

**ASSESSMENT OF INDUSTRY SPECIFICS IMPACT ON THE ESG RATING  
AMONG RUSSIAN COMPANIES**

**AVALIAÇÃO DO IMPACTO ESPECÍFICO DO SETOR NA CLASSIFICAÇÃO ESG  
ENTRE EMPRESAS RUSSAS**

**EVALUACIÓN DEL IMPACTO ESPECÍFICO DE LA INDUSTRIA EN LA  
CALIFICACIÓN ESG ENTRE LAS EMPRESAS RUSAS**

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## Abstract

The study highlights that ESG factors' importance varies by industry, and a more industry-specific approach is necessary to accurately assess companies' ESG performance. This paper provides a comprehensive analysis of ESG assessment methodologies and proposes a more industry-specific approach to address their limitations. By examining the importance of various sustainability factors across different industries, the study highlights the need for more tailored ESG assessments. The findings have practical implications for rating agencies, companies, and investors interested in sustainable development. Based on the analysis, aggregated conclusions are given on the level of significance of various factors of sustainable development for specific industries. The study's findings suggest that it is necessary to develop methodology of weights assessment for different industries, including the unified system of assessment across different ESG rating providers. In the beginning of 2023 Bank of Russia published the report, which provides recommendations on developing ESG assessment methodology and scope for the weights for each ESG criteria and elements. However there the lack of published of non-financial statements and reports, which enable to generate enough industrial statistics, complicates the process of developing weight coefficients for Russian companies.

**Keywords:** Industry specific in ESG, Non-financial factors, Sustainable performance, ESG rating, ESG methodology.

## Resumo

O estudo destaca que a importância dos fatores ESG varia de acordo com o setor, e é necessária uma abordagem mais específica do setor para avaliar com precisão o desempenho ESG das empresas. Este artigo fornece uma análise abrangente das metodologias de avaliação ASG e propõe uma abordagem mais específica do setor para abordar as suas limitações. Ao examinar a importância de vários factores de sustentabilidade em diferentes indústrias, o estudo destaca a necessidade de avaliações ESG mais personalizadas. As conclusões têm implicações práticas para agências de classificação, empresas e investidores interessados no desenvolvimento sustentável. Com base na análise, são apresentadas conclusões agregadas sobre o nível de significância de vários fatores de desenvolvimento sustentável para indústrias específicas. As conclusões do estudo sugerem que é necessário desenvolver uma metodologia de avaliação de pesos para diferentes indústrias, incluindo o sistema unificado de avaliação entre diferentes fornecedores de classificação ESG. No início de 2023, o Banco da Rússia publicou o relatório, que fornece recomendações sobre o desenvolvimento de uma metodologia de avaliação ESG e o âmbito dos pesos para cada critério e elemento ESG. No entanto, a falta de publicação de demonstrações e relatórios não financeiros, que permitam gerar estatísticas industriais suficientes, complica o processo de desenvolvimento de coeficientes de peso para as empresas russas.

**Palavras-chave:** Especificidades da indústria em ESG, Fatores não financeiros, Desempenho sustentável, Classificação ESG, Metodologia ESG.

## Resúmen

El estudio destaca que la importancia de los factores ESG varía según la industria, y que es necesario un enfoque más específico de la industria para evaluar con precisión el desempeño ESG de las empresas. Este documento proporciona un análisis integral de las metodologías de evaluación ESG y propone un enfoque más específico de la industria para abordar sus limitaciones. Al examinar la importancia de varios factores de sostenibilidad en diferentes industrias, el estudio destaca la necesidad de evaluaciones ESG más personalizadas. Los hallazgos tienen implicaciones prácticas para las agencias de calificación, las empresas y los inversores interesados en el desarrollo sostenible. Sobre la base del análisis, se dan conclusiones agregadas sobre el nivel de importancia de varios factores del desarrollo sostenible para industrias específicas. Los hallazgos del estudio sugieren que es necesario desarrollar una metodología de evaluación de ponderaciones para diferentes industrias, incluido un sistema unificado de evaluación entre diferentes proveedores de calificaciones ESG. A principios de 2023, el Banco de Rusia publicó un informe que ofrece recomendaciones sobre el desarrollo de una metodología de evaluación ESG y el alcance de las ponderaciones para cada criterio y elemento ESG. Sin embargo, la falta de publicación de estados e informes no financieros que permitan generar suficientes estadísticas industriales complica el proceso de elaboración de coeficientes de ponderación para las empresas rusas.

