Global Trends and Slovak Republic Focus on Environmental, Social and Governance Research

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Abstract **– This study presents a bibliometric analysis of environmental, social, and governance (ESG) research to identify global trends and specific focuses within the Slovak Republic. The analysis aims to explore the impact of ESG factors on corporate performance by examining 23,916 publications from 1990 to 2023. The study provides a comprehensive and up-to-date understanding of the relationship between ESG factors and corporate performance through a systematic analysis of academic publications. The integration of ESG factors into investment decisions and corporate strategies has gained increasing attention in recent decades due to the growing importance of sustainable and responsible business practices. This study identifies the overall trends in ESG research on a global scale and focuses on the developments within the Slovak Republic, offering valuable insights into the unique challenges and opportunities related to ESG factors in the Slovak business environment. The findings of this analysis can enhance policymakers' and corporate leaders' understanding of ESG factors' impact on corporate performance in both a global and local context, and aid researchers in investigating the most relevant and significant ESG research topics.**

Keywords **– Non-financial ESG disclosure, sustainability, intellectual capital, bibliometric analysis.**

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1. Introduction

In the current global business environment, environmental, social, and governance (ESG) factors have become key components of corporate strategy and management. This topic is increasingly crucial not only for business entities but also for investors, regulatory bodies, and the public, as global challenges such as climate change, social inequality, and the need for transparent corporate governance require comprehensive solutions and innovative approaches [1], [2], [3]. ESG criteria provide frameworks through which companies can measurably improve their impacts on the environment, relationships with employees, communities, and other stakeholders, as well as their governance practices. Environmental aspects focus on sustainable use of natural resources and minimizing ecological footprints, social factors assess how companies ensure fair treatment of employees and support local communities, while governance factors concern transparency, ethical management, and corporate governance effectiveness [4], [5]. Additionally, the implementation of ESG principles is seen to build a positive reputation [6]. The growing emphasis on ESG is also reflected in investment decisions, where an increasing amount of capital flows into companies effectively managing their ESG commitments, demonstrating that ethical behavior and sustainability can go hand in hand with financial performance and create long-term value for all stakeholders [7], [8]. This trend confirms that integrating ESG factors into corporate strategy is not only about risk minimization but also about leveraging new opportunities for growth and innovation [9].

2. Literature review

Velte [10] contends in his publication that scientists are paying increased attention to how ESG ratings influence a company's financial and market success. However, according to Brooks and Oikonomous [11], the economy's higher performance ESG has sparked a vigorous and highly contentious debate. The connection between ESG performance and business financial success has been the subject of more than 2000 empirical studies since the 1970s, as noted by Friede *et al.* [1]. Bansal *et al*. [12] identified three research streams in this discussion, each providing clear evidence of a positive, negative, or insignificant link between ESG and financial success. Researchers in the first group argue (positive correlation) that businesses can financially benefit from their social and environmental obligations and that operating in a socially and environmentally responsible manner does not incur high costs [13]. Alareeni and Hamdan [14] emphasize that inadequate corporate governance was identified as one of the key causes of the financial crisis in 2008 – 2009. They also mention that the overall performance of ESG and its financial implications are considered in the fourth category. The standardization of ESG performance assessment and the creation of rating tools by several ESG rating organizations can help researchers evaluate the financial effects of overall ESG performance [15]. The research findings in these four areas have been inconsistent and ambiguous, which alongside conclusions from other mentioned studies, led to the formulation of research questions aimed at more closely and comprehensively describing the relationship between ESG, financial performance, and the market value of a company [14]. The adoption of an ESG strategy is associated with stock performance, with environmental and governance aspects showing a statistically significant positive effect [16]. On the other hand, the social aspect is seen as insignificant. ESG factors can influence the strategy of stakeholders and their relationship to economic performance, which impacts long-term value creation and risk reduction [17].

3. Research Methodology

This topic is significant for credibility in the field of ESG and influences the trust of investors and other stakeholders in the company [18], [19]. Proponents of stakeholder theory argue that in today's complex business environment, building good relationships with stakeholders is key to maximizing profit.

This leads to gaining a competitive advantage and increasing the value of the company [20], [21], [22]. From the perspective of this theory, it is logical to acknowledge the interdependence between ESG performance and financial benefits, since key stakeholders are directly affected by the company's ESG activities. ESG should be perceived as an opportunity for growth, competitive advantage, and development. Protecting the interests of stakeholders leads companies to longer-term success and higher financial performance [23], [24]. For this reason, regulators should encourage companies that focus on ESG issues and responsibilities to contribute to the stabilization and support of long-term sustainability in the industry.

