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CHALLENGES AND OPPORTUNITIES OF ESG INVESTING

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Abstract. The main purpose of the article is to define the main challenges of ESG investing and propose key opportunities to foster its growth by considering the essential characteristics of ESG investing. The aim is developed within key objectives, including: provide a theoretical framework for ESG investing, exam the current global trends of sustainable economy development and ESG investing, identify the key challenges, and explore potential opportunities of ESG investing. Emphasizing practical application of the current research, it is relevant for devising strategies in both business and national economies. The article offers a comprehensive analysis of ESG investing dynamics by use of a measure of methods, including analytical, descriptive, and case study methods. The research results in development of ESG investing maps, SWOT analysis, and core principles for integrating ESG criteria into strategic social and economic frameworks. The practical significance of ESG investing topic is deeply connected with the necessity for its further exploration and implementation in business and national economic strategies.

Keywords: ESG investing, sustainable finance, impact business, sustainable development.

JEL Classification: D 25, G 2, G 3, Q 01, Q 56, Q 57.

1. Introduction

ESG investing has gained significant traction globally, addressing worldwide sustainability concerns. According to the PricewaterhouseCoopers [PWC] research, consumers, employees, investors, and broader stakeholder groups pay increasing attention to ESG performance. For instance, more than 60% of consumers consider sustainability and ethical criteria in their purchasing process. This indicator is growing by 10% yearly. Investors are also ready to invest more in ethically sourced and sustainably made products (PricewaterhouseCoopers, 2023).

Research by the International Institute for Sustainable Development [IISD] highlights some sector-specific ESG trends. In 2022, there is observation of the renewable energy sector's long-term growth, supported by global efforts, facing the challenge of climate change. Similarly, the technology sector attracted substantial ESG investments influenced by the increased scrutiny of data privacy and digital ethics (Giving Force, 2023). According to the ESG Risk Ratings, provided by Morningstar Sustainalytics, there is increasing growth of ESG risks affecting the operational activity of the company and its strategy building. The examination of around 12,197 companies during the timeframe of 2014–2022 represented the differentiation between ESG risks through different regions, countries, market structures, and sectors of the economy. So, the ESG risk impacts the portfolio performance dependent on the environmental peculiarities in a wide range of ways (Morningstar Sustainalytics, n.d.).

Due to the Global ESG report, prepared by Principles for Responsible Investment [PRI], the investment landscape has changed a lot during some previous years. This is connected with global, local, and national challenges, and needs transformation. This creates some problems,

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concerning the proper ESG research methodology creation. However, PRI findings show the progress of responsible investment activities over time, broadly supporting the role of the PRI in policy engagement, development of local communities of practice, bringing the PRI closer to global and local actors, implementation of PRI strategies and priorities through national and regional forums along with professional discussions (Principles for Responsible Investment, n.d.).

Bloomberg experts noted that projects that take into account environmental, social, and governance [ESG] factors collected about 30 trillion USD of investments in 2022. A main part of investors (85%) reported that ESG creates the basis for better returns, resilient portfolios, and enhanced fundamental analysis. Global ESG assets are predicted to hit $40 trillion by 2030 (Bloomberg, 2023).

ESG is also serving as a crucial tool within the building of the post-war reconstruction strategy in Ukraine. The post-war recovery strategy was elaborated at the international level at the Ukraine Recovery Conference in Lugano in 2022. The main points are considered through the ways of environmental, social, and infrastructure recovery from damages and losses caused by the war along with economic recovery. The instrument of post-war recovery support is the creation of specialized funds to mobilize international and national resources, aimed at sustainable development initiatives activation. Further development of post-war recovery strategies through sustainability concepts took place at the following Ukraine Recovery Conference in the UK in 2023. The main focus was removed from a wide range of sources for financial support, aiming to implement sustainability principles into a wide range of activities (Gernego et al., 2023).

The above-mentioned trends show the practical nature of ESG investing and their role in global society increase. This causes the increasing importance of appropriate research, concerning ESG factors and their role in modern society.

