Green Investing: Changing Paradigms and Future Directions

By Alessandro Rizzello

Book Review Contributed by Nicholas Simpson

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A Book Review of “Green Investing: Changing Paradigms and Future Directions”

By Alessandro Rizzello

The urgency of our planet’s perilous state, marked by the existential threat of climate change and environmental degradation, due to anthropogenic[2] activities, demands a radical shift in our approach to finance and investment. Despite the temporary decline in carbon dioxide (CO2) emission in 2020, with the largest annual drop in global-energy related CO_2 emissions attributed to a contraction of economic and social activity as a result of the COVID-19 pandemic, global emissions rebounded in 2021, rising above pre-pandemic levels. The need for sustained reductions in CO_2 emissions to enable long-term climate stability was highlighted by The Intergovernmental Panel on Climate Change (IPCC) in their Sixth Assessment Report (AR6). This report called for increased mitigation, adaptation, and finance strategies to reduce greenhouse gas emissions to net zero by 2050, in accordance with the Paris Agreement. Transitioning to a carbon-neutral, climate resilient, and resource-efficient economy by 2050 will require significant investment from the private sector to bridge the funding gap. According to the World Economic Forum’s Net Zero Industry tracker 2023 report, $13.5 trillion in investments is required (by 2050) to transition to a sustainable and carbon-neutral future successfully.

Due in part to policies and regulatory frameworks aimed at achieving the milestone of net-zero emissions by 2050, coupled with socioeconomic issues such as the spread of the COVID-19 virus, organisations have been increasingly adopting environmentally friendly approaches to financing their business models and investing in green projects. The growing prominence of green finance reflects the shift towards integrating environmental considerations into the financial decision-making process and understanding monetary implications associated with green investments. Against that backdrop, it becomes imperative to address the complexities and ambiguities within the green finance academic landscape. The book Green Investing: Changing Paradigms and Future Directions, written by Alessandro Rizzello, serves as a crucial resource by providing a comprehensive overview of the green finance sector and examines the evolving landscape of green financial instruments, particularly new developments in the portfolio design of green investments.

The text is sectioned into seven chapters, offering a thorough examination of green finance. The first two chapters introduce green investing by defining green finance and establishing conceptual

[2] Resulting from or produced by human activities. - IPCC, 2018: Annex I: Glossary

frameworks. Chapter three provides an overview of key instruments and emerging markets in the field of green finance by utilizing case studies to illustrate innovative green financing tools. Chapter four discusses the evolution of green investment, emphasizing the shift towards Environmental, Social, and Governance (ESG) integration along with investment strategies in alignment with the Sustainable Development Goals (SDGs). Chapter 5 addresses greenwashing and possible remedies to mitigate this issue. Chapter 6 analyses the impact of COVID-19 on finance and the green recovery, while chapter 7 concludes by reflecting on the future of green finance by considering the post-COVID landscape and its implications for the financial system.

The author begins by addressing the critical issue of defining green finance, underscoring the constraint posed on the green sector by the lack of definitional clarity in both theoretical and practical contexts. Ambiguity in the definition of green finance creates difficulties in assessing corporate sustainability and accurately evaluating the outcome of green investments (Ozili, 2022). In the absence of a universally accepted definition of green finance, there is a significant variation in how progress towards green finance objectives is measured (Shishlov & Censkowsky, 2022). Different organisations and countries may interpret and categorize financial flows related to green investments differently, leading to discrepancies in reported figures and potentially hindering efforts to accurately evaluate the progress towards green finance goals. Chapter two acknowledges that the challenge in defining green finance lies in its focus on financial activities rather than on the specific environmental outcomes they aim to achieve. Recent developments in definitions tend to view green finance as a tool to improve environmental conditions by emphasising the ability of green investments to achieve sustainable outcomes. The book considers a complete definition of green finance as:

"A subset of a sustainable financial system that enables the allocation of capital toward policies, organisations, investments, and activities, which provide direct/indirect environmental benefits, intended both as lower negative impact on the environment than the status quo, or as positive environmental impact."

This definition encapsulates the diverse spectrum of interpretations and overlapping definitions associated with green finance; encompassing the broader intent of green finance as a catalyst for environmental preservation. An intuitive representation of all the satellite terms that fall under the umbrella of green finance, such as climate finance, circular finance, clean energy finance, and blue finance, is provided by matching each term to the classic elements of nature.

