

A Systematic Review of Sustainable Investment Approaches

Charney S. Akala¹, Taryn Neuhaus¹ & Indrani O’Leary-Govender¹

¹ Department of Finance and Investment Management, University of Johannesburg, Johannesburg, South Africa

Correspondence: Taryn Neuhaus, Department of Finance and Investment Management, University of Johannesburg, Johannesburg, Corner Kingsway & University Road, Auckland Park, 2092, South Africa. Tel: 271-1559-3970.

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Abstract

The article examined three widely accepted approaches to sustainable investing: Socially Responsible Investing (SRI), Environmental, Social and Governance (ESG), and impact investing. Nevertheless, these sustainable investment strategies are under-institutionalised, characterised by a lack of consistent terminology and mixed return performance. Given that these inconsistencies are prevalent in academic research regarding sustainable investing, the paper aimed to perform a systematic review of related studies to compare, contrast and consolidate these sustainable investment approaches. The findings of this study reveal overlapping conceptual frameworks between SRI, ESG and impact investing. The paper recommends the development of a consistent conceptual framework for sustainable investing.

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

1. Introduction and Background

The concept of a social economy has existed globally for decades. Only more recently, a specific market segment in finance has been developed targeted at generating both societal and environmental returns (Nicholls, 2021). To this end, sustainable investing has fundamentally disrupted the financial industry’s traditional value chain and ecosystem by challenging finance’s core premise, wealth maximisation. The innovations presented by the sustainable finance model bring into play constructs such as “shared value” and “blended value propositions” (Dyllick & Muff, 2016). These concepts imply the integration of ESG considerations into financial decision-making and analysis, which serve as financial innovations to generate financial and societal returns (Yue, Han, Teresiene, Merkyte, & Liu, 2020). These sustainable investment strategies are closely aligned with the attainment of sustainable development, which is typified by humanity’s ability to meet the needs of the present generation without compromising future generations (Talan & Sharma, 2019).

Moreover, the proposition of sustainable development has led to a realignment of capital towards attaining societal and environmental outcomes. International agreements such as the United Nations Environmental Programme (UNEP) Financial Initiative, the Millennium Development Goals (MDGs), the UNPRI, the Paris Agreement, and the Congress of the Parties (COP) 26 Pact represent the acceptance of sustainable development ideas within international public policy circles (Claringbould, Koch, & Owen, 2019). These agreements collectively call upon the financial industry to bridge the gap in financing sustainable development through its intermediary role in the economy (Peeters, 2005). Additionally, these public initiatives place a responsibility on the financial industry to bring about societal and environmental change through collaborations with the public sector, Non-Governmental Organisations (NGOs) and society at large to offer solutions to societal and environmental challenges such as climate change, poverty, and inequality. These concepts and constructs have filtered through investment management strategies such as SRI, impact investing, and ESG investing, which have gained widespread acceptance in capital markets. However, these investment strategies are more prevalent in developed markets than in emerging and frontier markets. The adoption of these sustainable investment strategies in emerging and frontier markets is limited by systemic ESG issues such as corruption, political instability, and a lack of regulatory oversight (Claringbould et al., 2019). Talan and Sharma (2019) and Ferreira, Sobreiro, and Barboza (2016) observe the lack of clarity and consistency in terminology, concepts, and theoretical frameworks as a gap in the literature regarding sustainable investments. However, these studies used one database to collect related articles.

At the same time, empirical studies evaluating the performance of these sustainable investment approaches yield mixed return performance, which is problematic (Blankenberg & Gottschalk, 2018). However, most studies are limited by sample size, yet the sample period has been identified as a critical determinant in the financial performance of these sustainable investment strategies (Pokorna, 2017). Nevertheless, studies by Cornel (2021) and Cappucci (2018) discuss and outline the societal benefits associated with these investment strategies, alluding to a trade-off between societal and financial returns using traditional financial theories and concepts. On the contrary, more recent studies such as Bernal, Hudon, and Ledru (2021) propose that conventional financial models are not sufficient to explain the financial performance of these sustainable investment strategies.

Against the backdrop of the ensuing discussion, it is clear that there are gaps throughout the literature regarding the terminology and characterisation of sustainable investing approaches. Furthermore, these conceptual and empirical issues hamper the growth of the sustainable finance industry. These issues affect these sustainable investments' risks, return and valuation. This paper aims to build on the works of Talan and Sharma (2019) and Ferreira et al. (2016) by collecting, codifying, and systemising knowledge related to these sustainable investment approaches using multiple sources from academic research and key industry players. It follows that this paper compared, contrasted, and consolidated the conceptual frameworks and empirical evidence of these sustainable investment approaches by conducting a systematic review of the literature.

1.1 Research Objective

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

A systematic literature review is conducted following the work of Talan and Sharma (2019) to meet the objective of this paper. This research method is preferred as it provides a framework to identify, select and evaluate the findings of the studies included in the literature review (Rother, 2007). The paper examines literature linked to sustainable investment from sources such as 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 organised as follows; the first section discusses the introduction and background of SRI. The next section deals with relevant theoretical frameworks, followed by the methodology. Finally, the paper discusses the results, conclusions, and implications.

2. Literature Review

Conceptually, sustainable investing dates back to the Methodist Church in the 1700s, which advocated for an ethical approach to investing (Caplan, Griswold, & Jarvis, 2013). This conscientious approach involved a negative screening process toward companies engaged in the slave trade, gambling, and selling tobacco and alcohol. Traces of this socially responsible investing strategy would then evolve to suit the needs of the social climate in the Twentieth Century. Firstly, supporting reconstruction efforts after the Second World War and implementing negative screening strategies toward companies who did not support the Civil Rights Movement in the 1960s (Jinga, 2021). Additionally, similar exclusionary screens were implemented toward companies that supported the Vietnam War in the 1960s and against the Apartheid Regime (Townsend, 2020). Secondly, the global financial crisis of 2008 posed an existential threat to the global financial system and highlighted the need for effective corporate governance and risk management (Jinga, 2021). Corporate governance principles have become more popular due to this global financial crisis primarily caused by unethical behaviour, reckless lending practices and malpractice within the financial industry (Hull, 2012; Townsend, 2020). Lastly, global warming and climate change pose an existential threat to humanity, further exacerbated by the emission of greenhouse gases (Claringbould et al., 2019). These events represent the shift towards more progressive societal values that defined the Twentieth Century and their impacts on investor preferences.