The current research aims to define the main challenges and opportunities of ESG investing for creating a background for further development of national, regional, local, and business strategies aimed at ESG. In particular, to achieve the above-mentioned goal, the following objectives are defined in the article:

- to define the essential characteristics of ESG investing, provide the theoretical background for further practical implementation of sustainability concept;
- to describe the current global trends of sustainable economic development and ESG investing
- to define key challenges for ESG investing development;
- to find potential opportunities for ESG investing;
- to create a SWOT-analysis matrix for ESG investing;
- to propose key principles for ESG in-vesting strategies development.

2. Methodology and research design

To address the objectives of this research we use the interdisciplinary methodological approach, drawing on insights from finance, economics, environmental science, and social responsibility. The research instruments are represented by a mix of analytical, descriptive, and case study methods to provide a comprehensive analysis of ESG investing and its dynamics. This approach allowed us to combine findings from multiple sources and perspectives, enhancing the reliability and validity of our research outcomes.

At the first (theoretic) part of the research, a theoretical framework of ESG investing is provided through an extensive review of literature from academic journals, reports, and reputable sources in finance, sustainability, and corporate governance. This review enabled us to understand the key ESG definitions and principles underlying this approach.

The second (analytical) part of our research provides an overview of global trends in sustainable economy development and ESG investing. We used a combination of quantitative and qualitative data analysis techniques. In particular, the indicators companies acting in accordance with GRI principles are generalized, based on GRI analytical and financial reports, practical cases and impact stories. The structure of companies, acting by Task Force on Climate-Related Financial Disclosures [TCFD] recommendations, relies on TCFD branch reports' analysis and compartment. Information on companies that disclose climate-related financial information according to region of origin is a result of TCFD regional reports' analysis. The trend identification method is used for providing the overview of industry structure of companies that disclose financial information by SABS.

The third part of the research aims to identify the main challenges facing ESG investing. We employed a combination of qualitative research methods, including surveys and results of focus groups with sustainability experts. This enables us to define groups of factors that create barriers for ESG investing widespread.

The following part of the article represents the analysis of potential opportunities within ESG investing. The opportunities were explored through the regional and business cases analysis, concerning the ESG integration into the development strategies.

The final part of the research summarizes the previous studies, using the methodology of SWOT analysis. This provides the overview of ESG investing strengths and weaknesses along with the opportunities and threats of environment.

Overall, our research aimed to provide a systematic analysis of ESG investing, leveraging a range of research methods and data sources to address the objectives outlined in this study. By combining theoretical insights with empirical evidence and practical insights from industry experts, we tend to offer recommendations for advancing ESG investing in both business and national economic contexts.

3. Theoretical background

3.1. Literature review

The topic of ESG investing is rather new both in practice and in theoretical research. However, due to the importance of ESG investing increase for both business development and national economies, there is also a need to describe different aspects of the issue within theoretical research.

ESG investing has gained significant popularity in recent years. There is evidence that better ESG performance by companies leads to reduced risks, improved financial performance, higher stock market valuations, and enhanced returns for investors (Sundaram, 2023). Numerous studies have documented the rapid growth of ESG investing globally, driven by increasing awareness of sustainability issues among investors, regulatory pressures, and shifting societal norms (Hawley et al., 2011; Geczy et al., 2005).

Investors are integrating ESG factors into their decision-making processes, viewing them as material to long-term financial performance and risk management (Khan et al., 2016). This is why investors need to determine which ESG issues are important to them and how to incorporate them into their portfolios (Alford, 2019).

There are also some researches, describing particular challenges and opportunities of ESG investing. In particular, a practical approach of impacts and challenges of ESG investing is considered through the case study on how ESG philosophy helps to shape business (Liu, 2023). Some authors also pay their attention to the practical issue of sustainable multi-asset portfolio operation (Smiles & Purcell, 2023).

However, despite the growing interest in ESG investing, many debates and questions remain unanswered (Hill, 2020). Overall, ESG investing offers the potential for aligning financial goals with sustainability objectives, but investors need to navigate various challenges and make informed decisions about their approach. This is why, there are different points of view into the ESG challenges and opportunities nature.