RQ1: *What are the main themes that form the structure of research on ESG, and business performance based on the occurrence of key words?*

RQ2: *Who are the most cited authors, the most influential organizations and most cited documents in research related to ESG and business performance?*

RQ3: *What is the conceptual structure of research in Slovakia?*

Bibliometric analysis is a tool that researchers use to identify the main themes of their studies through the analysis of existing literature in their field of focus [25]. "Co-word analysis" focuses on identifying key themes, ideas, and relationships within a set of texts, which, according to Wang *et al.* [26], can reveal connections between different subjects and disciplines and allow for an understanding of patterns and developments in each area. One of the most significant tools for this analysis is VOSviewer software. This software allows for creating maps that display relationships between various academic disciplines, authors, institutions, and other aspects of the scientific community [27]. VOSviewer uses various techniques for analysis and visualization, such as the co-occurrence word algorithm, bibliographic coupling method, and co-authorship algorithm [28].

4. Data Preparation

In the context of a study on the relationship between ESG and corporate performance, a thorough analysis of literature utilizing the Web of Science database was undertaken. This database proved to be a key source of information, frequently featuring connections between the aforementioned topics. In the process, data were identified and downloaded in .txt format, serving as the basis for co-word analysis.

Upon reviewing several relevant articles related to this topic, a total of nine keywords were identified, including terms such as Environmental Score, Social Score, Governance Score, and other keywords from the area of Environmental, Social, and Governance factors.

After applying the keywords, relevant publications were needed to be filtered from the vast database, which contained 1,076,763 documents. Many of these documents, however, were from areas not directly related to the research. Figure 1 shows the 10 most frequently occurring research areas before setting the filter.

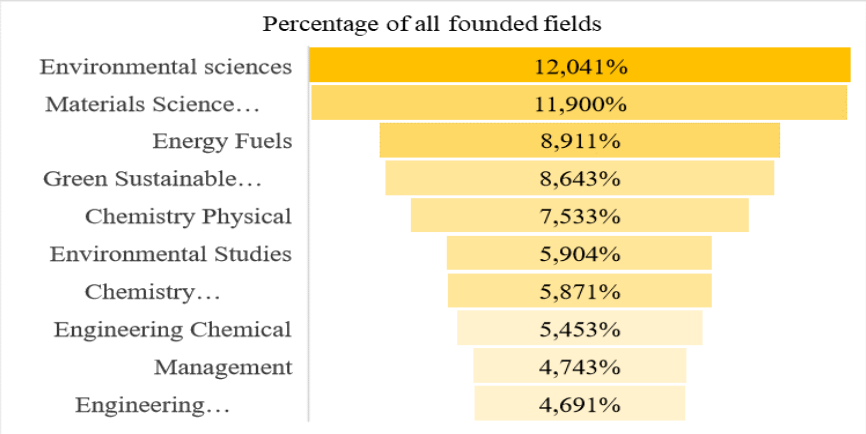

Figure 1. Ten most frequently occurring research areas

In order to ensure the relevance and accuracy of data, filtering focused on specific scientific disciplines was applied, including "Economics", "Management", "Corporate Finance", and "Public Administration" as well as others.

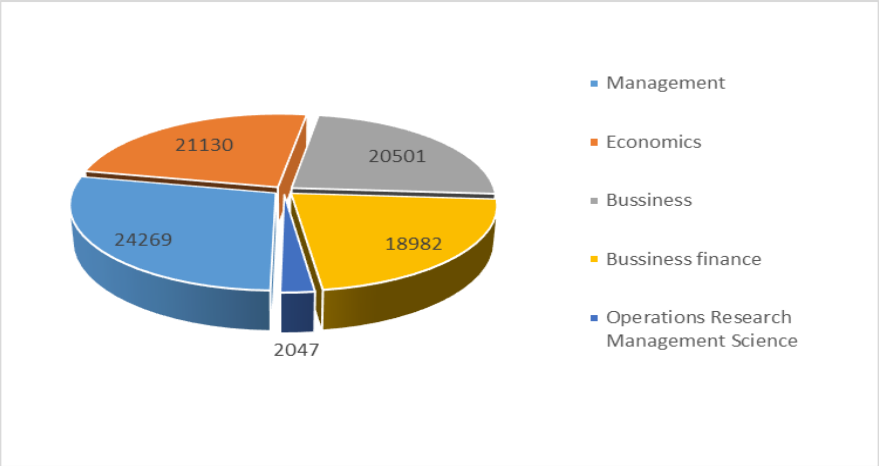

Figure 2. Number of records of individual research areas

Following the adjustment based on these criteria, 88,742 articles were obtained, which were further filtered. The next step involved temporal filtering covering the period from 1990 to 2023, taking into account the fact that discussions on sustainability began to intensify at the beginning of the 20th century. The majority of the scientific community publishes their work in English, leading to the selection of another filter focused on English-language articles, thereby narrowing the number of relevant documents to 83,392.