**Palabras clave:** Específicos de la industria en ESG, Factores no financieros, Desempeño sostenible, Calificación ESG, Metodología ESG.

## 1. INTRODUCTION

The ESG concept was introduced into scientific and business circulation in as early as 2004 in a report prepared as part of the implementation of the UN Global Compact initiative. Then, with the support of the UN, a group of the world's largest institutional investors joined the process of developing the Principles for Responsible Investment, and since April 2006, a rapid growth of signatories of these Principles and the active use of ESG tools in practice began. However, there is no unified system of assessment till nowadays. The number of companies rating providers was growing and consequently assessment methodologies options were growing too.

Major public international companies have a variety of rating scores, and in order to compare these scores, professional users often turn to databases that evaluate the correlation between ESG scores and so-called average ratings, such as CSR Hub. According to the CSR Hub, Nestle has 85 ESG sources, Apple has 87 sources, and Volkswagen has 52 sources. The correlation between the ESG scores of even the most commonly used sources is not very strong.

The specialists highlight the following main reasons that lead to a low correlation between ESG scores (Grishankova, 2022):

- differences in the rating question, that is, in the very definition of the ESG score;
- methodological differences, including differences in the choice of factors, their weights and units of measurement;
- various data sources.

Differences in the methodological approaches of providers lead to significant differences in the estimates of individual companies, but it is also important to note that there is some correlation between the estimates.

Here there are differences both in the number of sectors identified and in the assessment of the importance of indicators for a particular industry.

Obviously, the dominant factor in the lack of correlation is the difference in the methodological basis of the analysis. The basic part of the analysis, that is, the mathematical structure of the assessment, varies slightly from method to method. A selection of indicators in 3 areas is made, each indicator is assigned a score and weight, and an integral indicator is calculated. The main part of the differences lies in the assignment of weights to each specific indicator. And the assignment of weights depends primarily on the specifics of the industry to which the assessed company belongs.

## 2. LITERATURE REVIEW

In order to conduct a deeper analysis of the problem of comparability of assessments, let us consider the methods for assessing key market players.

All existing ESG ratings identify several main sectors of the economy for which different assessment methods are being introduced. Some agencies standardize the assessment by including additional indicators for certain sectors, some by weighting the indicators.

For example, the National Rating Agency highlights category of non-financial companies (industry and mining, consumer sector, real estate, services (non-financial) and the category of financial companies and applies to each industry a specific set of indicators (National Rating Agency, 2022).

The MSCI rating agency takes a different approach. All companies are evaluated on 10 topics, which include 37 indicators (MSCI ESG rating, 2022). Each company is then classified by industry according to GICS (The Global Industry Classification Standard). Further, for each industry, weights of indicators are assigned depending on two factors: the level of the company's contribution to the social or environmental effect and the expected time of risk realization. For one of the two subcategories of the governance block "Corporate Governance" in the methodology, the weights are the same from industry to industry. For the second subcategory "Corporate Conduct", the weights are evaluated similarly to other factors (Refinitive ESG methodology, 2022).

The methodology of the approach to the assessment of the Russian rating agency Expert RA is identical to the MSCI methodology, but involves a larger number of indicators – 221 (Expert RA ESG methodology, 2022). The Agency has developed risk materiality maps depending on the company's industry. It is worth noting that different sectors with different levels of detail are distinguished for social and environmental factors. The materiality of environmental risks is detailed to specific areas of the industry and the materiality of some factors is evaluated identically for them. The materiality of risks in terms of corporate governance of the company is not highlighted.

Refinitiv evaluates 186 indicators, aggregated into 10 categories. Companies are classified by industry in accordance with TRBC (The Refinitiv Business Classification). TRBC is a 154-industry market classification scheme similar to GICS and ICB systems. They classify companies based on market power, not economic institutions. The Refinitive methodology provides a specific indicator materiality matrix based on an assessment of ESG sample data. However, it is also noted that the matrix is indicative and is not mandatory for use when calculating the score. For the corporate governance block, weights are also not differentiated depending on the industry.