Another factor accelerating green investments is the shift in behaviour among investors, who have increasingly begun to incorporate environmental factors into their investment decisions. This trend is

evident in the adoption of screening criteria aimed at identifying environmentally responsible projects or investees. The main role of the financial intermediation chain in the green finance ecosystem is to assist these investors in identifying their green targets and assessing the environmental credentials of potential investments. Furthermore, financial intermediaries bridge the gap between investors' environmental priorities and the financing needs of those who demand capital for green projects, contributing to the growth and viability of the green finance ecosystem. The banking sector's involvement in the green finance market is instrumental in driving sustainable development, managing risk, and promoting responsible financial practices (Akomea-Frimpong et al., 2021). The author distinguishes between green banks, which operate based on a sustainable financial business model, and traditional banks which incorporate the practice of 'greening' by investing in environmentally friendly projects or businesses. Unlike traditional banks, green banks prioritize environmental well-being while financing projects and businesses; maximizing value for a wide audience of stakeholders. Besides the banking sector, a further portion of green investment flows emanates from institutional investors, including pension funds and insurance firms. However, institutional investors face constraints in diversifying their green investment portfolios and are often limited to green bonds and sovereign green bonds.

The author suggests that innovative financial instruments such as sustainability-linked bonds (SLBs), impact bonds, and green crowdfunding (GCF) can be utilized to encourage investments in green-oriented and low-carbon activities. Kölbel & Lambillon (2022) found results which agree with the book's conjecture that SLBs incentivize predetermined sustainability objectives by offering capital at a lower cost. The main distinction between green bonds and SLBs is the concept of earmarking; green bonds include a clause that requires the funds to be allocated towards green corporate investments. In contrast, the allocation of proceeds derived from issuing SLBs aren't predetermined, and can be used for general business purposes. This lack of commitment to green-oriented activities can encourage "greenwashing" activities when SLBs are issued with general, ambiguous sustainability goals set by the economic agent demanding capital. Impact bonds are more focused on achieving predetermined, measurable outcomes tied to specific environmental projects. The book provides a case study to illustrate the effectiveness of the Forest Resilience Impact Bond (FRIB) in improving the environmental conditions within the Tahoe National Forest, California. The FRIB is structured around achieving specific outcomes, including reducing risk of high-severity wildfire, maintaining water quality, and reducing the impact of floods. Impact bonds financing model involves the participation of multiple stakeholders from diverse sectors and can be replicated for addressing various environmental challenges, including those faced by Small Island Developing States (SIDs). GCF has been growing in popularity due to greater accessibility to a larger pool of potential investors and lower costs to investees. GCF allows investors to

enter the green finance ecosystem by contributing small amounts of capital through an online platform, and accumulating funds earmarked to support environmentally friendly initiatives, green ventures, and small to medium sized-enterprises that focused on improving environmental conditions. Policymakers should consider GCF as a crucial component in reducing the funding gap for green projects, increasing investor participation, and augmenting local awareness in working towards achieving sustainable outcomes (Adhami et al., 2017)

The emergence and increasing prominence of the Sustainable Development Goals (SDGs), established in 2015 by the United Nations – the 2030 Agenda, serves as a catalyst for shaping and influencing the evolution of green investment strategies. These 17 SDGs were designed to incorporate the interests of multiple stakeholders and are applicable to all regions around the world, including SIDs. Cooperation at the multilateral level is required to achieve the goals established by this framework created to address global challenges, including the climate crisis, inequalities, and sustainable growth. The book emphasizes how private finance plays a critical role in advancing the SDGs, leading to an increasing emphasis on aligning investment strategies with these goals. Private sector accounts for 85% of renewable energy finance, a significant effort consistent with adaptation and mitigation strategies established by the SDGs framework objectives. One of the challenges highlighted by the rise of SDG-aligned investment strategies is how to measure the environmental impacts of untargeted green finance; i.e., investments pursuing green targets as opposed to being earmarked for specific green technologies or products. Chapter four explores untargeted green investments in attempts to explain the implications for the green sector and highlight emerging trends that integrate the SDG framework into green financing business models.

Investment strategies aligned with SDGs have added a layer of analysis to the existing financing approaches, particularly through ESG investing and exclusionary screening. ESG investing is an approach that incorporates the risk associated with factors of long-term environmental, social, and governance challenges when assessing investment decisions. This approach encourages corporations to prioritize long-term sustainable outcomes rather than short-term financial performance and associated risk, fostering outcomes that align with SDG objectives for sustainable growth. Complementary to ESG investing, exclusionary screening involves omitting investments in sectors, companies, or projects with poor ESG performance or that fail to comply with international standards. This strategy can be used to eliminate companies or projects that pose significant ESG risks or violate global agreements. In theory, exclusionary screening could reward entities by identifying companies that exhibit high ESG performance relative to their peers in similar industries. Together, these two

strategies reflect a commitment to sustainability by guiding investment flows toward responsible and impactful enterprises.

The author goes on to highlight the growing body of research demonstrating that ESG investments have a positive or neutral performance relative to conventional investments. Conversely, only 13% of academic studies indicated a negative performance as a result of ESG investments. Additionally, the author raises a critical concern regarding the voluntary nature of ESG disclosures and the absence of uniform standards to ensure comparability across firms. Lack of agreed-upon standards for ESG ratings causes a significant challenge for the sector and gives rise to pertinent questions regarding greenwashing practices. Albeit the book fails to address inconsistencies in ESG data and analytics provided by firms, it delves into the pivotal role of ESG ratings and indices in allowing investors to accurately assess the ESG performance of portfolio companies. Distinction between ESG ratings and indices is acknowledged, the former referring to a framework utilized to evaluate firms' performances on ESG factors, and the latter being a list of performances by ESG companies. Inconsistencies in standards for ESG ratings raise critical challenges in accurately assessing firms' environmental impact, leading to concerns about greenwashing practices.