In the final step, a filter focused on the type of access to publication was applied, giving preference to articles with open access. This step allowed us to obtain a final set of 23,916 articles, which served as the basis for further analysis. This process demonstrated how complex filtering and targeted data selection can be crucial in exploring specific scientific areas and topics. Table 2 displays the overall filtering and data preparation process, which is essential for subsequent analyses, and this process is key to ensuring the relevance of the research.

Table 1. Filter settings on the Web of Science platform

	Filter	No. of documents
Keywords	*ESG Performance, ESG Index, ESG Score, CSR, Environmental Score, Social Score, Governance Score, ESG Factors, ESG*	*1 076 763*
WoS database 1.filter	Economics, Management, Mathematics, Bussiness finance, Operations Research, Management, Science, Bussiness, Mathematics Applied, Public Administration, Mathematics Interdisciplinary Applications, Multidisciplinary Sciences	*88 742*
2.filter	Year 1990 - 2023	*87 313*
3.filter	English language	*83 392*
4.filter	Article	*70 344*
5.filter	Open access	*23 916*
Final sample	The total number of the document	**23 916**

5. Web of Science Research Results

The analysis of scientific publications from 1990 to 2023 shows a clear positive trend in the number of works published in the scientific discipline under studied. Interest in ESG from the scientific community exhibited a gradual to exponential growth, as evidenced by Graph 3:

in 1990, there were only 4 articles published on this topic, whereas by 2010, there were more than 320 articles.

The dynamics of publishing could have been influenced by a combination of factors, including changes in funding and science support policies, technological advances, and the gradual evolution of sustainability criteria.

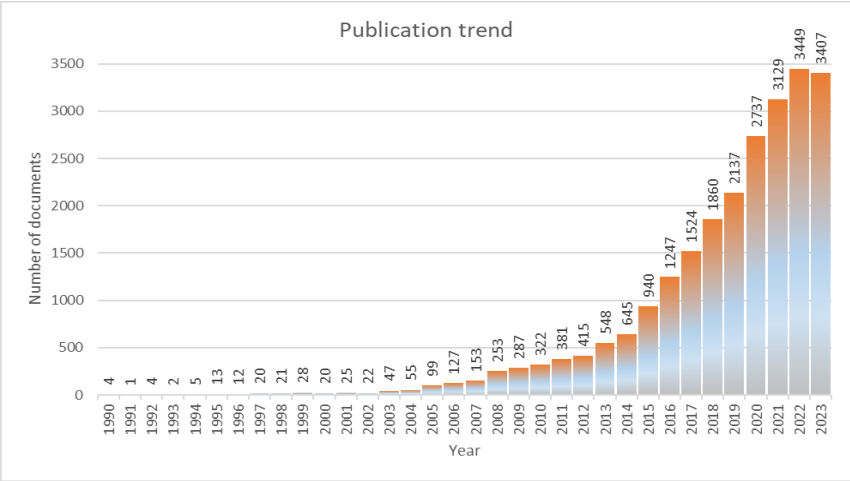

Figure 3. Publication trend

Although the observed trend suggests an optimistic picture of growth and expansion in scientific knowledge, it is important to note that this trend could change depending on many external and internal factors.

On one hand, economic recessions, political changes, or natural disasters could affect funding and research priorities, potentially slowing the pace of publication.

On the other hand, technological progress, such as new data analysis methods or developments in artificial intelligence, could significantly accelerate scientific research and enhance publishing efficiency.

Despite the current positive indications, it is important to recognize that current data do not allow for a definite prediction of whether the trend of increasing publications will continue in the future. Monitoring trends in publishing and adapting to changing conditions will be crucial for maintaining momentum and relevance in research within the academic sphere.

According to the Web of Science platform, the highest number of scientific articles was published in the United Kingdom, which accounts for 18.12% of all published works. It is followed by the United States, contributing 16.57% of scientific articles, placing it in the second position. Other countries also have a relatively balanced representation, such as China with 9.24%, Spain with 7.05%, and Germany, which contributes 5.6% of all articles. Australia, Italy, and the Netherlands also play a significant role in the global scientific discourse, with shares of 5.36%, 5.1%, and 4.54%, respectively. France and Canada complete the list of the top ten countries with contributions of 4.32% and 3.61%.

