



International Journal of Innovative Technologies in Economy

e-ISSN: 2414-1305

Operating Publisher
SciFormat Publishing Inc.
ISNI: 0000 0005 1449 8214

2734 17 Avenue SW, Calgary,
Alberta, T3E0A7, Canada
+15878858911
editorial-office@sciformat.ca

ARTICLE TITLE

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DOI

[https://doi.org/10.31435/ijite.2\(54\).2026.6298](https://doi.org/10.31435/ijite.2(54).2026.6298)

RECEIVED

22 March 2026

ACCEPTED

16 June 2026

PUBLISHED

30 June 2026

LICENSE



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ESG CRITERIA AND THEIR IMPACT ON INSURANCE COMPANY INVESTMENT PORTFOLIOS

Nana Shonia

Doctor of Economics, Professor of Finance, Akaki Tsereteli State University, Kutaisi, Georgia
ORCID ID: 0000-0001-7689-3800

Mzevinar Nozadze (Corresponding Author, Email: nozadzemzevinar11@gtu.ge)

Doctor of Economics, Georgian Technical University, Tbilisi, Georgia
ORCID ID: 0009-0007-3795-1132

Medea Chelidze

Professor, Doctor of Economics, Georgian Technical University, 77 M. Kostava str., 0160 Tbilisi, Georgia
ORCID ID: 0000-0002-3686-4201

Tamar Beridze

Candidate of Technical Sciences, Georgian Technical University, Faculty of Business Technologies, Tbilisi, Georgia
ORCID ID: 0009-0007-7052-647X

Goga Gelitashvili

Assistant Professor, Doctor of Business Administration, Tbilisi Humanitarian University, 31 Monk Gabriel Salos Ave., 0144 Tbilisi, Georgia
ORCID ID: 0000-0001-7924-7943

ABSTRACT

As institutional investors with long-term commitments, insurance companies are increasingly integrating environmental, social, and governance (ESG) criteria into their investment strategies. This paper explores the shift from a traditional risk-and-return optimization framework to a sustainability-focused model. Through a qualitative and comparative analysis, the study examines how ESG integration is transforming current industry practices and portfolio diversification strategies. It identifies the correlation between high ESG ratings and portfolio sustainability, investigating whether sustainable investing serves as a mechanism for optimization or a structural constraint. The research specifically addresses the interplay between ESG-driven asset allocation and regulatory frameworks, such as Solvency II, to evaluate impacts on capital requirements and risk mitigation. Ultimately, the study identifies ESG as a vital tool for enhancing investment portfolio resilience and managing long-term systemic risks within the evolving global regulatory landscape.

KEYWORDS

ESG Criteria, Portfolios, Portfolio Diversification, Green and Sustainable Bonds

CITATION

Nana Shonia, Mzevinar Nozadze, Medea Chelidze, Tamar Beridze, Goga Gelitashvili. (2026) ESG Criteria and Their Impact on Insurance Company Investment Portfolios. *International Journal of Innovative Technologies in Economy*. 2(54). doi: 10.31435/ijite.2(54).2026.6298

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1. Introduction.

In the current stage of economic development, ESG factors have emerged as critical components of investment decision-making. Their integration is essential for ensuring efficient portfolio management and achieving sustainable financial performance. Within the global financial system, insurance companies - acting as major institutional investors - serve as pillars of financial stability. Traditionally, the optimization of their investment portfolios relied solely on financial metrics, such as risk and return. However, the inclusion of non-financial ESG criteria has now become a strategic necessity for the operations of modern insurance firms. "This shift is further amplified by regulatory frameworks such as Solvency II, which mandate a more rigorous approach to long-term risk assessment.

2. Methodology

This study employs a qualitative research design based on a theoretical and comparative-analytical approach. The methodology consists of the following components:

Documentary Analysis: A systematic review of regulatory frameworks, specifically focusing on Solvency II directives and EU sustainability mandates.

Comparative Analysis: An evaluation of traditional vs. ESG-integrated investment strategies to identify differences in portfolio resilience and risk mitigation.

Synthesis of Secondary Data: Integration of existing academic literature, institutional reports, and market analyses to establish a conceptual link between ESG criteria and long-term financial stability.

Logical Deduction: Applying financial theories to interpret how green and sustainable bonds contribute to risk-adjusted returns and diversification within the insurance sector.

3. Results and Discussion

3.1.Theoretical Foundations of ESG Criteria and the Paradigm of Sustainable Investment

ESG criteria are categorized into three fundamental pillars: environmental, social, and governance factors. Integrating these dimensions allows investors to make more informed and robust investment decisions.