Even so, literature regarding sustainable finance is rooted in a Corporate Social Responsibility (CSR) element in the theory of the firm, which incorporates ESG factors that permeate into management decision-making and financial performance (Liang & Renneboog, 2020). Thus, CSR principles serve as the basis for principles for sustainable development. These studies highlight businesses' influence and ability to catalyse societal change (Carroll, 1999). Moir (2001) places the birth of these CSR ideals in the post-world war era, which scrutinises the relationships between businesses, society, and government, emphasising the firm's role in providing goods and services to community needs and wants. Furthermore, implying the existence of a social contract between the firm and society. Similarly, Ibanga (2018) defines the corporate social contract as an implicit or explicit agreement between the firm and society that outlines the benefits shared. Moreover, Moir (2001) views society as a set of contracts between members of society and society itself; when applied to concepts such as CSR and sustainable finance, this relates to how society expects the firm to conduct itself.

Nevertheless, the core proposition associated with finance relates to Efficient Market Hypothesis (EMH), which states that investors are inherently rational, pursue their self-interests and have access to all available information when making investment decisions (Ceren & Akkaya, 2013). Furthermore, a fundamental proposition of the EMH is the economic notion of rational self-interest, when applied to finance through the expected utility model under assumptions of investment choices and risk, whereby an optimal investment decision maximises the expected satisfaction or utility over an investment horizon (Mehran & Muhammad, 2009). Moreover, Modern Portfolio Theory (MPT) concepts such as the Capital Asset Pricing Model (CAPM) describe the risk-return trade-off, risk optimisation to generate returns and the implications on investment decisions (Sharpe, 1964). In the firm's context, investment decisions should maximise shareholder wealth or the present value of a shareholder's lifetime consumption (Copeland, Weston, & Shastri, 2005).

In contrast, sustainable investing implies a shift in investor preferences toward attaining societal objectives while pursuing financial returns (Claringbould et al., 2019). Furthermore, investors have gained an appreciation for qualitative sustainability concerns such as water use, carbon dioxide emissions, labour relations, supply chain management, and their implications for valuation, cost savings, and risk management for companies (Chouinard, Ellison, & Ridgeway, 2011). More recently, economists have started exploring the notion that investors seek financial and societal returns. This notion represents a shift from traditional financial theories such as the Efficient Market Hypothesis (EMH), which argue that investors are primarily motivated by rational self-interest and wealth maximisation (Barber et al., 2021). Furthermore, this notion suggests that investors are willing to trade off higher financial returns for societal and environmental benefits (Kollenda, 2021). In Table 1, Schoenmaker and Schramade (2018) provide a comprehensive typology for sustainable finance. This typology outlines the progression from traditional finance's philosophy of shareholder value maximisation to prioritising environmental and societal impact above financial returns. Firstly, Sustainable Finance 1.0 entails an exclusionary screening process towards firms posing ESG risks to enhance shareholder value. Secondly, Sustainable Finance 2.0 integrates ESG issues into financial analysis and decision making resulting in an integrated shareholder value proposition similar to the Triple or Double Bottom Line approach. Lastly, Sustainable Finance 3.0 is geared towards addressing ESG externalities to create a positive social impact (Dyllick & Muff, 2016).

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

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).

However, various definitions and terminology exist in literature aimed at characterising sustainable finance; these include SRI, ESG investing, development finance, green finance, impact investing, and ethical finance (Höchst ädter & Scheck, 2015). Although these terms vary widely in specificity and scope, they share a common thread that entails incorporating ESG factors into financial decision-making and analysis (Yue et al., 2020). The lack of clarity in terminology can be attributed to sustainable finance being a field of study lacking research, legal and regulatory frameworks, respectively. These structural and conceptual issues led stakeholders such as the UN and the EU, and the GIIN to develop the relevant terminology, infrastructure, and regulations to facilitate the growth of sustainable finance initiative (Pokorna, 2017).

The UNPRI defines Responsible Investment (RI) as an investment strategy incorporating ESG factors into financial decision-making, active ownership, and sustainable finance (Yue et al., 2020). The UNPRI characterises Responsible Investment RI into five primary categories, exclusionary screening, ESG integration, positive screening, impact investing and active ownership (UNEP and UN Global Compact, 2021). Similarly, the EU defines sustainable finance as considering ESG factors in financial decision-making in the financial sector to support economic growth and reduce the pressure on the environment. The EU further emphasises transparency regarding ESG risks and efforts made to mitigate against these through effective corporate governance structures (Claringbould et al., 2019).