Table 2. The number and share of individual countries in publication activity focused on ESG

No.	Country	No. of document	% of publications
1	England	4334	18,12%
2	USA	3965	16,57%
3	China	2211	9,24%
4	Spain	1688	7,05%
5	Germany	1340	5,60%
6	Australia	1284	5,36%
7	Italy	1220	5,10%
8	Netherlands	1088	4,54%
9	France	1035	4,32%
10	Canada	864	3,61%
34	Slovakia	334	1,39%

On the other hand, Slovakia, although not a global leader, contributed approximately 1.39% of all articles, ranking 34th. This position indicates an active participation in the international scientific community. However, there is a significant difference in scientific output between leaders such as England and the USA, and other countries, highlighting geographical and possibly financial inequalities in access to scientific resources and publishing.

The overall sample of analyzed data includes 189 countries, allowing a deeper look at the global distribution of scientific publications. This extensive sample provides important insights into the distribution of scientific work and shows how various countries contribute to the development of global knowledge. These data are crucial for understanding the dynamics of the international scientific community and can serve as a basis for further studies on the impact of geographical and economic factors on scientific production.

In the final sample from the analysis, which includes ten categories according to the Web of Science classification, the field of economics dominates with a total of 6,750 records, representing 28.226% of all publications. This high proportion indicates significant interest and dynamics in research within economic studies. The category of management occupies the second position with 5,700 records, accounting for 23.833% of all included works, followed by the area of corporate finance, which contributes 5,346 records and holds a share of 22.353%.

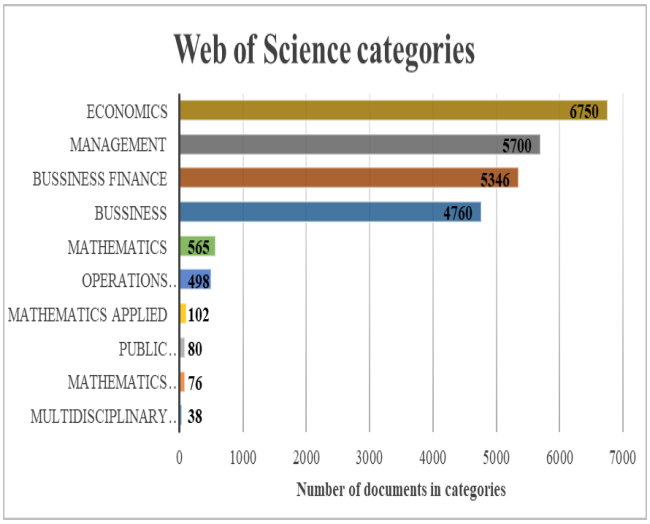

Figure 4. Web of Science research areas (final sample)

Commerce, as another significant category, contains 4,760 records and forms 19.904% of the sample, indicating strong representation in commercial studies. Mathematics, represented less prominently, constitutes 2.361% with 565 records. The sciences of operational research management, which include analyses and process optimizations, have 498 records in the database, making up 2.084%. Less represented categories include applied mathematics with 102 records, representing 0.427%, public administration with 80 records and a share of 0.333%, and mathematical interdisciplinary applications with 76 records, which is 0.320%. The category of multidisciplinary sciences has the fewest records, only 38, which is 0.160%, reflecting their specialized and often integrative nature.

This distribution of records shows that traditional business and economic disciplines hold a predominant position in academic publishing, while specialized and interdisciplinary areas are represented to a lesser extent. The results are displayed in Figure 4, which graphically illustrates the proportions of each category and provides a visual overview of the current state of scientific research within the analyzed fields.

6. Results of the Keyword Analysis

As previously mentioned, the total number of records in the study amounts to 23,916. To explore the common relationships among key terms, the VOSviewer software was used, which is designed for the visualization and analysis of such data. The software identified 50,754 keywords, of which 283 exceeded the threshold value of 50, indicating that they appeared in a significant number of documents.

Table 3. Top 30 most frequently occurring keywords

Keyword	Frequency	Keyword	Frequency
Governance	2278	Participation	311
Sustainability	1758	Water governance	302
Corporate social responsibility	1188	Covid-19	296
Climate change	1154	Institutions	296
ESG	1066	CSR	274
Sustainable development	1041	Social network analysis	272
Environmental governance	804	Conservation	259
Corporate governance	752	Policy	248
China	713	Stakeholders	244
Resilience	514	Environmental justice	243
Social-ecological systems	469	Financial performance	242
Environment	396	Sustainable development goals	242
Ecosystem services	360	Environmental policy	241
Environmental	330	Environmental performance	227
Adaptation	323	Social	223

For better organization and analysis, the keywords were divided into four basic groups. The first group contains 94 items, the second group includes 93 items, the third group comprises 79 items, and the fourth, the smallest group, contains 17 items.