Environmental Factors: These encompass climate change mitigation (emissions reduction), biodiversity conservation, resource sustainability, and energy efficiency. Such elements are increasingly recognized for their capacity to significantly influence a firm's long-term financial performance.

Social Factors: This category reflects a company's social performance through human capital management, community engagement, adherence to human rights and labor standards, and consumer protection and product safety. At this stage, such an indicator as corporate social responsibility is increasingly used to assess the quality of a company's work (Mzevinar Nozadze G. B., 2025).

Governance Factors: These pertain to the institutional framework and ethical conduct of a firm, including corporate governance structures, board diversity, executive compensation, shareholder rights, and financial transparency.

Portfolio managers integrate ESG factors into their investment practices through a variety of strategic frameworks. These criteria have evolved into critical components of the decision-making process, essential for investment professionals aiming to achieve sustainable financial performance. By leveraging ESG data and advanced analytics, investors can more effectively navigate the increasing complexity of the sustainable finance landscape, thereby enhancing risk-adjusted returns and long-term value creation.

The UN Principles for Sustainable Insurance (PSI) is the most influential global framework document, established at the UN Conference in Rio de Janeiro in 2012 (Rio+20). Its goal is to transform the insurance industry from a "risk reinsurer" to a "partner in sustainable development".

ESG issues are increasingly influencing traditional risk factors and can have a significant impact on the industry's viability (United Nations Environment Programme Finance Initiative, 2012, June).

As previously mentioned, investors are increasingly moving towards "value-based investing," which involves adding innovative instruments to their portfolios that respond to modern challenges. As global awareness of sustainability issues grows, investors and fund managers are increasingly considering the broader societal and environmental impacts of their investment choices, alongside traditional financial metrics (Jia, 2024).

The continued growth of "green" and sustainable funds means to insurers that they must actively monitor and promote their ESG ratings in order to retain full access to capital and manage the potential impacts on their stock prices (Bressan, 2023).

3.2. ESG Factors: Stock Exchange Transformation

Modern stock exchanges have undergone significant changes, which implies the gradual replacement of traditional securities on the exchange with sustainable, social and green bonds. Investors now evaluate companies not only by financial indicators, but also by their environmental responsibility, social policy and corporate governance. These factors are becoming an integral part of investment analysis, especially for long-term strategies.

It is known that in any financial market there is asymmetric information between issuers and investors. Investors ask the question, will the capital raised from sustainable and green bonds really be used to finance environmental measures?

The scale of this transformation is impressive: according to the Global Sustainable Investment Alliance, sustainable investments grew by 15% from 2018 to 2020, reaching \$35.3 trillion. The most dynamic growth is observed in the segment of public company stocks.

Insurance companies use ESG (Environmental, Social, Governance) criteria to assess risks. Green and sustainable bonds are a practical tool with which the company proves its commitment to ESG principles in action. By implementing a social standard, a company publicly declares its commitment to environmental protection, minimizes harmful impacts on the environment, ensures the creation of a safe environment for future generations and promotes sustainable development.

Accordingly, insurance companies leverage these bonds to diversify their portfolios, thereby addressing both **the Environmental (E)** and **Social (S)** components of their mandates. The integration of ESG factors is increasingly prevalent; however, it is crucial to recognize that such strategies extend beyond ethical considerations to encompass the pursuit of superior investment outcomes. By incorporating environmental, social, and governance dimensions, investors can more accurately evaluate corporate risks and opportunities, ultimately fostering enhanced long-term financial resilience.

Non-compliance with ESG standards exposes issuers to regulatory penalties, reputational erosion, and legal liabilities, all of which may adversely affect financial performance. Empirical evidence from MSCI research suggests that firms with superior ESG ratings exhibit higher profitability, reduced volatility, and more robust dividend yields compared to their non-compliant counterparts. Consequently, by integrating ESG factors, investors can capture these long-term performance premiums. Furthermore, prioritizing securities from socially and environmentally responsible entities allows insurance companies to substantiate their commitment to corporate sustainability and fiduciary responsibility.

3.3. The impact of ESG criteria on the investment portfolios of foreign insurance companies

Because of these large government and corporate bond investments, the investment behaviour of insurers has the potential to affect long-term interest rates and pricing in the secondary markets (The Importance of Insurance Companies for Financial Stability, 2009).

The sustainability of the EU insurance markets measured with the solvency ratios varies among Member States of the European Union, and the ESG issues are sometimes underdeveloped (Juan Bataller-Grau, 2025).