The rise in ESG integration into the investment management process through ESG ratings and research can be attributed to the materiality of ESG concerns on valuation and financial performance to reduce risks (Schramade, 2016). Moreover, ESG indices such as the Dow Jones Sustainability Index (DJSI), the Morgan Stanley Capital International (MSCI) KLD 400 and the Stoxx Global ESG Leaders indices are becoming more prevalent in capital markets. Nevertheless, sustainable financial instruments such as green equities, green bonds, Social Impact Bonds (SIBs) and social stocks contribute to the fight against climate change and sustainable development (Albuquerque, Koskinen, Yang, & Zhang, 2020; Roy, 2015). At the same time, ESG ratings serve as a quantifiable indicator to measure non-quantifiable ESG performance and risks, rooted in the UNPRI's sustainability principles (Escrig-Olmedo, Fernández-Izquierdo, Ferrero-Ferrero, Rivera-Lirio, & Muñoz-Torres, 2019). Capital markets have adopted and incorporated these ESG ratings, as seen in the rapid growth of the market, for vendors of ESG ratings provide ESG data to assess the "ESG quality" of securities, firms, and mutual funds. These agencies include Thomson Reuters Refinitiv, MSCI, Sustainalytics and S&P Global (Berg, Fabisik, & Sautner, 2020). These ESG rating agencies collect, aggregate, and quantify publicly available information from data sources, sustainability disclosures, company websites, company filings and NGOs and disseminate this data systematically (Li & Polychronopoulos, 2020). However, ESG rating methodologies vary between these ESG rating vendors (Swiss Sustainable Finance, 2017). Further research is being conducted towards a unified ESG reporting framework complete with mandatory investment grade metrics and disclosures encompassing ESG issues (Esty & Cort, 2020).

Similarly, impact investing was characterised by the GIIN to distinguish the investment strategy from comparable investments such as venture capital or private equity (Agrawal & Hockerts, 2021). This term was first used in 2007 at a conference on philanthropy and development finance convened by the Rockefeller Foundation (OECD, 2015). Impact investing refers to investments in companies that seek to generate financial returns and meet social and environmental outcomes, thus offering a blended value proposition (Bernal et al., 2021). In comparison, empirical studies relating to sustainable investments provide mixed results. Earlier studies by Kempf and Osthoff (2007) and Statman and Glushkov (2009) yielded positive results noting the effects of a constrained portfolio. However, most later studies, such as those by Pedersen, Fitzgibbons, and Pomorski (2021), and Auer and Schuhmacher (2016), mainly found negative results. Interestingly, studies by Naffa and Hain (2018) and Blankenberg and Gottschalk (2018) reported a no-effect hypothesis.

3. Methodology

The methodology of this paper is based on Talan and Sharma (2019). The paper utilised an inductive research paradigm which aims 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 pertaining to SRI, ESG and impact investing
- Developing a classification framework to codify papers analysed
- Analysis of literature reviewed
- Identifying research gaps and overlapping frameworks.

3.1 Selection Process of Relevant Papers

Policy documents and articles regarding sustainable investment will be selected from the following sources:

- UN
- GIIN
- International Finance Corporation (IFC)
- OECD
- Science Direct
- SSRN
- Taylor Francis Group
- Springer Link

Firstly, Springer Link, SSRN, Taylor Francis Group, Science Direct and SSRN were selected as databases as they provide coverage over a multidisciplinary range of scientific journals, articles, and books. Furthermore, these databases enable access to credible traditional financial journal publications such as 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 used as a scientific journal dedicated to sustainable investing. This method goes beyond Talan and Sharma (2019) and Ferreira et al. (2016), which used a single database and focused on academic studies in their research. This paper also used policy documents, articles and empirical studies from key industry stakeholders such as the UN, IFC, OECD and GIIN to incorporate these perspectives further to consolidate the frameworks related to these sustainable investment approaches. Articles were primarily selected from these sources and contained the following keywords: sustainable investing, sustainable finance, SRI, ESG investing and impact Investing. The analysis period comprised from 2010-2022, whereby academic interest peaked in socially responsible investing in the aftermath of the global financial crisis (Jinga, 2021). These articles were then evaluated based on their relevance to the paper, while duplicate articles were excluded to derive a sample of 40 articles.

3.2 Classification of Articles

This paper adopts the classification framework of Talan and Sharma (2019) and Jabbour (2013) as seen in the table below. Articles were classified according to four major topics and coded by letters A to D. Table 2 presents this classification scheme used to codify articles.

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 according to the criteria outlined in Table 2. The first classification relates to the sustainable investing approach utilised in literature, given the paper's objectives. Firstly, SRI relates to a values-based approach based on an investor's beliefs and typically involves a negative screening process (Caplan et al., 2013). Secondly, ESG investing entails integrating ESG factors and sustainability data into investment management decisions (Giese et al., 2019). Lastly, impact investing is characterised by its ability to generate a positive social impact beyond a financial return (Reeder & Colantonio, 2013). These investment approaches are coded as (A to C).

The second classification relates to the geographic focus, categorised as developed or emerging markets, global or Not Applicable (N/A). These geographic regions were coded as (A to D). The third classification relates to the methodologies utilised in the articles selected. An analysis of the varying methods prevalent in literature on sustainable investment approaches allows the paper to gain deeper insights into these approaches (Talan & Sharma, 2019).

Additionally, this paper sought to benefit from divergent views, methodologies, and findings regarding sustainable investing. Similarly, these divergent methodologies were categorised by codes (A to C). The last classification relates to the findings of the articles and whether these findings provide new and divergent perspectives or are consistent with literature coded as (A to C).

4. Results and Discussion

4.1 Descriptive Analysis

The articles were selected, classified, and coded according to the criterion presented in Table 2. Table 3 depicts the descriptive analysis followed by the interpretation of the results.

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.