3.2. Environmental, social and governmental investing definition

Environmental, social and governmental [ESG] means the combination of Environmental, Social, and Governance. Investors are considering such non-financial factors as an important part of potential project portfolio analysis, combining the identification of material risks with potential social, environmental, and governmental increases. Mostly, ESG factors are not included in the mandatory reporting. However, in 2024 this is considered as an important part of business development strategy in the European Union. Additionally, businesses are paying increasing attention to sustainability reports along with their mandatory financial reports. Sustainability reports are mostly elaborated by the globally widespread standards such as the Sustainability Accounting Standards Board [SASB], the Global Reporting Initiative [GRI], and the Task Force on Climate-related Financial Disclosures [TCFD]. This facilitates the process of ESG factors incorporation into the investment process (CFA Institute, 2024).

ESG investing encompasses a variety of strategies that factor in environmental, social, and governance considerations alongside financial metrics to assess investments' sustainability and ethical impact (Khan et al., 2016). The primary aim of ESG investing is to generate long-term sustainable returns while fostering positive environmental and social outcomes (Clark et al., 2015).

So, the screening of the environmental, social, and governance factors has to be made as a part of the investment attractiveness evaluation process (Syed & Ntim, 2017). Social, environmental, and governmental criteria are becoming especially important next to the economic indicators at both business and national levels (Figure 1).

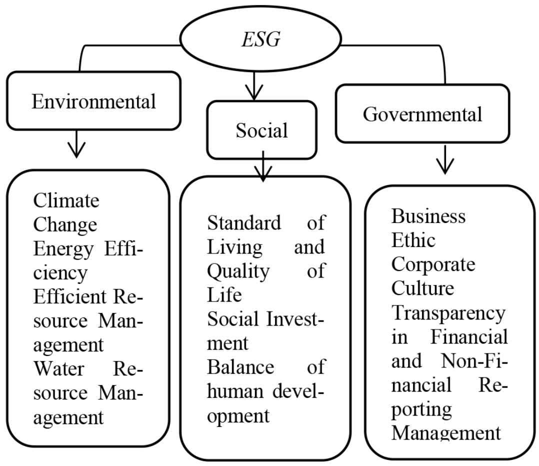

Figure 1. Criteria ESG (ESG Investment Principles, 2021; Gernego et al., 2024)

The environmental criteria evaluate a company's impact on natural resources, climate change, pollution, and energy efficiency. Common metrics include carbon emissions, water usage, and renewable energy initiatives (Aragón-Correa et al., 2008). Social criteria assess a company's relationships with stakeholders, including employees, customers, communities, and suppliers. Metrics may encompass labor practices, diversity and inclusion, human rights, and product safety (Chatterji et al., 2020). Governance criteria focus on corporate governance structures and practices, including board composition, executive compensation, shareholder rights, and transparency. Effective governance is crucial for risk mitigation and accountability (Grewal & Serafeim, 2020).

Thus, there is no single definition of ESG investing. However, generally, it represents a multifaceted approach to investment management, integrating environmental, social, and governance factors along with financial considerations. In practice, it is represented as a combination of challenges and opportunities due to the use of these factors combination.

4. Global trends of sustainable economy development and ESG investing

A general overview of global trends of sustainable economy development and ESG investing is possible to provide based on the reports of world-known institutions, providing standards of ESG and sustainability estimation.

The Global Reporting Initiative [GRI] defines principles that help standardize understand and communicate their impact on issues such as climate change, human rights, and corruption (Figure 2).

