, facilitating market infrastructure and regulatory environment (Alshehhi et al., 2018; Claringbould et al., 2019). This enabling infrastructure refers to indices like DJSI and MSCI KLD 400, which facilitate investment in SRI (Roy, 2015). Moreover, adopting international agreements such as the Paris Accord and the UNPRI has contributed to the proliferation of sustainable investment principles in developed markets (Talan & Sharma, 2019). In the meantime, the EU Commission presents a comprehensive legislative framework, a climate change action plan, a taxonomy for classifying financial activities as environmental, social, or financial, and a framework for sustainable finance that can be used for sustainability reporting (Nicholls, 2021). In addition, only a minority of studies (Sherwood & Pollard, 2018; Chen & Yang, 2020) examine emerging markets. In recent years, however, the number of studies on sustainability practices and CSR in emerging markets such as China, Taiwan, and Malaysia has increased (Alshehhi et al., 2018). Comparatively, impact investing studies

such as those by (Kollenda, 2022; Rizzi et al., 2018) investigate the intermittent cash flows from developed markets to emerging markets that directly address societal and environmental challenges from a global perspective.

6. METHODOLOGY

As shown in Table 4.1, most SRI research is empirical and quantitative. As with Talan & Sharma (2019), these articles investigated whether these investments generate risk-adjusted returns and how their return properties compare to those of traditional markets. Following (Alshehhi et al., 2018), most of these articles use regression analysis to determine the relationship between sustainability practices and financial performance. Statistical and Sharpe ratio analyses are used by IFC (2019), Mudaliar & Bass (2017), Sherwood & Pollard (2018), and Gardenier et al. (2021) to evaluate the risk-adjusted efficacy of SRI. Notably, (Pokorna, 2017) implements the CAPM and Cahart-Fama-French models while incorporating statistical and Sharpe ratio analyses. SRI and ESG studies evaluate the performance of ESG and SRI investments using traditional financial frameworks such as the EMH, CAPM, Fama, and French models (Yue et al., 2020; Pedersen et al., 2021; Auer & Schuhmacher, 2016; Giese et al., 2019). Additionally, these models have been applied to quantitative studies such as Bernal et al.'s (2021) impact investing studies; however, further analyses are hampered by a lack of data due to the largely private nature of the industry. However, studies such as Jeffers et al.'s (2021) that examine private impact funds utilizing a PME (Public Market Equivalent) are scarce. Giese et al. (2019) and Naffa and Hain (2018) examined the effects of ESG ratings on financial performance as the primary objective of ESG research. Before applying conventional financial models such as the CAPM and the Cahart-Fama-French models, new studies such as (Naffa & Hain, 2022; Clarke et al., 2017; Menchero, 2010) construct Pure Factor Portfolios (PFPs) to isolate the signal associated with ESG investments. In contrast, new frameworks such as the Willingness-To-Pay by Barber et al. (2021)

Table 4.1 demonstrates that qualitative studies were in the minority, consistent with (Alshehhi et al., 2018). Most of these articles were structured as literature reviews and discussed sustainable investment strategies from various perspectives. However, the presence of EU, GIIN, and EU policy documents is noteworthy. SRI studies (Oh, Park, & Ghauri, 2013; Dam & Scholtens, 2015) investigate the relationships between CSR, SRI, and ESG investing in developing a CSR-grounded theoretical framework. In addition, Schoenmaker & Schramade (2018) and Dyllick & Muff (2016) offer a theoretical foundation, typology, and justification for sustainable finance based on the long-standing tradition of value-based investing in CSR, ESG integration, and impact investing. While other studies, such as those by (Cornell, 2021; Cappucci, 2018;

Nicholls, 2021), provide a discussion of SRI and ESG investing as well as an overview of the sustainable finance landscape, this study provides a comprehensive analysis of the topic. Policy documents such as the UNPRI sought to consolidate and characterize SRI and give a taxonomy of related activities and approaches (UNEP and UN Global Compact, 2021). Literature on impact investing (Agrawal & Hockerts, 2021; OECD, 2015; GIIN, 2021) differentiates impact investing from SRI, venture capital, and philanthropy. Despite this, studies (Agrawal & Hockerts, 2021; GIIN, 2021; Reeder & Colantonio, 2013) discuss qualitative and quantitative methods of Social Return on Investment (SROI), Theory of Change, scorecards, and Cost Benefit Analyses as the frameworks for measuring societal performance.