4.2 Sustainable Investment Approach

Most articles related to impact investing, as seen in Table 3; ESG and SRI articles display overlapping frameworks, terminology, and subject matter. Talan and Sharma (2019) suggest that terminology such as ethical investing is preferred in the United Kingdom (UK), while SRI is mainly used in the United States of America (USA). Nonetheless, most articles characterise SRI as integrating ESG factors into investment decisions, encompassing investment strategies such as negative screening, ESG investing and Impact investing (Jain, Sharma, & Srivastava, 2019; Blankenberg & Gottschalk, 2018; Yue et al., 2020). This definition is problematic as ESG investing is characterised similarly by studies (Pedersen et al., 2021; Auer & Schuhmacher, 2016; Naffa & Fain, 2020). Even so, studies by (Cornell, 2020; Cornell, 2021; and Matos, 2020) use the terminology of ESG investing in typifying the SRI universe of assets. There is an overlap in the conceptual frameworks of SRI and ESG investing, while the scopes of these sustainable investment strategies differ. SRI is commonly associated with negative screening and a best-in-class approach. The former relates to the alignment of the portfolio with an investor's ethics, beliefs, and values while mitigating ESG risks and putting pressure on businesses involved in questionable business practices (Kumar, Dayaramani, & Rocha, 2016; Trinks & Scholtens, 2017). The latter entails selecting the best operators within a given sector or industry based on ESG standards, considering companies best suited to tackle sustainable development challenges while balancing the interests of shareholders (Rayer, 2019; Swiss Sustainable Finance, 2017). In contrast, popular variations of ESG investing methods are ESG momentum and ESG tilting, which involves selecting firms that have increased their ESG quality in recent periods. In contrast, ESG tilting relates to overweighting a portfolio with securities with high ESG ratings (Nagy, Kassam, & Lee, 2015).

However, Cappucci (2018) suggests a progression from values-based ethical investing to SRI with more sophisticated ethical screens before evolving to ESG integration. This view aligns with Schoenmaker and Schramade (2018), who classify the advancements made in sustainable investment strategies by exclusion, ESG integration and contribution to sustainable development. Most studies agree on the nature of impact investing and its typology as proposed by GIIN, in addition to the trade-off between societal returns and financial returns (Barber et al., 2021; Bernal et al., 2021). Furthermore, these studies agree that impact investments are a subset of SRI. Although, terminology such as ethical investing, social impact investment and social finance is used to refer to impact investing (Rizzi, Pellegrini, & Battaglia, 2018; Matos, 2020; OECD, 2015).

Nevertheless, the characterisation of impact investing poses a dilemma given the broad spectrum of impact capital inclusive of for-profit businesses, development banks and grant organisations, which leads to this capital being denoted as philanthropy, venture capital, microfinance (Agrawal & Hockerts, 2021; Schoenmaker & Schramade, 2018). Even so, there is a degree of overlap in the framework of sustainable thematic investing and impact investing. The core premise of thematic investments is the identification of key themes that play a more significant role in explaining the risk-return characteristics of investments, such as demographic shifts and societal changes and attitudes, when compared to more orthodox elements rooted in financial theory (Somefun, Perchet, Yin, & Leote De Carvalho, 2021). These themes are usually structured around achieving the UN's Sustainable development goals, common themes of water, security, clean energy, and nutrition (Morrow & Vezár, 2020). Although, thematic investing is commonly implemented with impact investing and represents a new building block within institutional investors' portfolios, which has had implications for traditional asset allocation (Swiss Sustainable Finance, 2017).

4.2.1 Geographic Focus

Most SRI, ESG and impact investment studies are situated in developed markets or take a global focus, as seen in Table 3. Even within global studies, by and large, the emphasis is on developed markets such as Europe, and the USA, while a majority of the capital is allocated towards developed markets (Auer & Schuhmacher, 2016; Yue et al., 2020; GIIN, 2020). These sustainable investment strategies were adopted due to a transparent, enabling market infrastructure and regulatory environment compared to emerging markets (Alshehhi, Nobanee,

& Khare, 2018; Claringbould et al., 2019). This finding is corroborated by Talan and Sharma (2019), who argues that the overall size of the sustainable investing market in emerging markets is insignificant compared to developed markets, which hampers the development of literature. Although studies by (Sherwood & Pollard, 2018; Chen & Yang, 2020) examine emerging markets, these studies are in the minority. In comparison, impact investing studies such as those by (Kollenda, 2022; Rizzi et al., 2018) take a global perspective and examine the intermittent cash flows from developed markets to emerging markets aimed at directly addressing societal and environmental challenges.

4.2.2 Methodology

Most SRI studies are empirical and quantitative, as seen in Table 3. These articles examined whether these investments generate risk-adjusted returns and how their return properties compare with traditional markets, as with Talan and Sharma (2019). SRI and ESG studies use traditional financial frameworks such as the EMH, CAPM and Fama and French models to evaluate the performance of ESG and SRI investments such as (Yue et al., 2020; Pedersen, Fitzgibbons, & Pomorski, 2021; Auer & Schuhmacher, 2016; and Giese et al., 2019). Also, these models have been applied to quantitative studies such as Bernal et al. (2021) in impact investing studies, but further analyses are limited by a lack of data attributable to the bulk of the industry is mainly private. Even so, studies like Jeffers, Lyu, and Posenau (2021) examining private impact funds using a PME (Public Market Equivalent) are relatively scant. Overall, ESG studies sought to primarily examine the effects of ESG ratings on financial performance (Naffa & Hain, 2018; Giese et al., 2019). Although, new studies such as those by (Naffa & Hain, 2022; Clarke, De Silva, & Thorley, 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) have been applied to impact investments, while studies by Kollenda (2022) analyse the volume of social impact transactions through peer-to-peer lending platforms.

Nevertheless, these qualitative studies were in the minority, as seen in Table 3. These articles discussed sustainable investment approaches and provided divergent perspectives. SRI studies (Oh, Park, & Ghauri, 2013; Dam & Scholtens 2015) examine the linkages between CSR, SRI and ESG investing, seeking to provide a definitive theoretical framework rooted in CSR. Additionally, Schoenmaker and Schramade (2018) and Dyllick and Muff (2016) provide a theoretical base, typology and justification for sustainable finance rooted in 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 discourse regarding SRI and ESG investing while providing an overview of the sustainable finance landscape. Policy documents such as the UNPRI aimed to consolidate and characterise SRI and provide a taxonomy of related activities and approaches (UNEP and UN Global Compact, 2021). Impact investing literature (Agrawal & Hockerts, 2021; OECD, 2015; GIIN, 2021) distinguishes impact investing from other forms of SRI, venture capital and philanthropy. Even so, studies by (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 to measure societal performance.