However, according to PWC analysis, the Sustainalytics ESG Risk Rating for the banking industry prioritizes risks related to corporate governance, such as business ethics, over other industries. Also, the rating agency SAM CSA (S&P Global) singles out the issue of corporate governance for the banking sector as more significant than in other industries. From the results of the study, it is clear that all three rating agencies (MSCI, Sustainalytics, S&P)

place the greatest number of requirements in terms of environmental factors on the energy sector (Material ESG Topics, 2022).

One study by Khan et al. (2021) compared the ESG ratings of four major providers: MSCI ESG Fundamentals, Sustainalytics, Vigeo Eiris, and Robeco SAM. The study found a low level of correlation between the ratings of different providers, with an average correlation coefficient of only 0.38. The authors suggested that the lack of comparability and standardization could lead to confusion and potential misalignment of investments.

Another study by Hirschberger et al. (2020) compared the ESG ratings of companies in the automotive industry by five different providers: MSCI, S&P Global, ISS ESG, Robeco SAM, and Vigeo Eiris. The study found significant differences in the ratings, with an average correlation coefficient of only 0.46. The authors suggested that the lack of comparability could be due to differences in data sources, weighting schemes, and methodologies.

A study by Linsmeier et al. (2021) compared the ESG scores of companies in the S&P 500 index by six different providers: Bloomberg, MSCI, Refinitiv, S&P Global, Truvalue Labs, and Vigeo Eiris. The study found a high level of dispersion in the scores, with a standard deviation of 12.4% of the mean score. The authors suggested that the lack of comparability could be due to differences in data coverage, quality, and methodology.

One recent study by Durieux et al. (2021) reviewed the different ESG assessment methodologies available and identified four key categories: self-assessment, standard-setting, rating agencies, and alternative data. The authors discussed the strengths and weaknesses of each methodology and suggested that combining different approaches can lead to more comprehensive and reliable ESG evaluation.

Another study by Alexandra Mihailescu et al. (2021) examined the evolution of ESG evaluation methodologies and argued that a holistic approach is necessary for effective ESG evaluation. The authors highlighted the importance of integrating ESG factors into a company's overall business strategy and suggested that ESG evaluation should not be seen as a separate process but rather as an integral part of corporate decision-making.

A review by the World Economic Forum (2020) highlighted the lack of standardization in ESG disclosure and assessment, which could lead to confusion, greenwashing, and potential

misalignment of investments. The review suggested that standardization could be achieved through the development of common frameworks, data standards, and disclosure requirements.

From this information, certain trends can be identified among all players. The greatest attention is paid to companies in the industrial sector. For them, Environmental indicators are most important, but special attention is also needed to Social indicators in terms of labor protection and ensuring the safety of workers. For all sectors, with the exception of financial institutions, Governance indicators are equivalent.

The lack of aggregation of sectoral division is obvious. It is also obvious that insufficient attention is paid to social risk factors. For the Agency, the RA expert and Refinitive social risk factors for IT companies and industrial companies are evaluated with the same level of weights, which does not give a fair assessment. At the same time, for example, the RA expert in assessing environmental factors does not single out the IT industry at all.

To date, the main drivers of economic growth and the most sought-after assets on the market are high-tech companies, the specifics of which are not taken into account by ESG ratings. High-tech companies, especially in the information technology sector, are characterized by a lack of asset diversity. Their main asset is human capital. Evaluating such companies in the same way as industrial companies in terms of environmental and social factors distorts the degree of their contribution to global sustainable development.

### **3. MATERIALS AND METHODS**

First of all, the authors collected and compared ESG ratings of providers with the largest coverage in the public space in the Russian market: RAEX-Europe, MSCI, Sustainalytics and Refinitiv to empirically prove the low correlation between existing assessment methodologies. The results are illustrated in the Table 1 with color indication from green - good rating to red - bad. The data in the table is collected as of May 24, 2022.