Allianz and AXA, the world's leading Property and Casualty (P&C) insurers, have been signatories to the UN Principles for Sustainable Insurance (PSI) since its inception. A comparative analysis of these entities provides a robust illustration of how ESG standards are translated into tangible financial metrics. Notably, both insurers maintain the highest possible MSCI ESG Rating of AAA, underscoring their roles as industry benchmarks in sustainability and risk management. Annual contract renewals allow quick adaptation to sustainability changes, like climate change, as part of continuous portfolio management (Power of unity Passion for growth, 2024).

The investment and underwriting strategies of Allianz and AXA demonstrate distinct approaches to ESG integration. **Allianz** employs a rigorous exclusionary policy (Negative Screening), targeting a complete phase-out of coal-related risks by 2040 for companies generating more than 25% of their revenue from coal. In contrast, **AXA** adopts a more aggressive stance toward the fossil fuel industry by restricting the underwriting of new upstream oil exploration projects that fail to meet stringent environmental criteria.

Regarding positive impact, Allianz has expanded its portfolio to include over 200 'Sustainable Solution' products, generating billions in revenue from renewable energy insurance. Similarly, AXA has established a concrete target to increase its "Green" insurance premiums to €7.5 billion by 2026, signaling a strategic transition toward climate-resilient underwriting.

3.4. The impact of ESC criteria on the investment portfolios of foreign insurance companies

In contrast to global markets, the Georgian insurance sector is in the nascent stages of ESG integration. While international giants like Allianz and AXA have already embedded sustainability into their core investment strategies, the local market is characterized by a developing regulatory framework and a gradual shift toward environmental and social responsibility. In Georgia, with the help of international organizations and a number of leading countries, the concept of sustainable and green financing has been formed and is developing (Rusudan Kutateladze, 2025). While the National Bank of Georgia's guidelines provide a structured roadmap for ESG integration, the practical implementation remains constrained by the scarcity of financial instruments with formal ESG ratings. The limited availability of ESG-labeled assets in the local capital market hinders the ability of domestic insurers to align their investment portfolios with global sustainability standards effectively. The Sustainable Finance Taxonomy was developed by the National Bank of Georgia in collaboration with local and international experts and stakeholders (Mzevinar Nozadze L. V., 2025).

Green finance has already become a fundamental condition for economic development based on sustainable principles. At the same time, Georgia faces a number of challenges that hinder the development of green finance (Merab Vanishvili, 2026, February).

The investment activities of the Georgian insurance market are regulated by the normative acts established by the Insurance State Supervision Service of Georgia (ISSSG), specifically by the Rule on Covering Insurance Reserves and Investment of Assets, which is in alignment with the European Solvency II principles.

In Georgia, the management of insurance investment portfolios is a highly regulated process. The primary regulatory body is the Insurance State Supervision Service of Georgia (ISSSG), which establishes the legal framework and prudential limits governing the allocation, diversification, and concentration of assets. These mandates ensure that insurance entities maintain adequate liquidity and capital to fulfill their obligations toward policyholders.

The regulatory framework defines a restrictive list of 'admissible assets' for insurance investment portfolios. To ensure policyholder protection, insurers are prohibited from allocating premiums into unapproved or high-risk business ventures. The primary categories of eligible assets include:

1. Eligible Assets for Insurance Reserves include:

- Government Securities: Treasury bills and bonds, categorized as the lowest-risk instruments.
- Bank Deposits and Certificates: Permissible only in commercial banks maintaining high credit ratings and liquidity standards.
- Corporate Bonds and Equities: Investment is restricted to securities that meet specific liquidity thresholds and credit rating criteria.

2. Asset-Liability Matching (ALM) Principle include:

"Asset-Liability Matching (ALM) constitutes the core of financial management within the insurance sector. Insurers are mandated to ensure that their admissible assets consistently exceed their projected liabilities (expected losses). This principle is underpinned by two critical constraints:

Currency Matching: To mitigate foreign exchange risk, insurers must align the currency denomination of their investment portfolio with that of their insurance liabilities. For instance, if a significant portion of policies is denominated in USD, the underlying assets must be similarly held in USD to prevent currency fluctuations from eroding capital adequacy.

Duration Matching: Insurers strive to synchronize the maturity profiles of their assets and liabilities. Long-term obligations, such as life insurance products, necessitate investment in long-dated instruments (e.g., long-term bonds) to ensure sufficient liquidity for future claims fulfillment.