4.2.3 Results

Overall, results regarding SRI, ESG and impact investing studies are consistent with the literature, as seen in Table 3, i.e., SRI yield mixed return performance (Blankenberg & Gottschalk, 2018). Most SRI studies conclude that although SRI investments limit the investment options available but provide diversification benefits relative to traditional markets (Yue et al., 2020; Blankenberg & Gottschalk, 2018; Winegarten, 2019). Even so, SRI, ESG and impact investments are linked with lower return performance than traditional companies (Pedersen, Fitzgibbons, & Pomorski, 2021; Auer & Schuhmacher, 2016; Bernal et al., 2021; Jeffers et al., 2021). Furthermore, studies by (Pedersen et al., 2021; Chen & Yang, 2020) propose an overreaction hypothesis regarding ESG investments, mainly related to climate change. ESG investments are associated with better corporate governance structures, which translates to a lower cost of capital and a higher firm value reflected in accounting-based performance (Fulton, Kahn, & Sharples, 2012; Auer & Schuhmacher, 2016). Cornell (2021) argues that proponents of ESG investments often conflate these benefits with higher expected returns. Similarly, PFP studies by (Naffa & Fain, 2022) mainly yielded negative results.

Although Escrig-Olmedo et al. (2019) highlight the need for more consistent, transparent ESG ratings as these factors affect the valuations of these sustainable investments. By and large, impact investments display a wide dispersion of returns, attributable to factors such as asymmetrical information, manager selection and inconsistent investor objectives (Mudaliar & Bass, 2017; Jeffers et al., 2021; Bernal et al., 2021). Divergent perspectives relate to studies such as those by (Fain & Naffa, 2019; Blankenberg & Gottschalk, 2018) that

describe a no-effect hypothesis between ESG and financial return performance. Blankenberg and Gottschalk (2018) reported equivalent performance relative to a traditional portfolio, while Naffa and Fain (2022) concluded that ESG ratings serve to quantify sustainability risks. Conversely, studies that found a positive relationship between ESG and financial performance, such as Gardenier, Lac, and Ashfaq (2021) and Giese et al. (2019), are relatively scarce in modern times. Interestingly, Dam and Scholtens (2015) provided a theoretical model for SRI based on CSR using accounting ratios such as the price to book and return on assets, which found positive results regarding CSR and financial performance. Additionally, Gardenier et al. (2021) note that positive results are generally associated with earlier time periods. Most new contributions are related to impact investments (Kollenda, 2022; Barber et al., 2021) which examined peer-to-peer platforms and implemented utility functions such as WTP, only serve to increase the evidence base for impact investments. At the same time, (Rizzi et al., 2018; Agrawal & Hockerts, 2021; GIIN, 2020; Reeder & Colantonio, 2013) consolidate terminology and theoretical frameworks related to the budding investment management discipline.

4.3 Thematic Discussion

This paper aimed to compare and contrast the approaches to sustainable investing while identifying gaps within the literature. Firstly, it is evident that there are overlapping frameworks within the field of sustainable investing (Talan & Sharma, 2019; Jain et al., 2019; Blankenberg & Gottschalk, 2018; Yue et al., 2020). Although, most studies agree on incorporating ESG factors into the practice of investment management as a starting point. While some studies characterise the field of SRI using the terminology of ESG investing, others use sustainable finance and RI. However, most studies agree that impact investing is a subset of these SRI and emphasises achieving societal and environmental outcomes. Still, terminology issues persist about impact investing, with some researchers still using varying terminology (Agrawal & Hockerts, 2021). These overlapping frameworks filter through sustainability standards, disclosures and methods used to derive ESG ratings. These ratings serve as quantifiable indicators of societal and environmental performance. The trend persists within the field of impact investing, whereby various approaches have been proposed in the literature to measure societal performance.

Nevertheless, this field can be considered relatively novel. These factors hamper the mainstreaming of these sustainable investing strategies. While literature indicates that SRI principles have mainly been adopted in developed markets, studies such as Odell and Ali (2016) maintain that challenges such as poverty, urbanisation, pollution, and corruption represent significant risks for these investments in emerging markets. However, these challenges also present a unique opportunity for emerging markets. These nations are more suited to gain from the societal and environmental benefits, sustainable economic growth and profitability offered by sustainable investments (Sherwood & Pollard, 2018).

Similarly, most SRI investment studies undertake a quantitative methodology rooted in traditional 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). These traditional financial theories may be ineffective in explaining the returns of socially responsible investment strategies, which could be a plausible reason for the negative performance of sustainable investments (Bernal et al., 2021). Another possible explanation for this negative performance could be the trade-off between societal performance and financial returns. There is a need for more research into quantitative models that incorporate societal and environmental factors such as the WTP and PFPs (Naffa & Hain, 2022; Barber et al., 2021). In contrast, qualitative literature mainly favours these sustainable investment strategies in light of the prevailing socio-economic climate (Nicholls, 2021; Cappucci, 2018). Advocates against SRI investing highlights the adverse effects of a constrained portfolio posed by ESG screening (Cornell, 2021). Even so, studies such as (Oh et al., 2013; Dam & Scholtens, 2015; Schoenmaker & Schramade, 2018; Dyllick & Muff, 2016) agree that CSR is a crucial theoretical component of SRI while providing divergent theoretical bases for SRI rooted in literature. Nonetheless, policy documents by the UNPRI and GIIN consolidate SRI approaches in the literature.