**Table 1**

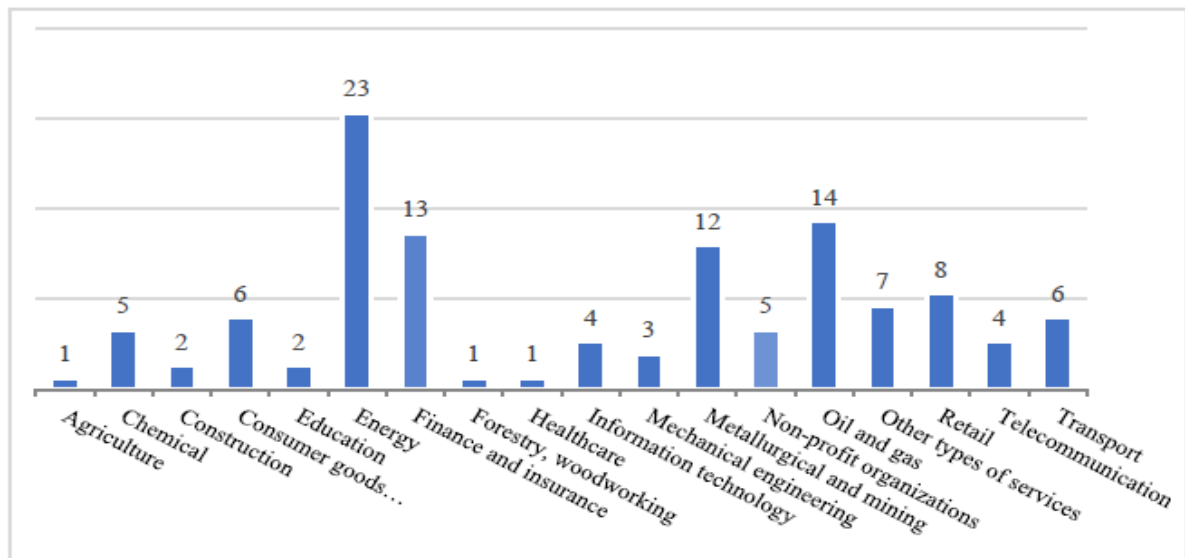
Comparison of ESG ratings of the largest providers in terms of coverage in the public space in the Russian Market

Rank	Company name	RAEX Europe	MSCI	Sustainalytics	Refinitiv
1	Enel Russia	A	B		53
2	Polymetal	A	B	21,9	84
3	Credit Bank of Moscow	A		36,1	
4	NLMK	A	B	34,2	81
5	Vimpelcom	A			
6	MTS	A	B	29	
7	LUKOIL	A	B	39,3	79
8	Severstal	A	B	37,4	76
9	Rosneft	A	B	44	77
10	Polus	A	B	31,1	57

\* Composed by the authors

Secondly, the authors' group analyzed the exposure of companies in various industries to ESG risks in order to develop an aggregate matrix of each sustainable development metric significance for different economy sectors.

The study was conducted through a direct survey, as well as analysis of public reports of 117 companies of various industries and scales (Appendix 1). The detailed structure of the analyzed sample is shown in Figure 1.



\* Composed by the authors

**Figure 1. The detailed structure of the analyzed sample**

First of all, the total pool of companies was divided according to the size of the organization into small and medium-sized businesses and large businesses, since the company's



market share directly depends on the degree of its influence on sustainable development factors, as well as the availability of financial opportunities to manage such risks.

The analysis structure consists of two main blocks:

- assessment of the company's own exposure to sustainability factors in the context of three main sections;
- assessment of the company's existing regulations, policies, and reports aimed at managing sustainability risks.

The first block includes 20 questions with different types of answers. The first type is a point assessment of exposure, the second type is the choice of the most important factor listed. For the purpose of evaluation, company responses were aggregated and ranked by two types of response in a complex way. First, the most important factors for the company were sorted, for which the highest score was assigned (from 10 to 1). Then the results of the second type of questions are superimposed on the data obtained, where the most important factors are recognized as those that the company chose with a higher share.

According to the results of the assessment, 80% of all small and medium-sized businesses surveyed declare their commitment to the principles of sustainable development. It is important to note that 20% of non-committed companies are non-profit. At the same time, only 20% participate in the preparation of reports. The main motivation for reporting companies is to strengthen their reputation. The main standards used are international and Bank of Russia recommendations (Bank of Russia, 2023). For large businesses, reporting is more common. Out of 100% of companies committed to the principles of sustainable development, 92% make reports. 74% of all respondents identify "regulatory requirements" as the main motivation for drawing it up, but "strengthening reputation" and "attracting investors" are also important factors. Almost all large business companies use international reporting standards, and only 2% of companies use the standards of the Bank of Russia.