This division allows for a deeper understanding of the thematic structure and interrelationships among the keywords. Table 3 contains a total of 30 most frequently occurring keywords. These insights are crucial for understanding the main research trends and dynamics in the field.

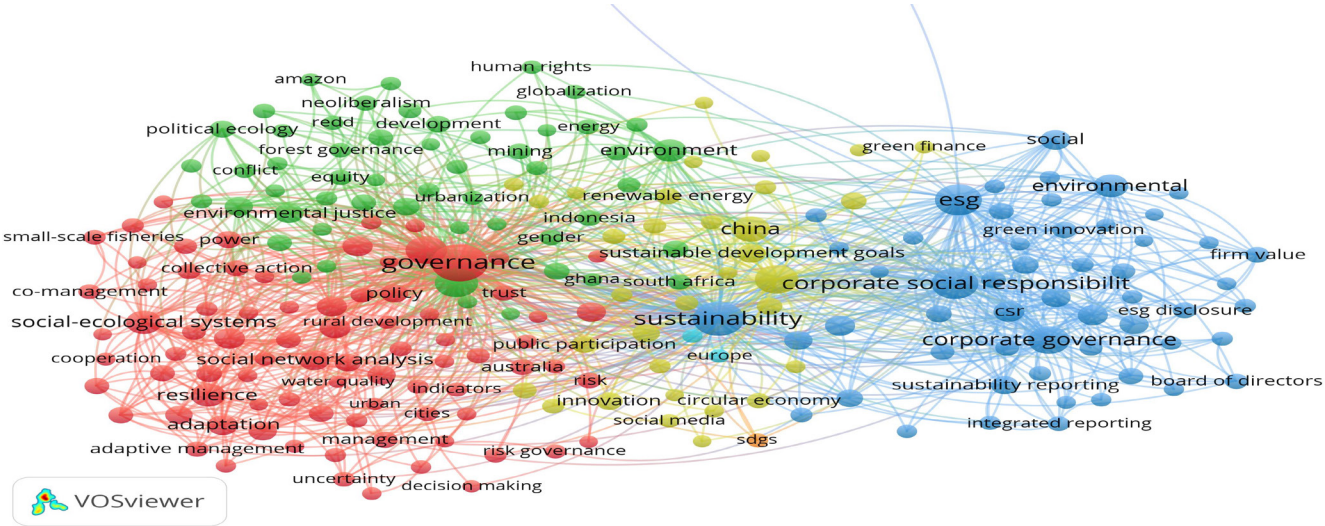

Figure 5. Keyword co-occurrence network for the final sample (1990-2023)

6.1. Important Authors

Table 4. List of top 10 authors by number of documents

Author	Documents	Citations
Eric S.G. Shaqfeh	205	8992
Joyeeta Gupta	62	1772
Arthur PJ Mol	54	1860
Derek Armitage	49	3171
Claudia Pahl-Wostl	37	3096
Ryan Plummer	37	2464
Isabel-María Gracía-Sánchez	34	1841
Rutgerd Boelens	33	1056
Niki Frantzeskaki	33	1535
Teodor Gabriel Crainic	30	1772

Table 5. List of top 10 authors by number of citations

Author	Documents	Citations
Eric S.G. Shaqfeh	205	8992
Neil Adger	10	8314
Carl Folke	11	4894
Elinor Ostrom	9	3878
George Serafeim	18	3862
Harriet Bulkeley	19	3409
Fikret Berkes	21	3258
Derek Armitage	49	3171
Claudia Pahl-Wostl	37	3096
Örjan Bodin	27	2645

Tables 4 and 5 present a list of the ten most productive authors in the field of environmental, social, and governance (ESG) practices, with "Eric S.G. Shaqfeh" leading the list as the author of 205 documents.This data clearly indicates his significant standing as a leading figure in the ESG field. This list can serve as a valuable resource for readers seeking reputable experts and leading authorities on the topic. In a broader context, a total of 63,770 authors have written on the subject of ESG, but the graphical representation in Figure 6 focuses only on those who have published at least five papers and have garnered a minimum of 200 citations.

This criterion was met by 583 authors, highlighting their significant contributions and recognition within the scientific community.

Such information is important not only for the academic sphere but can also serve as a valuable guide for policymakers, practitioners, and organizations interested in implementing ESG practices. Authors with a high number of citations and publications are often considered leaders in the field, capable of providing insightful opinions and guidance in the debate on sustainable development.