5. Conclusions and Recommendations

In conclusion, the societal and environmental challenges prevalent in modern times emphasise the need for collective action to attain sustainable development. Furthermore, sustainable investment strategies such as SRI, ESG and impact investing have been earmarked by the UNPRI as critical tools to allocate capital toward sustainable development objectives. The paper examined the predominant approaches to sustainable investing found in literature, SRI, ESG and impact investing, using a systematic literature review. The paper examined 40 articles from sources such as the UN, OECD, Springer Link and SSRN. These articles were then systemically classified and coded following a thematic approach. The paper concluded that overlapping conceptual frameworks plague these sustainable investment approaches by examining relevant theories and empirical

evidence. The overlapping frameworks were particularly prevalent in ESG and SRI investment approaches. Moreover, the integration of ESG ideals is skewed towards developed markets due to enabling market infrastructure. However, sustainable investing does present an opportunity for emerging markets, given the social and economic challenges endemic in these nations.

Analyses of methodologies reveal approaches to these sustainable investment approaches are primarily rooted in financial theory, which cannot explain the returns of these investments (Bernal et al., 2021). Although studies agree that CSR provides a theoretical basis for SRI, there is still a lack of a unified theoretical base for sustainable investing. More specifically, the literature examining these sustainable investing approaches is mainly quantitative, examining the implications of these approaches on risk-return performance. In comparison, qualitative studies arguing for the widespread implementation of sustainable investing outline these approaches' societal and environmental benefits.

Studies opposing sustainable investing agree that these approaches lead to a more constrained portfolio attributable to limited investment options compared to traditional capital markets. Even so, propositions relating to the trade-off between societal and financial returns are often used as possible descriptors of financial performance. Therefore, empirical studies on these sustainable investment approaches reveal a largely negative performance. Given the overlapping conceptual frameworks prevalent in SRI, the paper recommends the development of consistent terminology, theoretical framework, and taxonomy to characterise the field of SRI, which will aid in the development of sustainability standards to measure societal performance. Furthermore, this paper calls for further research into ESG integration in traditional models or the development of multi-utility functions to explain the returns of these sustainable investment strategies.

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References

- Agrawal, A., & Hockerts, K. (2021). Impact investing: Review and research agenda. *Journal of Small Business & Entrepreneurship*, 33(2), 153-181. <https://doi.org/10.1080/08276331.2018.1551457>
- Albuquerque, R., Koskinen, Y., Yang, S., & Zhang, C. (2020). Resiliency of environmental and social stocks: An analysis of the exogenous COVID-19 market crash. *The Review of Corporate Finance Studies*, 9(3), 593-621. <https://doi.org/10.1093/rcfs/cfaa011>
- Alessandrini, F., & Jondeau, E. (2021). Optimal strategies for ESG portfolios. *The Journal of Portfolio Management*, 47(6), 114-138. <https://dx.doi.org/10.2139/ssrn.3578830>
- Alshehhi, A., Nobanee, H., & Khare, N. (2018). The impact of sustainability practices on corporate financial performance: Literature trends and future research potential. *Sustainability*, 10(2), 494. <https://doi.org/10.3390/su10020494>
- Auer, B. R., & Schuhmacher, F. (2016). Do socially (ir) responsible investments pay? New evidence from international ESG data. *The Quarterly Review of Economics and Finance*, 59, 51-62. <https://doi.org/10.1016/j.qref.2015.07.002>
- Barber, B. M., Morse, A., & Yasuda, A. (2021). Impact investing. *Journal of Financial Economics*, 139(1), 162-185. <https://doi.org/10.1016/j.jfineco.2020.07.008>
- Berg, F., Fabisik, K., & Sautner, Z. (2020). Rewriting history II: The (un) predictable past of ESG ratings. *European Corporate Governance Institute–Finance Working Paper*, 708(2020), 10-2139.
- Bernal, O., Hudon, M., & Ledru, F. X. (2021). Are impact and financial returns mutually exclusive? Evidence from publicly listed impact investments. *The Quarterly Review of Economics and Finance*, 81, 93-112. <https://doi.org/10.1016/j.qref.2021.04.010>
- Blankenberg, A., & Gottschalk, J. F. A. (2018). *Is socially responsible investing (SRI) in stocks a competitive capital investment? A comparative analysis based on the performance of sustainable stocks. CEGE Discussion Paper No. 349-May 2018*. Göttingen: University of Göttingen, Centre for European, Governance and Economic Development Research (cege).
- Caplan, L., Griswold, J. S., & Jarvis, W. F. (2013). *SRI/ESG: recent trends for Emerging Markets Funds*. Wilton: Common fund Institute.