Assessing the exposure to sustainability factors of small and medium-sized businesses in various industries, based on the scope and direction of their internal policies and reports, we can draw several clear conclusions:

1. Companies in the digital sector of the economy have the largest shares of policies in terms of human resource development and information security of the company's

product (29% of the total volume of policies). At the same time, companies do not have policies regarding environmental risks.

2. Logistics companies received a similar distribution of weights to the digital sector, but with a share of policies in terms of overall environmental risks (12.5%).
3. Financial sector companies also pay the most attention to the development of human capital (the largest share, 20% of all policies). The distribution among other topics of sustainable development is approximately the same.
4. Companies in the wood processing, construction, and agricultural industries have distributed their attention between all blocks in approximately equal proportions.
5. It is important to note that absolutely all small and medium-sized businesses pay considerable attention to the development of human capital.
6. The results of an individual assessment of companies' exposure to various sustainability factors presented in Table 2 confirm the analysis based on existing policies. Companies in the high-tech sector pay the least attention to the problems of environmental development, as well as companies in the financial sector. At the same time, companies in the financial sector allocate a factor for themselves. Corporate behavior as the most important, while companies in the agricultural sector consider the factors in this section to be the least important. Companies in the industrial and scientific sectors assess their exposure to all factors equally.

**Table 2**

Assessment of small and medium-sized businesses ' exposure to sustainability factors

		Woodworking	Logistics services	Science	Agriculture	Construction	Finance	Digital sector
E	Climate change	10	10	10	10	7	7	8
	Environmental opportunities	10	9	10	10	3	4	1
	Natural resources	10	10	10	9	7	5	10
	Pollution&waste	10	10	10	8	7	7	10
S	Human capital	9	10	10	8	8	6	10
	Social Opportunities	10	10	10	9	7	6	10
	Product Liability	10	10	10	9	3	5	10
G	Corporate governance	10	9	10	6	5	7	10
	Corporate behavior	10	10	10	7	6	7	10
	Corporate behavior	10	10	10	8	4	8	10

\* Composed by the authors

Analysis of regulations and policies of large business companies allows us to draw the following conclusions:

1. Companies in the telecommunications and digital sectors of the economy, like small and medium-sized businesses, have the largest shares of policies in terms of human resource development and information security of the company's product (12% of the total policy volume). But they also pay more attention to corporate behavior and have policies on environmental risks.
2. Logistics companies also pay attention to all factors in equal shares, but the lowest share is taken by corporate behavior policies.
3. Energy companies distinguish the consumption of natural resources from all environmental risks
4. Retailers (including clothing retailers) have a variety of policies designed to manage climate change risks
5. Heavy industry companies have policies equally distributed among all factors, with the only factor covered in the smallest proportion being corporate governance.

Similarly, to small and medium-sized businesses, large companies in all industries identify human capital factors.

**Table 3**  
Assessment of large business companies ' exposure to sustainability factors

		Woodworking	Health care	Mining	Oil and gas	Machine production	Retail	Construction	Telecommunication and digital	Logistics services	Finance	Chemical	Energetics
E	Climate change	6	10	8	7	8	6	8	6	9	10	8	4
	Environmental opportunities	4	9	6	7	9	4	6	7	9	9	8	5
	Natural resources	5	10	8	7	7	6	7	8	8	10	8	5
S	Pollution & waste	8	10	8	7	8	6	7	7	8	10	8	6
	Human capital	7	10	8	7	9	6	8	10	9	10	9	7
	Social Opportunities	7	10	7	8	8	7	8	10	9	10	10	6
	Product Liability	6	10	5	7	8	7	5	10	9	10	9	4
G	Corporate governance	8	10	5	7	9	7	7	10	9	10	9	6
	Corporate behavior	6	8	6	7	10	6	7	10	9	9	9	7
	Corporate behavior	8	10	6	7	8	6	8	5	8	9	9	7

\* Composed by the authors

Table 3 also shows the results of an individual assessment of large business companies' exposure to sustainability factors. The results also confirm that companies in the high-tech telecommunications sector are particularly exposed to human capital risks. Mining companies are most exposed to climate change risks. Healthcare companies assess their exposure to all factors in equal shares and at a significantly high level.