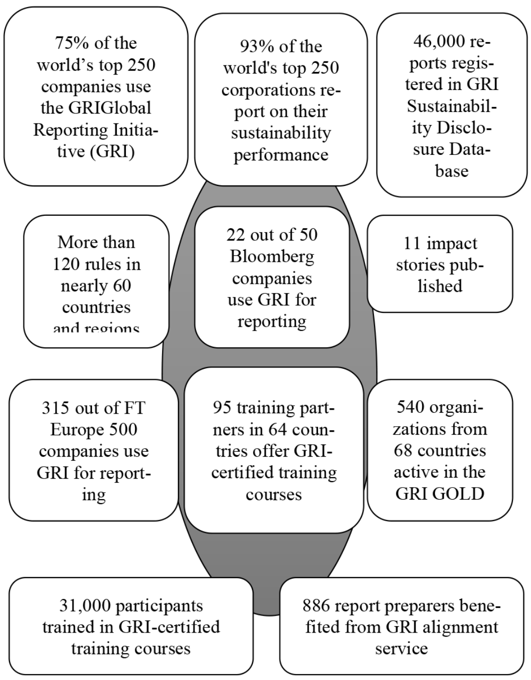

Figure 2. GRI application in the world in 2022 (Global Reporting Initiative, 2023)

The GRI community includes more than 500 organizations from more than 70 countries. These members reflect the diversity of GRI sustainability reporting, with organizations large and small, private and public, located in all regions. Sectors represented in the Community include agriculture, automotive, chemicals, communications, commercial services, conglomerates, construction, education, energy, finance, food, healthcare, recreation, manufacturing, mining, non-profit organizations, technology, tourism, transportation, real estate, retail and waste management. Specifically, four organizations from Poland are members of the GRI community. These are Millow Consulting, Responsible Business Forum, Sustainability Report and TerGo. In addition, according to the GRI community, 10 GRI-certified sustainability specialists refer to it. Velma ESG is a certified GRI software partner (Global Reporting Initiative, 2023).

Financial markets and investors need clear, comprehensive and high-quality information on the impacts of climate change. This includes risks and opportunities arising from rising temperatures, climate-related policies and emerging technologies in our changing world. The Financial Stability Board (FSB) established the Task force on climate-related financial disclosures (TCFD) to improve and enhance the reporting of climate-related financial information. Each year since the TCFD published its recommendations. Since 2017, we have seen an increasing number of companies disclosing climate-related financial information by the recommendations. These companies come from different regions and different industries (Figure 3).

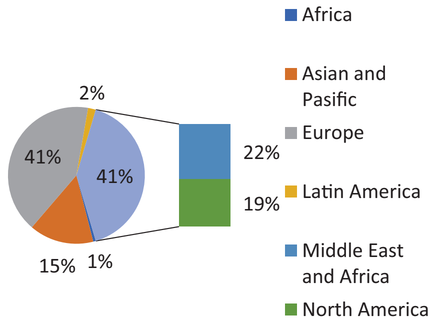

Figure 3. Companies that disclose climate-related financial information according to region of origin in 2022, % (Task Force on Climate-Related Financial Disclosures, 2024)

According to the information provided, the largest portion of companies that disclose climate-related financial information is from Europe (41%), the Middle East and Africa (22%), or Latin America (19%).

The structure of companies, acting by TCFD recommendations, also varies, depending on the branch (Table 1).

Table 1. Companies that disclose climate-related financial information, according to industry of origin in 2022 (Task Force on Climate-Related Financial Disclosures, 2024)

Branch	Some of the companies, derived from this industry, that disclose climate-related financial information, %
Agricultural, food and forestry products	7.52
Materials and Buildings	0.75
Asset manager	9.77
Asset owner	8.27
Banking	12.03
Consumer goods	3.01
Energy	22.56
Insurance	4.54
Materials and Buildings	15.04
Technology and utilities	9.02
Transportation	7.52

The largest share of companies that disclose climate-related financial information comes from Energy (22.56%), Materials and Construction – 15.04% and Banking – 12.03%. Similar trends are also true at the regional level, particularly in Europe. Generally, these companies are active at the international level, especially Allianz Group and AXA Group (Insurance), Barklays and BNP Paribas (Banking), Danone and Nestle (Consumer Goods), and etc.