3. Solvency and Capital Adequacy Control include:

The Insurance State Supervision Service of Georgia enforces stringent solvency requirements to ensure that insurance entities maintain adequate regulatory capital. This oversight is exercised through mandatory monthly and quarterly financial reporting. Under this framework, insurers are subject to mark-to-market valuation of their investment portfolios. Consequently, any significant depreciation in asset value (e.g., a decline in equity prices or credit downgrades) necessitates an immediate capital injection to restore solvency margins and safeguard the firm's ability to meet its future obligations.

As Georgia transitions to the European model, an analogue of the European Solvency II Directive (2009/138/EC) is being implemented in the country. Solvency II is an EU legislative programme implemented in all Member States. It introduces a harmonized EU-wide insurance regulatory regime (Capacity Building of Insurance State Supervision Service of Georgia, 2019)

Sustainable Finance Roadmap: This document defines the country's strategy for integrating ESG factors into the financial sector.

Law of Georgia on Insurance: Although an explicit 'ESG score' is not yet strictly defined in the Law, it regulates risk management and transparency standards, which form the foundation of the 'G' (Governance) component of ESG.

4. Conclusions

The analysis of the collected data and literature reveals several key findings regarding the impact of ESG criteria on insurance portfolio optimization.

International experience demonstrates that integrating ESG criteria into insurance investment portfolios is no longer elective but a fundamental requirement for long-term financial stability.

Insurance companies are no longer limited to traditional risk assessment approaches—they actively consider environmental and social indicators, levels of corporate governance, and the impact of climate change on insurance portfolios.

The integration of ESG factors into insurance investments serves as a strategic tool for mitigating long-term liabilities and ensuring institutional credibility in an increasingly transparent financial ecosystem.

The Georgian insurance sector is currently undergoing a significant stage of transformation. The process of approximation with the European Union and the implementation of Solvency II principles create a solid foundation for integrating ESG criteria.

REFERENCES

1. Bressan, S. (2023). Effects from ESG scores on P&C insurance companies. *Sustainability*, 15(16). <https://doi.org/10.3390/su151612644>
2. European Union. (2019). *Capacity building of Insurance State Supervision Service of Georgia*. <https://www.insurance.gov.ge/Files/ShowFiles?id=6d96760c-9e88-4404-aba0-6159505bb3f8>
3. Jia, S. (2024). Impact of ESG risk on portfolio optimization and returns: An analysis using the Markowitz model. *Highlights in Business, Economics and Management*, 40. <https://doi.org/10.54097/2dkd066>
4. Bataller-Grau, J., & Kjos, M. (2025). *Sustainability and the insurance market: Trends and challenges*. Europe Research Series on Insurance Law and Regulation. <https://doi.org/10.1007/978-3-031-72186-1>
5. Merab Vanishvili, M. C. (2026, February). CHALLENGES AND PROSPECTS OF GREEN FINANCING IN MODERN GEORGIA. *International scientific journal GRAIL OF SCIENCE*, 691-696. doi: DOI: <https://doi.org/10.36074/grail-of-science.20.02.2026.073>
6. Mzevinar Nozadze, G. B. (2025). BUSINESS SOCIAL RESPONSIBILITY AND “GREEN INNOVATIONS” – CAUSE-AND-EFFECT RELATIONSHIP. *International Journal of Innovative Technologies in Social Science*, 1(45), 5. doi: DOI [https://doi.org/10.31435/ijitss.1\(45\).2025.3261](https://doi.org/10.31435/ijitss.1(45).2025.3261)
7. Mzevinar Nozadze, L. V. (2025). THE IMPACT OF GREEN FINANCE ON BUSINESS SUSTAINABILITY. *European Science Review* (No 11–12). doi: DOI:10.29013/ESR-25-11.12-33-36
8. Allianz Group. (2024). *Power of unity, passion for growth*. https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/investor-relations/en/results-reports/annual-report/ar-2024/en-allianz-group-annual-report-2024.pdf
9. Kutateladze, R., & Nozadze, M. (2025). Green financing and its instruments: Foreign and Georgian experience. *The European Journal of Humanities and Social Sciences*, (1). <https://doi.org/10.29013/EJHSS-25-1-58-61>
10. European Central Bank. (2009). *The importance of insurance companies for financial stability*. https://www.ecb.europa.eu/pub/pdf/fsr/art/ecb.fsrart200912en_05.pdf
11. United Nations Environment Programme Finance Initiative. (2012, June). *Principles for sustainable insurance*. UNEP FI. <https://www.unepfi.org/psi/wp-content/uploads/2012/06/PSI-document.pdf>