#### 4. RESULTS

The results of the study show that the companies themselves in various industries assess their exposure to certain factors of sustainable development in different ways.

Obviously, companies in the telecommunications, information technology and education industries can influence environmental factors to a much lesser extent than companies

in the oil and gas, wood processing and energy industries. From the point of view of the practical applicability of these findings, this means that when calculating the aggregated ESG rating, depending on the industry, a company should be assigned a commensurate weight for each factor. To illustrate the notion of «proportionality» used, Table 4 is given.

**Table**  
Enlarged distribution of sustainable development topics by industry

Sector	Main Pillar	Main Theme in Pillar	Secondary Pillar	Secondary Theme in Pillar
Agriculture Forestry, woodworking Mechanical engineering Metallurgical and mining Energy Oil and gas	Environmental	Climate change	Social	Workplace safety
Consumer Goods Manufacturing Retail Transport Chemical Healthcare Construction	Environmental	Pollution & waste	Social	Workplace safety
Non-Profit Organizations Finance and insurance Education Other types of services	Governance	Corporate governance	Social	Human capital development
Information Technology Telecommunication	Social	Human capital development	Environmental	Natural resources

\* Composed by the authors

Thus, the assessment of the level of human capital management for high-tech companies should be in the complex rating of the company in proportion to the weight of the assessment of climate change risk management for heavy industry companies or the assessment of pollution risk management for companies in the manufacturing sector.

## 5. DISCUSSION

The relevance of the study is confirmed by the report of the Bank of Russia “Model Methodology for ESG Ratings” (2023) released at the beginning of 2023, in which the regulator

identifies the current issue of assigning sustainable development ratings (Bank of Russia, 2023). The global topic of the international and national agenda in this area is the insufficient information efficiency of ESG ratings, which includes several sections: the uncertainty of the subject of assessment, the incompatibility of ESG ratings with each other, issues of fair rating practice and the lack of transparency of the methodology. Partial harmonization of ESG ratings can be achieved through centralized regulation, which is why the European Commission (2021) plans to decide in 2023 on the need to introduce additional regulatory measures, and the Bank of Russia in this report gives recommendations on developing an assessment methodology. These recommendations include an enlarged division of companies into Financial and Non-Financial and a minimum weight value for some indicators, while the regulator indicates that it is recommended to determine the weight of the element for assessing the profile by component considering the industry specifics of the organization without additional digitized data. That is why the results of this study are necessary and can be used to unify the weights of indicators depending on the industry being analyzed.

## 6. CONCLUSION

The performed analysis confirms the theory put forward by the authors that the existing methodologies for ESG ratings do not fully consider industry specifics and can also be used to further develop a universal methodology for evaluating companies for compliance with the criteria for sustainable development.

In conclusion, this paper addresses the problem of existing methodologies of ESG assessment of the largest rating agencies in terms of taking into account industry specifics. The study analyzes the exposure of companies in various industries to ESG risks in order to develop an aggregate matrix of each sustainable development metric significance for different economy sectors. The main finding of the study is that the existing methodologies of ESG assessment do not take into account the industry-specific characteristics of the companies being evaluated, which leads to a low correlation between ESG scores. This lack of correlation is mainly due to differences in the methodological basis of the analysis. The basic part of the analysis, that is, the mathematical structure of the assessment, varies slightly from method to method. A selection of indicators in three areas (E, S and G) is made, each indicator is assigned score and

weight, and an integral indicator is calculated. The main part of the differences lies in the assignment of weights to each specific indicator. The assignment of weights depends primarily on the specifics of the industry to which the assessed company belongs.

The study provides an aggregate matrix of each sustainable development metric significance for different economy sectors. The results show that companies in the high-tech sector pay the least attention to the problems of environmental development, while companies in the industrial and scientific sectors assess their exposure to all factors equally. Companies in the telecommunications and digital sectors of the economy have the largest shares of policies in terms of human resource development and information security of the company's product. Logistics companies pay attention to all factors in equal shares, but the lowest share is taken by corporate behavior policies. Energy companies focus on environmental risks, while companies in the agricultural sector consider the factors in this section to be the least important.

The study's findings suggest that ESG assessments should take into account the industry-specific characteristics of the companies being evaluated. This can be achieved by using a more sophisticated methodology that assigns weights to indicators based on the industry to which the company belongs. In addition, the study highlights the need for a unified system of assessment to ensure consistency across different ESG rating providers.