The Sustainability Accounting Standards Board [SASB] standards are developed by a non-profit organization that was founded in 2011 by Jean Rogers for standards' development. SASB standards enable ESG integration across multiple asset classes. ESG Integration Insights are compilations of case studies from asset owners and managers outlining best practices for applying SASB standards and tools to investment decisions across asset classes. Hundreds of companies around the world and across all sectors are using SASB Standards to communicate financially relevant sustainability information to investors. According to SASB's online portal, the Sustainability Accounting Standards are applied to 4 516 companies from 75 countries. The largest minority of companies that disclose financial information by SABS work in the Infrastructure and Extract and Mineral Processing industries (Figure 4).

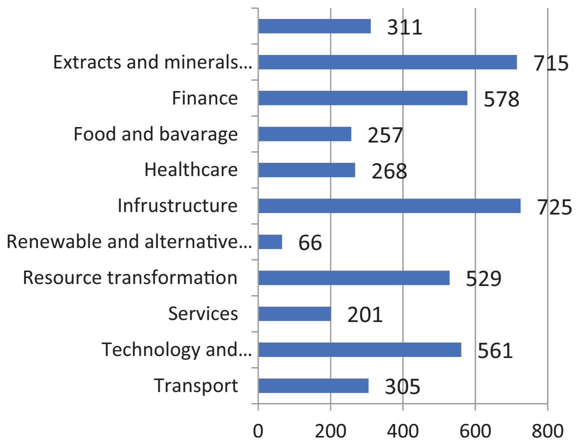

Figure 4. Industry structure of companies that disclose financial information by SABS in 2022, companies (Sustainability Accounting Standards Board, 2024)

The above-mentioned trends show the increasing importance of ESG for both investors and businesses. Therefore, there is a practical need to consider the challenges of ESG investing.

5. Challenges of ESG investing

In this section, we aim to provide a general overview of existing ESG investing challenges, based on available research and analytical studies.

The key findings from scholarly research and industry reports show that the main challenges of ESG investing are connected with the following aspects:

– Data Quality and Standardization;
– Greenwashing and ESG Dilution;
– Integration Challenges

Lack of data quality and standardization cause the problem of appropriate assessing of companies' ESG performance (Clark et al., 2015). Greenwashing causes the increasing risk of misrepresentation of companies' sustainability efforts in attract investors (Renneboog et al., 2008). Integrating ESG factors into investment decision-making processes also poses practical challenges for investors, including determining materiality, establishing appropriate benchmarks, and measuring the financial impact of ESG considerations (Grewal &, Serafeim, 2020).

Data Quality and Standardization is one of the primary challenges facing ESG investing. This is connected with inconsistent reporting practices and data gaps hinder comparability and reliability, making it challenging for investors to accurately evaluate ESG risks and opportunities.

The lack of availability and quality of data, as well as the lack of standardization and transparency in ESG rating methodologies, are barriers to ESG integration. Commercial ESG ratings suffer from biases, such as quantity bias, where companies with more ESG data tend to receive higher ratings and lower costs of funding (Mu et al., 2023). To address these challenges, there is a need for the development of global frameworks and reporting standards for both financial and nonfinancial companies. Additionally, the use of next-generation technology infrastructure and robust data governance mechanisms can improve the transparency and state of sustainability disclosure, enabling better-informed and data-driven decision-making.

ESG widespread has raised concerns about greenwashing. Greenwashing is typical for some large companies, disclosing large quantities of ESG data but simultaneously having poor ESG performance. In this context, greenwashing creates a barrier to the ESG factor's integration into investment decisions (Yu et al., 2020). Additionally, the broadening of ESG criteria in some funds may dilute their impact, as companies with marginal ESG improvements are included alongside leaders in sustainability.

ESG integration challenges are connected with a measure of processes, including level of uncertainty, insufficient data, methodological constraints, time-horizon mismatch, etc. (Open Risk Manual, 2021). There is a measure of complicated processes, including establishing appropriate benchmarks and measuring the financial impact of ESG considerations in investment decision-making.

6. Opportunities of ESG investing

Despite a measure of challenges, concerning ESG criteria, they can enhance risk-adjusted returns for investors. On the one hand, ESG criteria can reduce reputation, political, and regulatory risks. This is due to the decreasing probability of consumer boycotts, environmental disasters, or reputation scandals with ESG integration into the current activity. On the other hand, investors increase their benefit (additional value), boosting the social impact of responsible companies and reducing exposure to risks faced by ESG laggards (Sourd, 2024).