7. RESULTS

Overall, the results of SRI, ESG, and impact investing studies are consistent with the literature, as shown in Table 3, i.e., SRI yields varied returns (Blankenberg & Gottschalk, 2018). Although SRI investments limit investment options, they provide diversification benefits relative to traditional markets, according to most studies (Yue et al., 2020; Blankenberg & Gottschalk, 2018; Winegarden, 2019). Nonetheless, SRI, ESG, and impact investments are associated with a lower rate of return than traditional companies (Pedersen et al., 2021; Auer & Schuhmacher, 2016; Bernal et al., 2021; Jeffers et al., 2021). In addition, studies (Pedersen et al., 2021; Chen & Yang, 2020) propose an overreaction hypothesis concerning ESG investments, primarily about climate change. ESG investments are associated with improved corporate governance structures, which results in a lower cost of capital and a higher firm value as measured by accounting-based performance (Fulton et al., 2012; Auer & Schuhmacher, 2016). Cornell contends that advocates of ESG investments frequently conflate these advantages with higher expected returns. Similarly, most PFP studies (Naff & Fain, 2022) produced negative outcomes.

Although Escrig-Olmedo et al. (2019) emphasize the need for more consistent and transparent ESG ratings, as these factors impact the valuations of sustainable investments, these ratings are inconsistent and opaque. In general, impact investments exhibit a wide range of returns due to asymmetrical information, manager selection, and inconsistent investor objectives (Mudaliar & Bass, 2017; Jeffers et al., 2021; Bernal et al., 2021). Studies, such as those by (Fain & Naffa, 2019; Blankenberg & Gottschalk, 2018), which characterize a no-effect hypothesis between ESG and financial return performance, are viewed from divergent perspectives. Blankenberg and Gottschalk (2018) reported comparable performance in comparison to a traditional portfolio, whereas Naffa and Fain (2022) concluded that ESG ratings serve to quantify

sustainability risks. In contrast, studies demonstrating a positive correlation between ESG and financial performance, such as [Gardenier et al. \(2021\)](#) and [Giese et al. \(2019\)](#), are uncommon today. Intriguingly, [Dam and Scholtens \(2015\)](#) developed a theoretical model for SRI based on CSR utilizing accounting ratios such as the price-to-book ratio and return on assets and discovered positive correlations between CSR and financial performance. Moreover, [Gardenier et al. \(2021\)](#) observe that positive outcomes are commonly associated with earlier periods. Most recent contributions are associated with impact investments ([Kollenda, 2022](#); [Barber et al., 2021](#)). These contributions, which examined peer-to-peer platforms and implemented utility functions such as WTP, only strengthen the evidence basis for impact investments. Similarly, ([Rizzi et al., 2018](#); [Agrawal & Hockerts, 2021](#); [GIIN, 2020](#); [Reeder & Colantonio, 2013](#)) consolidate investment management terminology and theoretical frameworks.

8. THEMATIC DISCUSSION

This paper aims to compare and contrast the approaches to sustainable investing and identify any voids in the literature. There are overlapping frameworks in sustainable investing ([Talan & Sharma, 2019](#); [Jain et al., 2019](#); [Blankenberg & Gottschalk, 2018](#); [Yue et al., 2020](#)). Although, the majority of studies concur that incorporating ESG factors into investment management practice is a good starting point. While some studies characterize the field of SRI using ESG investing terminology, others use sustainable finance and RI terminology. However, most studies concur that impact investing is a subset of SRI that emphasizes social and environmental outcomes. Still, terminology issues regarding impact investing persist, with some researchers continuing to use diverse terminology ([Agrawal & Hockerts, 2021](#)). These overlapping frameworks serve as a filter for sustainability standards, disclosures, and methodologies used to calculate ESG ratings. These ratings serve as quantitative measures of societal and environmental performance. Within the field of impact investing, numerous approaches to measuring societal performance continue to be proposed in the literature.