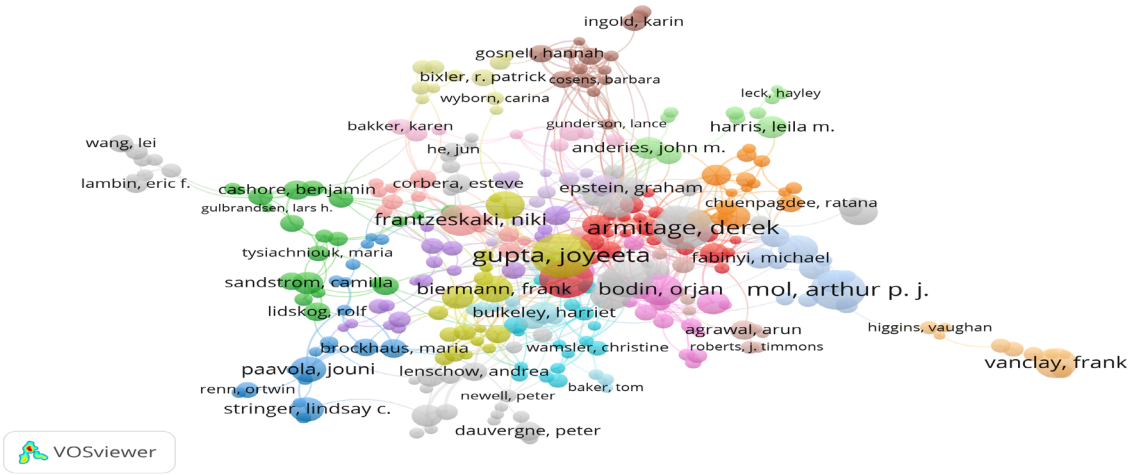

Figure 6. Visual display of individual authors

The analysis of the distribution of authors by the number of their documents and citations reveals an important aspect of scientific publishing: "not only the quantity of published works is crucial, but also their quality and impact."

This factor is reflected in the significant differences among authors who rank at the top of the charts. A notable difference in the number of citations attracted by individual works indicates that some authors produce work with significantly greater scientific impact and contribution to their disciplines.

This phenomenon underscores that the scientific community values not only quantity but primarily the quality and relevance of research works. The high number of citations that some works earn is often considered an indicator of their innovativeness and significance for further research. This perspective is key to understanding how scientific knowledge is disseminated and how it is received and utilized in the academic community.

6.2. The most influential research organizations

Identifying the most influential organizations in the field of ESG research is crucial for pinpointing the epicentres of innovation and scientific advancement in these topics. These institutions are often equipped with cutting-edge technologies and lead not only in scientific discoveries but also in shaping global policies and practices in sustainability. Their work stimulates international collaboration and partnerships, thereby enhancing the quality and reach of research. Moreover, they frequently prepare future generations of experts and contribute to economic development through new technologies and solutions, significantly influencing broader societal changes.

Table 6. List of the 10 most successful organizations in the number of citations

Organizations	Documents	Citations
Stockholm University	324	26289
University of Amsterdam	527	18633
University of East Anglia	111	16746
Stanford University	333	15052
University of Oxford	382	14793
Wageningen University and Research	425	14184
The University of British Columbia	372	13480
Arizona State University	270	11881
The University of Manchester	266	11623
Indiana University	130	11517

Table 6 presents a list of the top ten research institutions by number of published works, which can be utilized to identify institutions active in the field of ESG. These institutions are potential candidates for future research partnerships in ESG and its impact on corporate performance. The results showed that a total of 17,849 universities and research institutions published studies related to ESG. One of the leading organizations in this research is Stockholm University, which, with 26,289 citations, ranks among the most significant research institutions worldwide.

This university has a substantial contribution to scientific knowledge in the field of ESG.

6.3. The Most Frequently Cited Documents

Table 7 showcases a carefully curated selection of the ten most frequently referenced publications that explore the ESG factors. This list serves as a valuable resource for researchers and students who are actively seeking to understand and contribute to the evolving scholarly dialogue on ESG. The criteria for inclusion in this list are based primarily on the citation frequency of each publication, which serves as a robust indicator of their relevance, influence, and the significant role they play within the academic community focusing on ESG topics. These publications are seminal works that have shaped current understanding and discussions in the field, offering foundational insights and frameworks that are pivotal for both new and ongoing research in ESG studies.

Table 7. List of the most frequently cited publications

Title of the publication	Number of citations
Resilience: The emergence of a perspective for social–ecological systems analyses	4068
Social-Ecological Resilience to Coastal Disasters	3426
Adaptive governance of social-ecological system	3139
Global, regional, and national comparative risk assessment of 84 behavioral, environmental and occupational, and metabolic risks or clusters of risks for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017	2628
Global, regional, and national comparative risk assessment of 79 behavioral, environmental and occupational, and metabolic risks or clusters of risks, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015	2534
The Struggle to Govern the Commons	2454
Corporate social responsibility and access to finance	1911
Resilience and Sustainable Development: Building Adaptive Capacity in a World of Transformations	1649
A diagnostic approach for going beyond panaceas	1608
Vulnerability	1542

7. Research Results for the Slovak Republic

Research on ESG issues in Slovakia primarily focuses on the impact and performance of ESG practices on businesses, highlighting a strong interest in understanding how these factors influence financial and competitive outcomes. Significant attention is given to Corporate Social Responsibility (CSR), examining how companies manage their social and environmental responsibilities.