Overall, the study provides important insights into the limitations of existing ESG assessment methodologies and the need to develop more sophisticated approaches that take into account industry-specific characteristics. This will help to ensure that ESG assessments are more accurate and reliable and will enable investors and other stakeholders to make better-informed decisions about the companies they invest in or do business with. The study also highlights the need for more collaboration between different ESG rating providers to develop a unified system of assessment that can provide consistent and comparable results.

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## REFERENCES

- Bank of Russia. (2023). Methodological Recommendations on the Application of Models for Assessing the ESG Risks of Corporate Borrowers and Issuers. Retrieved from: [https://www.cbr.ru/en/finmarkets/ranm\\_en/metod\\_issled/esg\\_recommendations2020/Refinitive](https://www.cbr.ru/en/finmarkets/ranm_en/metod_issled/esg_recommendations2020/Refinitive)
- Durieux, S., Croux, C., Dehon, C. (2021). Productivity Spillovers from Foreign Direct Investment: Evidence from Belgium. *Journal of International Business Studies*, 52(4), 528-545.
- European Commission. (2021). Study on Sustainability-Related Ratings, Data and Research. Retrieved from: <https://op.europa.eu/en/publication-detail/-/publication/d7d85036-509c-11eb-b59f-01aa75ed71a1/language-en/format-PDF/source-183474104>
- Expert RA ESG methodology. (2022). Retrieved from: [https://www.ranational.ru/sites/default/files/analitic\\_article/Methology\\_ESGratings\\_corp.pdf](https://www.ranational.ru/sites/default/files/analitic_article/Methology_ESGratings_corp.pdf)
- Grishankova, S. (2022). ESG scores market: comparability of results and transparency of assessment methodologies. Retrieved from: <http://review.cbonds.info/article/references/1037/>
- Hirschberger, M., Lütke Schipholt, H., Zarembova, A.(2021). Learning to Teach in a Digital Age: The Impact of Teacher Education Programs on Digital Competence. *Journal of Digital Learning in Teacher Education*, 36(3), 99-109.
- Khan, M.S., Butt, N., Khan, M.H., Shoaib, M., Javed, M. (2021). Impact of Covid-19 on the Hospitality Industry: A Review of Current Findings. *Journal of Hospitality and Tourism Management*, 46, 205-215.
- Linsmeier, J.E., Lee, W., Lee, B., Sullivan, K. (2021). Reconciling the Cost and Benefits of Enterprise Risk Management: Evidence from U.S. Property-Liability Insurers. *Journal of Risk and Insurance*, 88(1), 137-163.
- Material ESG Topics. (2022). PWC. Retrieved from: [https://www.pwc.com/kz/en/publications/new\\_publication\\_assets/esg-may-2022-rus.pdf](https://www.pwc.com/kz/en/publications/new_publication_assets/esg-may-2022-rus.pdf)
- Mihailescu, A.I., Pinte, M., Cîrnu, D. (2021). The Impact of Leadership Styles on Organizational Performance. *Journal of Competitiveness*, 13(1), 96-112. Retrieved from: <https://www.cjournal.cz/index.php?hid=clanek&bid=archiv&cid=246&cp=96>
- Model methodology of ESG ratings. (2023). Bank of Russia. Retrieved from: [http://www.cbr.ru/Content/Document/File/144085/Consultation\\_Paper\\_17012023.pdf](http://www.cbr.ru/Content/Document/File/144085/Consultation_Paper_17012023.pdf)
- MSCI ESG rating. (2022). Retrieved from: <https://www.msci.com/our-solutions/indexes/gics>
- National Rating Agency. (2022). ESG scores methodology. Retrieved from: [https://www.ranational.ru/sites/default/files/analitic\\_article/Methology\\_ESGratings\\_corp.pdf](https://www.ranational.ru/sites/default/files/analitic_article/Methology_ESGratings_corp.pdf)
- World Economic Forum. (2020). The Future of Jobs Report. Retrieved from: <https://www.weforum.org/reports/the-future-of-jobs-report-2020>