Chapter five is dedicated to the increase in regulatory initiatives aimed at eliminating or mitigating the risk of greenwashing, an issue that coincides with the rise in green asset allocations within financial institutions. The phenomenon 'greenwashing', a term referenced multiple times in the text, refers to the gap between symbolic gestures and substantive actions, aligning with professed sustainability principles. The pressures faced by firms to incorporate sustainable practices into their business model, coupled with the expectation to achieve positive financial returns, has influenced some companies to give the impression of being more environmentally friendly but without making any actionable commitments to sustainable initiatives. Consequently, greenwashing frequently results from companies' efforts to maintain a favourable impression with stakeholders by engaging in Corporate Socially Responsible (CSR) activities that may not accurately represent their real conduct. The author examines the various forms of greenwashing practices that may occur, both at the firm level and at the product/service level. Global regulatory organisations that have initiated measures to combat greenwashing include the US Securities and Exchange Commission (SEC), the Hong Kong Securities and Future Commission (SFC), and the International Organisation of Security Commissions (IOSCO).

To address greenwashing, the book highlights three primary tools: taxonomies, ratings, and standards. Taxonomies, such as the EU Taxonomy, offer a clear classification of environmentally sustainable activities, reducing ambiguity and ensuring consistent labelling of green assets (Kooroshy et al., 2020).

The Taxonomy establishes a screening criterion for activities to qualify as environmentally sustainable, aligned with six environmental objectives set by the EU Taxonomy regulation. Creating specific benchmarks, including emissions thresholds for energy generation, reduces the risk of vague or misleading claims about sustainability. Additionally, the regulation requires companies and financial market participants to disclose the extent to which their activities or investments align with the EU Taxonomy. This encourages both transparency in the market, which enables stakeholders to verify claims of environment impact. Ratings, meanwhile, act as quantitative benchmarks for evaluating a company's ESG performance. These ratings provide investors a more technical way to critically assess the legitimacy of sustainability claims, identifying inconsistencies or inflated portrayals of green efforts. Standards complement taxonomies and ratings by unifying the criteria for disclosing and evaluating green activities, enhancing comparability and reliability across firms. Hu et al. (2023) did research on corporate greenwashing and found that the issue can be effectively mitigated through unification of rating standards, which would reduce inconsistencies and foster a more transparent evaluation of corporate environmental performance.

Together, the three tools mentioned by the author form a mechanism for mitigating greenwashing, addressing both the systemic and operational dimensions of sustainable misrepresentation. However, the success of these tools is dependent on a coordinated implementation. The integration of taxonomies, ratings, and standards creates a multi-faceted defence against greenwashing, with each tool addressing specific vulnerabilities in disclosure and accountability frameworks. Although these measures are promising, challenges persist, such as contextual differences in applying taxonomies and fragmented methodologies in ESG ratings. Although the text proposes actionable steps to mitigate greenwashing, including increasing independent evaluators participation and developing criteria to assess untargeted green investments, it failed to discuss the implementation challenges or potential drawbacks associated with these remedies. Furthermore, there is limited exploration of how these solutions might be successfully incorporated into existing regulatory frameworks or business practices.

The concluding section of the book explores the importance of financing the green recovery following the COVID-19 pandemic. Policy responses that give priority to long-term sustainability and resilience, in addition to addressing the pandemic's immediate economic fallout is imperative. In light of the pandemic's extensive effects, there has been a growing recognition of the inextricable link between public health, environmental sustainability, and economic stability. The chapter explains the nexus between the pandemic and green recovery plans, clarifying that efforts to reduce environmental risks in the financial sector are intertwined with the need for preventing and balancing transition related risk pertained to moving towards low-carbon activities. Although the text offers a thorough summary of the

broad conceptual issues underpinning the shift to a greener economy, it falls short in providing concrete strategies and recommendations to help financial institutions and policymakers effectively navigate this shift.

The book, 'Green Investing: Changing Paradigms and Future Directions' serves as a valuable resource for policymakers, economists, and stakeholders in the finance sector, offering insights into the complexities and opportunities within the green finance landscape. Through simplified discourse regarding the intricacies of green finance and case studies that provide practical examples of green instruments applied in the real world, readers will achieve a greater understanding of the green investment ecosystem. The author's reliance a systematic literature review methodology, used to identify and analyse existing research on green finance, enhances the book's theoretical foundation, adding credibility of the content and equipping readers with important insights for navigating the green finance sector with confidence.

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