The study of management and governance within organizations reveals how ESG principles are integrated into business operations and strategies. Research also emphasizes the role of small and medium-sized enterprises (SMEs) in ESG practices, addressing specific challenges and innovations in sustainability within different sectors. Overall, the research integrates themes of sustainability, financial performance, and corporate governance, contextualized within the Slovak environment to explore local ESG implementation and impacts.

Table 8. Top 30 most frequently occurring keywords Slovak Republic

Keyword	Frequency	Keyword	Frequency
Performance	92	corporate social responsibility	17
Impact	66	CSR	17
Management	58	Growth	17
Competitiveness	35	Business	16
Determinants	31	Corporate social-responsibility	16
SMEs	29	Earnings management	16
Innovation	28	Enterprises	16
Sustainability	25	Industry	16
Slovakia	24	Efficiency	14
Companies	23	Models	14
Financial performance	22	Business performance	13
Sustainable development	21	Sector	13
Model	19	Small and medium-sized enterprises	13
Quality	18	Perception	12
Business environment	17	Corporate governance	11

Table 8 displays the 30 most frequently occurring keywords in Slovakia, providing insights into the predominant themes and areas of focus in relevant research or discourse within the region.

In Figure 7, the interconnectivity between keywords is visible, which are categorized into six distinct clusters. This visualization represents a network analysis showing how these keywords are related to each other, indicating common themes and areas of research.

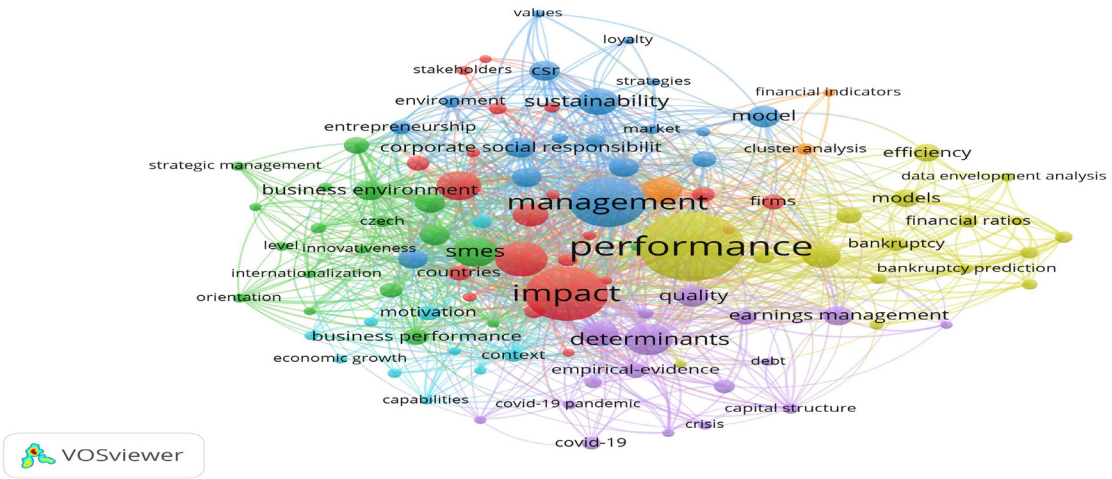

Figure 7. Keyword co-occurrence network for Slovakia

7.1. Most Cited Authors in Slovak Republic

Table 9. List of top 10 authors by number of citations in Slovak Republic

Author	Documents	Citations
Luboš Pastor	3	461
Tomáš Klieštik	14	364
Katarína Valášková	21	344
Jaroslav Belás	11	309
Pavol Ďurana	16	290
Beáta Gavurová	14	223
Rastislav Rajnoha	10	158
Jozef Habánik	3	128
Ján Dobrovič	8	113
Mária Kováčová	6	110
Miloš Tumpach	4	110

Table 9 presents a list of the ten most productive authors in the field of environmental, social, and governance (ESG) practices, with "Luboš Pástor" in Slovakia leading the list as the author of 3 documents, and in total with 461 citations. This data clearly indicates his prominent position as a leading figure in the ESG field in Slovakia. This list can serve as a valuable resource for readers seeking reputable experts and leading authorities on this topic in Slovakia and for establishing collaborative relationships.