- Cappucci, M. (2018). The ESG integration paradox. *Journal of Applied Corporate Finance*, 30(2), 22-28. <https://doi.org/10.3905/jesg.2022.1.054>
- Carolina, R. de C. F. M., Amorim, S. V., Kimura, H., & Luiz, de M. B. F. (2016). A systematic review of literature about finance and sustainability. *Journal of Sustainable Finance & Investment*, 6(2), 112-147. <https://doi.org/10.1080/20430795.2016.1177438>
- Carroll, A. B. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business & Society*, 38(3), 268-295. <https://doi.org/10.1177/000765039903800303>
- Ceren, U. Z. A. R., & Cenk, A. G. (2013). The mental and behavioral mistakes investors make. *International Journal of Business and Management Studies*, 5(1), 120-128.
- Chen, H. Y., & Yang, S. S. (2020). Do investors exaggerate corporate ESG information? Evidence of the ESG momentum effect in the Taiwanese market. *Pacific-Basin Finance Journal*, 63, 101407. <https://doi.org/10.1016/j.pacfin.2020.101407>
- Chouinard, Y., Ellison, J., & Ridgeway, R. (2011). The sustainable economy. *Harvard Business Review*, 89(10), 52-62.
- Claringbould, D., Koch, M., & Owen, P. (2019). Sustainable finance: The European Union's approach to increasing sustainable investments and growth—opportunities and challenges. *Vierteljahrshefte zur Wirtschaftsforschung*, 88(2), 11-27. <https://doi.org/10.3790/vjh.88.2.11>
- Clarke, R. G., de Silva, H., & Thorley, S. (2017). Primer on factor exposures and payoffs. Available at SSRN 3045449. <https://dx.doi.org/10.2139/ssrn.3045449>
- Copeland, T. E., Weston, J. F., & Shastri, K. (2005). *Financial theory and corporate policy* (2nd ed.). Boston: Pearson Addison Wesley.
- Cornell, B. (2020). ESG Investing: Conceptual issues. *The Journal of Wealth Management*, 23(3), 61-69. <https://dx.doi.org/10.2139/ssrn.3621163>
- Cornell, B. (2021). ESG preferences, risk and return. *European Financial Management*, 27(1), 12-19. <https://doi.org/10.1111/eufm.12295>
- Currie, R. R., & Pandher, G. S. (2011). Finance journal rankings and tiers: An active scholar assessment methodology. *Journal of Banking & Finance*, 35(1), 7-20. <https://doi.org/10.1016/j.jbankfin.2010.07.034>
- Dam, L., & Scholtens, B. (2015). Toward a theory of responsible investing: On the economic foundations of corporate social responsibility. *Resource and Energy Economics*, 41, 103-121. <https://doi.org/10.1016/j.reseneeco.2015.04.008>
- Dyllick, T., & Muff, K. (2016). Clarifying the meaning of sustainable business: Introducing a typology from business-as-usual to true business sustainability. *Organization & Environment*, 29(2), 156-174. <https://doi.org/10.1177/1086026615575176>
- Escrig-Olmedo, E., Fernández-Izquierdo, M. Á., Ferrero-Ferrero, I., Rivera-Lirio, J. M., & Muñoz-Torres, M. J. (2019). Rating the raters: Evaluating how ESG rating agencies integrate sustainability principles. *Sustainability*, 11(3), 915. <https://doi.org/10.3390/su11030915>
- Esty, D. C., & Cort, T. (2020). *Values at work: Sustainable investing and ESG reporting* (1st ed.). Cham: Palgrave Macmillan. <https://doi.org/10.1007/978-3-030-55613-6>
- Fain, M., & Naffa, H. (2019). Performance measurement of active investment strategies using pure factor portfolios. *Financial and Economic Review*, 18(2), 52-86. <https://doi.org/10.1371/journal.pone.0244225>
- Fulton, M., Kahn, B., & Sharples, C. (2012). Sustainable Investing: Establishing long-term value and performance. Available at SSRN. <https://doi.org/10.2139/ssrn.2222740>
- Gardenier, J., Lac, V., & Ashfaq, M. (2021). *Risk-adjusted return in sustainable finance: A comparative analysis of European positively screened and best-in-class ESG investment portfolios and the Euro Stoxx 50 index using the Sharpe Ratio (No. 7/2021)*. IUBH Discussion Papers-Business & Management: IU International University of Applied Sciences.
- Giese, G., Lee, L. E., Melas, D., Nagy, Z., & Nishikawa, L. (2019). Foundations of ESG investing: How ESG affects equity valuation, risk, and performance. *The Journal of Portfolio Management*, 45(5), 69-83. <https://doi.org/10.3905/jesg.2022.1.054>
- GIIN. (2021). *Compass: The methodology for comparing and assessing impact*. Investor Guide. New York:

GIIN.

- GIIN. (2021). *IRIS+ thematic taxonomy fundamentals*. New York: GIIN.
- Höchstädter, A. K., & Scheck, B. (2015). What's in a name: An analysis of impact investing understandings by academics and practitioners. *Journal of Business Ethics*, 132(2), 449-475. <https://doi.org/10.1007/s10551-014-2327-0>
- Hull, J. (2012). *Risk management and financial institutions* (4th ed.). Hoboken: John Wiley & Sons.
- IFC. (2019). *Creating impact: The promise of impact investing*. World Bank: Washington.
- Jabbour, C. J. C. (2013). Environmental training in organisations: From a literature review to a framework for future research. *Resources, Conservation and Recycling*, 74, 144-155. <https://doi.org/10.1016/j.resconrec.2012.12.017>
- Jain, M., Sharma, G. D., & Srivastava, M. (2019). Can sustainable investment yield better financial returns: A comparative study of ESG indices and MSCI indices. *Risks*, 7(1), 15. <https://doi.org/10.3390/risks7010015>
- Jeffers, J., Lyu, T., & Posenau, K. (2021). The risk and return of impact investing funds. *Available at SSRN 3949530*. <https://dx.doi.org/10.2139/ssrn.3949530>
- Jinga, P. (2021). The increasing importance of Environmental, Social and Governance (ESG) Investing in combating climate change. In J. P. Tiefenbacher (Ed.), *Environmental Management-Pollution, Habitat, Ecology, and Sustainability* (1st ed.). London: Intech Open.
- Kempf, A., & Osthoff, P. (2007). The effect of socially responsible investing on portfolio performance. *European financial management*, 13(5), 908-922. <https://doi.org/10.1111/j.1468-036X.2007.00402.x>
- Kollenda, P. (2022). Financial returns or social impact? What motivates impact investors' lending to firms in low-income countries. *Journal of Banking & Finance*, 136, 106224. <https://doi.org/10.1016/j.jbankfin.2021.106224>
- Kumar, R., Dayaramani, N., & Rocha, J. D. (2016). *Understanding and comparing ESG terminology: A practical framework for identifying the ESG Strategy that is right for you*. Boston: State Street Corporation.
- Li, F., & Polychronopoulos, A. (2020). *What a difference an ESG ratings provider makes*. Retrieved from <https://www.researchaffiliates.com/documents/770-what-a-difference-an-esg-ratings-provider-makes.pdf>
- Liang, H., & Renneboog, L. (2020). *Corporate social responsibility and sustainable finance: A review of the literature*. *European Corporate Governance Institute–Finance Working Paper no. 701*. Singapore: Research Collection Lee Kong Chian School of Business.
- Mehran, N., & Muhammad, N. (2009). Behavioral finance vs traditional finance. *Advanced Management Journal*, 2(6), 01-10.
- Moir, L. (2001). What do we mean by corporate social responsibility? *corporate governance*. 1(2), 16-22. <https://doi.org/10.1108/EUM0000000005486>
- Morrow, D., & Vezár, M. (2020). 10 FOR 2020: *Creating impact through thematic investing*. Amsterdam: Sustainalytics.
- Mudaliar, A., & Bass, R. (2017). *GIIN perspectives: Evidence on the financial performance of impact investments*. New York: GIIN.
- Naffa, H., & Fain, M. (2022). A factor approach to the performance of ESG leaders and laggards. *Finance Research Letters*, 44, 102073. <https://doi.org/10.1016/j.frl.2021.102073>
- Nicholls, A. (2021). Financing a green and inclusive recovery, 1-51. *Sustainable finance: A primer and recent developments*. Asian Development Outlook 2021.
- Odell, J., & Ali, U. (2016). ESG investing in emerging and frontier markets. *Journal of Applied Corporate Finance*, 28(2), 96-101. <https://dx.doi.org/10.1111/jacf.12181>
- OECD. (2015). *Social impact investment: Building the evidence base*. Paris: OECD.
- Oh, C. H., Park, J. H., & Ghauri, P. N. (2013). Doing right, investing right: Socially responsible investing and shareholder activism in the financial sector. *Business Horizons*, 56(6), 703-714. <https://doi.org/10.1016/j.bushor.2013.07.006>
- Pastor, L., Stambaugh, R. F., & Taylor, L. A. (2021). *Dissecting green returns (Working Paper No. 28940)*. Cambridge: National Bureau of Economic Research.