## Appendixes

### Appendix 1. Full list of analyzed companies

27	AFK "Sistema"	Finance and insurance
28	Bank "CENTER-INVEST"	Finance and insurance
29	PJSC "IC RUSS-INVEST"	Finance and insurance
30	Sberbank of Russia PJSC	Finance and insurance
31	AK BARS BATTERY	Finance and insurance
32	Sovcombank PJSC	Finance and insurance
33	Moscow Exchange	Finance and insurance
34	VEB RF	Finance and insurance
35	VTB Bank	Finance and insurance
36	SME Bank	Finance and insurance
37	Gazprombank	Finance and insurance
38	JSCB "Almazargisbank"	Finance and insurance
39	BIOCAD	Healthcare
40	"Social Information Agency"	Non-profit organizations
41	BF "Sistema"	Non-profit organizations
42	Elena and Gennady Timchenko Charitable Foundation	Non-profit organizations
43	Test	Finance and insurance
44	BF "Spin Bifida"	Non-profit organizations
45	JSC "SSC NIJAR"	Energy
46	JSC "Grid Company"	Energy
47	State Corporation "Rosatom"	Energy
48	JSC "IDGC of the Urals"	Energy
49	PJSC "Gazprom"	Energy
50	PJSC "Inter RAO UES"	Energy
51	PJSC IDGC	Energy
52	of Siberia PJSC IDGC of Center (Rosseti Center)	Energy
53	PJSC OGH-2	Energy
54	PJSC Rosseti Moscow Region	Energy
55	PJSC Rosseti Siberia PJSC	Energy

56	Rosseti PJSC RnaHydro	Energy
57	PJSC	Energy
58	FGC UES	Energy
59	PJSC Enel Russia	Energy
60	PJSC "Unipro"	Energy
61	PJSC "Rosseti North-West"	Energy
62	JSC "Atomenergoprom"	Energy
63	PJSC "Rosseti Volga"	Energy
64	PJSC "Rosseti Kuban"	Energy
65	PJSC "RossetiLeningo"	Energy
66	PJSC RossetiYug	Energy
67	PJSC Rosseti Tyumen	Energy
68	Philip Morris International in Russia	Consumer goods manufacturing
69	BELUGA GROUP	Consumer goods manufacturing
70	"Coca-Cola HBC Russia"	Consumer goods manufacturing
71	Baltika Brewing Company	Consumer goods manufacturing
72	Charkizovo Group	Consumer goods manufacturing
73	Deloitte CIS	Other types of services
74	AKIG Group of Companies	Other types of services
75	PwC in Russia	Other types of services
76	EY	Other types of services
77	ROS AGRO PLC	Consumer goods manufacturing
78	Lukoil	Oil and gas
79	KazMunayGas	Oil and gas
80	YATEK	Oil and gas
81	INC. Capital	Oil and gas
82	NOVATEK	Oil and gas
83	Rosneft	Oil and gas
84	Sakhalin Energy	Oil and gas

85	Surgutneftegasprom	Oil and gas
86	Surgutneftegas	Oil and gas
87	Tatneft	Oil and gas
88	Ecostandard group	Other types of services
89	LLC "Novostal-M Logistics"	Transport
90	LLC Services	Other types of services
91	JSC "Centrodorstroy"	Transport
92	LLC FinExpertiza	Other types of services
93	Miscanthus LLC	Agriculture
94	Siberian Biogel LLC	Forestry, woodworking
95	National Institute of Ecology and Climate	Education
96	Association of Managers	Non-profit organizations
97	LLC "Grindata"	Information technology
98	Association of Practical Psychologists and Coaches	Retail
99	LLC Trade Management	Retail
100	Institute of Information Society Development	Information technology
101	MTS	Telecommunication
102	PJSC "VIMPELCOM"	Telecommunication
103	MegaFon	Telecommunication
104	Rostelecom	Telecommunication
105	LLC "Yandex"	Information technology
106	LLC "VKONTAKTE"	Information technology
107	Gasprom Neft	Oil and gas
108	Gasprom Energoholding	Oil and gas
109	Zarubezhneft	Oil and gas
110	Transneft	Oil and gas
111	Leroy Merlin Vostok LLC	Retail
112	X5 Retail Group	Retail
113	PJSC "M.Video"	Retail
114	Magnet	Retail
115	Rolf	Retail
116	The group of companies "Detaly Mir"	Retail
117	Rostec Group of Companies	Mechanical engineering