7.2. The Most Frequently Cited Documents by Slovak Academics

Table 10 presents a meticulously curated selection of the ten publications most cited, written by Slovakian academics, which investigate the complex dimensions of environmental, social, and governance (ESG) factors. This collection is crafted to provide an essential resource for researchers and students who are keen on delving into and contributing to the ongoing academic conversation regarding ESG. The article receiving the most citations is titled "Sustainable Investing In Equilibrium," authored by Ľuboš Pástor, Robert F. Stambaugh, and Lucian A. Taylor, published in 2021 with a total of 335 citations.

The study [29] introduces an equilibrium model to analyse how environmental, social, and governance (ESG) criteria influence asset pricing and investment behaviour.

The model suggests that green assets carry lower expected returns due to their appeal to investors and their effectiveness in hedging against climate risks. However, these assets can outperform during periods of positive shocks related to shifts in consumer and investor preferences towards sustainability.

Table 10. List of the most frequently cited publications in Slovak Republic

Title of the publication	Number of citations
Sustainable Investing in Equilibrium	335
Does the life cycle affect earnings management and bankruptcy?	77
Dissecting Green Returns	75
Do Funds Make More When They Trade More?	71
The business environment of small And medium-sized enterprises In selected regions of the Czech Republic and Slovakia	69
Remaining Financially Healthy and Competitive: The Role of Financial Predictors	63
Collateral requirements for SME loans: Empirical evidence from the Visegrad countries	52
Bankruptcy in Slovakia: international comparison of the creditor´s position	51
Performance comparison of multiple discriminant analysis and logit models in bankruptcy prediction	49
Distinctive determinants of financial indebtedness: Evidence from Slovak and Czech enterprises	48

The authors of the document “Sustainable Investing in Equilibrium” [29] highlight that the ESG investment sector is most significant when there is a wide variation in investors' ESG preferences. Sustainable investing, according to the model, promotes positive social impacts by encouraging firms to adopt greener practices and directing investment towards environmentally friendly firms. The study also elaborates on the effects of ESG investing on the cost of capital for firms, showing that greener firms benefit from lower costs of capital, thus influencing corporate behaviours and market values. The overall findings indicate a complex interaction between ESG factors and financial performance, suggesting that ESG considerations are becoming integral to investment strategies and financial market dynamics.

8. Conclusion

This research provides a comprehensive review of literature on ESG and its impact on corporate performance spanning from 1990 to 2023. Utilizing basic descriptive statistics and co-word analysis, 23,916 publications were examined, noting a growing interest in ESG research annually. The first research question explores key topics within the realm of ESG and corporate performance, with a separate co-word analysis conducted for both the global context and specifically for the Slovak Republic from 1990 to 2023.The second research question identifies the most cited authors and documents in the field. The third question investigates environmental, social, and management practices specifically within the Slovak context.

Globally, the most frequent keywords are "Governance," "Sustainability," "Corporate social responsibility," and "Climate change." These terms indicate a broad focus on governance structures, long-term ecological sustainability, corporate accountability in social issues, and the impacts of climate dynamics. In contrast, the most common keywords in Slovak ESG research are "Performance," "Impact," "Management," "Competitiveness," and "Determinants." This suggests a more performance-oriented approach within the Slovak context, focusing on the direct effects of ESG factors on business operations, management practices, and competitive positioning in the market. The emphasis is less on broader societal and environmental issues and more on the internal dynamics and outcomes related to ESG within organizations. This divergence highlights the varying focal points in ESG research, with global studies tending towards broader, systemic sustainability and social responsibility themes, while Slovak research concentrates on the practical, operational impacts of ESG criteria on business performance and strategy.

The results show that among the most cited authors is "Eric S.G. Shaqfeh" with a total number of citations of 8992. The most influential organisations in the field of ESG research were identified and results show that the most cited publication is the publication "Resilience: The emergence of a perspective for social-ecological systems analyses" with 4068 citations. Among the Slovak authors focusing on the field of ESG, two leaders can be mentioned: Ľ. Pastor and T. Klieštík, who ranked first in terms of citations. Among the most frequently cited documents by Slovak academics is the document by Ľuboš Pastor, Robert F. Stambaugh and Lucian A. Taylor, published in 2021, entitled "Sustainable Investing in Equilibrium".

This study also has its limitations. While the Web of Science database is comprehensive, it does not cover all existing articles on ESG.

Readers should be cautious in generalising obtained results, as the bibliometric analysis focuses on the titles, keywords, and abstracts of published studies. Thus, the approach used does not analyse entire articles. However, the study focuses on the positive side, which offers the reader a comprehensive overview of the area of interest.

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