However, the main investor's goal is still to get a financial effect. This is why there is a growing importance of impact investing in the modern world, which refers to the intention of generating positive social and environmental outcomes, alongside financial returns. Impact investment potential plays a particular role, because of the following principles:

- intentionality;
- investment with return expectations;
- range of return expectations and asset classes;
- impact measurement and management.

Intentionality means consciousness of decisions in the allocation of capital for investments, enabling them to create positive social and environmental change, going beyond merely avoiding harm. This is why research suggests that companies with strong ESG performance may be more competitive in the long term (Friede et al., 2015).

Impact investments are different from grants or donations because they can generate financial returns, ranging from below-market to market-rate. Namely, impact investing seeks to generate measurable, beneficial social or environmental impact alongside financial returns (Bril et al., 2021). Additionally, impact investing may span through different asset classes, such as private equity, public equity, fixed income, and real estate. Achievement of both social and financial return is possible in case of effective management, including monitoring, evaluation, and adaptation of investments, maximizing their impact (Viviani & Maurel, 2019)

At the state and regional level, ESG investments create the opportunity for specific regulatory development, including disclosure requirements and tax incentives for sustainable investments. This means that regulatory developments, such as mandatory ESG disclosure requirements and tax incentives for sustainable investments, are creating a supportive environment for ESG investing (Janicka & Sajnóg, 2022). Increased transparency and accountability can enhance market integrity and investor confidence in ESG strategies.

7. SWOT analysis

SWOT analysis matrix represents the possible combinations of strengths, weaknesses, opportunities, and threats of ESG investing (Figure 5).

1. Strengths:	**2. Weaknesses**
– ability to create value by strengthening investment portfolio with social value positive environmental outcome; – long-term value creation through ESG; – identification and mitigation of non-financial risks, including regulatory compliance, supply chain disruptions, reputational damage, etc.; – increasing regulatory initiatives and reporting standards.	– lack of standardized ESG metrics and reliable data; – complexity in ESG factors interpretation and estimation; – the probability of greenwashing and misrepresentation; – lack of informative support for ESG investing.
3. Opportunities	**4. Threats**
– market growth potential through ESG opportunities; – possibility of ESG innovation and product development; – investors engagement with companies on environmental, social, and governance issues; – regulatory development.	– data privacy and security risks; – market volatility and uncertainty; – regulatory changes and compliance risks; – competitive pressure.

Figure 5. SWOT analysis of ESG investing

The possible scenarios of ESG investing development may be based on opportunities used to overcome the weaknesses. This includes the possibility of using market growth potential to overcome the lack of information on ESG in investment strategies. The appropriate regulatory basis development can assist in the management of greenwashing issues. The complexity in ESG factors interpretation and estimation may decrease in the case of ESG innovation and product development.

8. Conclusions

The development of ESG projects at the international level leads to the emergence of increasingly specialized financial practices and tools aimed at supporting appropriate initiatives, in particular aimed at counteracting climate change. ESG investing takes an important place among traditional investment instruments and forms. The main essential characteristic of ESG investing is its ability to create additional value through environmental, social and governmental effects. The international global rankings show the increasing tendencies of ESG investing through national economies, regions and branches.

Therefore, there is a growing importance to define key ESG challenges and possible opportunities, including:

- enhance risk-adjusted returns for investors to overcome possible challenges of ESG integration into investors' strategies;
- valuable benefits from impact investments to provide a mechanism of acknowledgment with data quality and ESG standards;
- the opportunity for regulatory development provides a mechanism for greenwashing and ESG dilution management.

Realization of existing social and economic potential is possible in case of creation of a comprehensive system for stimulating the financing of sustainable projects, which requires approval of appropriate regulations and standards at the national level with sector standards and strategies of socially responsible activity of contractors.

Disclosure statement

The authors do not have any competing financial, professional, or personal interests from other parties

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