- Pedersen, L. H., Fitzgibbons, S. & Pomorski, L. (2021). Responsible investing: The ESG-efficient frontier. *Journal of Financial Economics*, 142(2), 572-597. <https://doi.org/10.1016/j.jfineco.2020.11.001>
- Peeters, H. (2005). Sustainable development and the role of the financial world. In L. Hens, & B. Nath (Eds.), *The World Summit on Sustainable Development*. Dordrecht: Springer.
- Pokorna, M. (2017). *Socially responsible investing and portfolio performance* (Unpublished master's thesis). Erasmus University, Rotterdam.
- Rayer, Q. G. (2019). Ethical investing approaches: screening and best-in-class. *The Private Investor, the newsletter of the UK*.
- Reeder, N., & Colantonio, A. (2013). *Measuring impact and non-financial returns in impact investing: A critical overview of concepts and practice (EIBURS Working Paper 2013/01)*. London: The London School of Economics and the European Investment Bank Institute.
- Rizzi, F., Pellegrini, C., & Battaglia, M. (2018). The structuring of social finance: Emerging approaches for supporting environmentally and socially impactful projects. *Journal of Cleaner Production*, 170, 805-817. <https://doi.org/10.1016/j.jclepro.2017.09.167>
- Rother, E. T. (2007). Systematic literature review X narrative review. *Acta Paulista de Enfermagem*, 20.
- Roy, J. K. (2015). Green stocks: Green investment, green return. *The Financial Express*, 22, 255.
- Schoemaker, D., & Schramade, W. (2018). *Principles of Sustainable Finance* (1st ed.). Oxford: Oxford University Press.
- Schramade, W. (2016). Integrating ESG into valuation models and investment decisions: The value-driver adjustment approach. *Journal of Sustainable Finance & Investment*, 6(2), 95-111. <https://dx.doi.org/10.2139/ssrn.2749626>.
- Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. *The Journal of Finance*, 19(3), 425-442. <https://doi.org/10.1111/j.1540-6261.1964.tb02865.x>.
- Sherwood, M. W., & Pollard, J. L. (2018). The risk-adjusted return potential of integrating ESG strategies into emerging market equities. *Journal of Sustainable Finance & Investment*, 8(1), 26-44. <https://doi.org/10.1080/20430795.2017.1331118>
- Somefun, K., Perchet, R., Yin, C., & Leote de Carvalho, R. (2021). Allocating to thematic investments. Available at SSRN. <https://dx.doi.org/10.2139/ssrn.3923605>
- Statman, M., & Glushkov, D. (2009). The wages of social responsibility. *Financial Analysts Journal*, 65(4), 33-46. <https://doi.org/10.2469/faj.v65.n4.5>
- Swiss Sustainable Finance. (2017). *Handbook on sustainable investments: Background information and practical examples for institutional asset owners*. Zurich: CFA Institute Research Foundation.
- Talan, G., & Sharma, G. D. (2019). Doing well by doing good: A systematic review and research agenda for sustainable investment. *Sustainability*, 11(2), 353. <https://doi.org/10.3390/su11020353>
- Trinks, P. J., & Scholtens, B. (2017). The opportunity cost of negative screening in socially responsible investing. *Journal of Business Ethics*, 140(2), 193-208. <https://doi.org/10.1007/s10551-015-2684-3>
- UNEP & UN Global Compact. (2021). *Principles for responsible investment an investor initiative in partnership with UNEP Finance Initiative and the UN Global Compact*. Washington: United Nations. Retrieved from <https://www.unpri.org/download?ac=10948>
- Venter, P., Van Zyl, D., Stack, E., Van Rensburg, W., Joubert, P., & Pellissier, R. (2017). *Economic and Management Research* (1st ed.). Cape Town: Oxford University Press.
- Yue, X. G., Han, Y., Teresiene, D., Merkyte, J., & Liu, W. (2020). Sustainable funds' performance evaluation. *Sustainability*, 12(19), 8034. <https://doi.org/10.3390/su12198034>

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