Nonetheless, this discipline is considered to be relatively new. These factors impede the widespread adoption of sustainable investment strategies. While the literature suggests that SRI principles have been adopted primarily in developed markets, [Odell and Ali \(2016\)](#) assert that poverty, urbanization, pollution, and corruption pose significant risks for these investments in emerging markets. However, these obstacles also present emerging markets with unique opportunities. These nations are better positioned to benefit from the societal and environmental benefits, sustainable economic development, and financial returns that sustainable investments provide ([Sherwood & Pollard, 2018](#)).

Similarly, the majority of SRI investment studies employ a quantitative methodology

based on conventional financial theories such as CAPM, Fama and French, and the EMH (Pedersen et al., 2021; Auer & Schuhmacher, 2016; Bernal et al., 2021; Jeffers et al., 2021). The ineffectiveness of these conventional financial theories in explaining the returns of socially responsible investment strategies may be a plausible explanation for the poor performance of sustainable investments (Bernal et al., 2021). The trade-off between societal performance and financial returns is an additional possible explanation for this negative performance. More research is available on quantitative models integrating societal and environmental factors, such as the WTP and PFPs (Naffa & Hain, 2022; Barber et al., 2021). In contrast, qualitative research overwhelmingly supports these sustainable investment strategies in light of the current socioeconomic climate (Nicholls, 2021; Cappucci, 2018). Advocates against SRI investing emphasize the negative effects of an ESG-restricted portfolio (Cornell, 2021). Nonetheless, studies such as (Oh et al., 2013; Dam & Scholtens, 2015; Schoenmaker & Schramade, 2018; Dyllick & Muff, 2016) concur that CSR is a crucial theoretical component of SRI, despite offering divergent literature-based theoretical bases for SRI. Nonetheless, UNPRI and GIIN policy documents consolidate SRI approaches in the literature.

9. CONCLUSIONS AND RECOMMENDATIONS

In conclusion, the modern era's prevalent societal and environmental issues emphasize the need for collective action to achieve sustainable development. In addition, the UNPRI has identified sustainable investment strategies such as SRI, ESG, and impact investing as crucial instruments for allocating capital toward sustainable development objectives. Using a systematic literature review, this paper examined the most prevalent approaches to sustainable investing found in the literature, namely SRI, ESG, and impact investing. The report reviewed 40 articles from the United Nations, the Organization for Economic Co-operation and Development, Springer Link, and SSRN. Then, these articles were classified and coded systematically using a thematic approach. Examining relevant theories and empirical evidence, the paper concluded that overlapping conceptual frameworks plague these sustainable investment strategies. Particularly prevalent were overlapping frameworks in ESG and SRI investment approaches. Moreover, incorporating ESG principles is biased toward developed markets due to the market infrastructure that makes this possible. Nevertheless, sustainable investing presents an opportunity for emerging markets, given these countries' inherent social and economic challenges.

These sustainable investment approaches are predominantly based on financial theory, which cannot explain the returns of these investments, according to analyses of methodologies (Bernal et al., 2021). Although studies concur that CSR provides a

theoretical foundation for SRI, sustainable investing lacks a unified theoretical foundation. Specifically, most of the literature assessing these sustainable investing approaches is quantitative, focusing on the implications of these approaches on risk-return performance. Comparatively, qualitative studies advocating for the widespread implementation of sustainable investing describe these approaches' societal and environmental benefits.

Those who oppose sustainable investing concur that these approaches result in a portfolio with fewer investment options than conventional capital markets. However, propositions regarding the trade-off between societal and financial returns are frequently used as potential financial performance indicators. Consequently, empirical studies on these sustainable investment strategies indicate poor performance. Given the prevalence of overlapping conceptual frameworks in SRI, the paper suggests the development of consistent terminology, a theoretical framework, and a taxonomy to characterize the field of SRI, which will assist in developing sustainability standards to measure societal performance. In addition, this paper calls for additional research on ESG integration in conventional models or the creation of multi-utility functions to explain the returns of these sustainable investment strategies.

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