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Which Shareholders are Interested in the ESG-indicators of the Company?

V.V. Karginova-Gubinova
Institute of Economics of the Karelian Research Centre of the Russian Academy of Sciences, Petrozavodsk, Russia

ABSTRACT

Today Russian companies have a low level of compliance with the principles of sustainable economy, which can be largely determined by a weak interest of some corporate stakeholders to ESG (environmental, social and governance) indicators. It determines the **relevance** of studying the individual groups of stakeholders and determine the measure of their interest in ESG-strategy. The **purpose** of this work is to determine which shareholders are most interested in ESG indicators of companies whose securities are traded on the Russian stock market. The research is based on the data from Yahoo Finance and the website of the Sustainalytics, Inc. company as of the end of 2021. Cluster, variance, regression and correlation **analyses** were carried out and **methods** of descriptive statistics were used. **Results** of this work have revealed the presence of the features of ownership structure of Russian companies in comparison with companies of developed countries. The lack of insiders' interest in corporate ESG characteristics has been confirmed. At the same time, the increase in the share of institutional shareholders leads to decrease in the assessed risk of ESG but its rate is less than the change in the shares of institutional owners. The different importance of individual components of the ESG assessment for institutional shareholders has been noted. The **novelty** of this research is the study of Russian investors and issuers that have not been systematically studied before as well as the ascertainment of complex influence of insiders/outsiders and institutional/private investors. The scientific significance is determined by the development of a new approach to study the influence of the degree of investor responsibility on corporate characteristics. The practical significance of the results lies in obtaining the possibility of developing targeted incentive tools for company shareholders to increase their interest in corporate ESG-indicators and to increase the sustainability of the company and territories. This research will be of interest to investors, company managers, authorities, non-profit organizations and specialists in the field of ESG investment.

Keywords: ESG investment; responsible investment; environmental risk; social risk; managerial risk; insiders; institutional investors; social cost theory; the free rider problem; the "principal-agent" problem; institutional theory of the firm

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INTRODUCTION

As of 2021, almost four thousand investors from more than 60 countries with total assets of over $ 120 trillion have joined the UN principles for responsible investment, calling for focusing on the ESG characteristics of companies.[1]

The purpose of this research is to determine which shareholders are most interested in the ESG indicators of companies whose securities are traded on the Russian stock market.

The COVID-19 pandemic has led to a reduction in government spending on environmental protection and certain areas of social policy [1]. This trend regarding environmental costs is expected to stay in the coming years [2]. At the same time the pandemic has significantly increased the volume of medical waste and some domestic waste, for example, related to the packaging of internet orders [3] and active use of disposable goods [4]. The above-mentioned increases the importance of investing funds in the mentioned areas by commercial companies. At the same time, it is noted that the ESG orientation of business has not become widespread in Russia, unlike in developed countries: over 80% of Russian companies rated by the "Expert RA" agency have not adopted the appropriate strategy [1]. Ascertaining groups of shareholders that show the greatest and the least interest in corporate ESG indicators will allow developing an effective targeted policy of supporting and stimulating the company's stakeholders to improve its

[1] Principles for responsible investment. URL: https://www.unpri.org/download?ac=10948 (accessed on 28.02.2022).

sustainability characteristics. It determines the relevance of the study.

The research used data from Yahoo Finance and the website of Sustainanalytics, Inc. company as of the end of 2021. Methods of descriptive statistics, cluster, dispersion, regression and correlation analyses are used for the analysis part.

The novelty of the study is, firstly, the analysis of Russian investors and issuers that were not systematically studied before and, secondly, determination of the model of influence of institutional investors and insiders as well as the features of their complex impact on corporate ESG indicators.

The scientific significance of the research lies in the development of a new approach to the study of responsible behaviour of investors, taking into account the synthesized influence of the "free rider" and "principal-agent" problems. The results of the study will allow performing targeted stimulation of the company's stakeholders in order to increase their focus on corporate ESG indicators and increase in business sustainability. This is the practical significance of the study.

The research is of interest to investors, company managers, authorities, non-profit organisations and specialists in the field of ESG investment.

THEORETICAL REVIEW

1. The "ESG investment" Term

The "United Nations Global Compact" initiative was launched in 2000 and its purpose is supporting the sustainable behaviour of companies and providing the reports on their activities.[2] Following a proposal by UN Secretary General Kofi Annan on developing principles and recommendations for integrating environmental, social and governance aspects into asset management, the "Who cares wins — connecting financial markets to a changing world" report was published within this initiative in 2004 and fixed the ESG (Environmental, Social and Governance) term.[3]

As a result, the concept of ESG investment has emerged, it refers to investments made taking into account environmental and social risks as well as corporate governance practices. The main requirements of such investments were enshrined in the six principles of responsible investment created under the aegis of the UN and first introduced in 2006[4] so the "responsible investment" term is widely used instead of ESG investment. Also, since ESG factors determine the sustainability of a business, ESG and sustainability are often used interchangeably.[5] It should be noted that the most common understanding of sustainable development was first enshrined in the report of the World Commission on Environment and Development in 1987 as meeting the needs without reducing similar opportunities for future generations.[6]

The concepts of ESCM (environment, society, corporate management) (see [5], for example) and ESM (ecological, social, managerial) ([6], in particular) were used in the meaning of ESG in Russia but the ESG term received much greater distribution.

The concept of ESG investing is close to the earlier "social investing" and "impact investing" terms but there is also a fundamental difference between them.

Social investing (SI) or socially responsible investing (SRI) characterizes investments made on the basis of ethical criteria [7]. ESG investor but not an SRI investor can buy shares in an alcohol or oil company operations of which meet sustainability standards. In their turn the SRI investor will invest in organizations that actively provide gratuitous assistance to others but are unable to influence the effectiveness of its implementation. Social investments in Russia are often considered those that correspond to the concept of corporate social responsibility [8].

Impact investing (investing of influence) means investments that are made to obtain a positive, measurable social and environmental impact at a given level of profitability (financial return).[7] Thus, while ESG

[2] United Nations Global Compact. URL: https://www.unglobalcompact.org/ (accessed on 28.02.2022).

[3] Who Cares Wins — Connecting Financial Markets to a Changing World. URL: https://d306pr3pise04h.cloudfront.net/docs/issues_doc%2FFinancial_markets%2Fwho_cares_who_wins.pdf (accessed on 28.02.2022).

[4] Principles for Responsible Investment. URL: https://www.unpri.org/ (accessed on 28.02.2022).

[5] International experience in the application of ESG standards ("Environmental, social, governance") and the possibilities of its use in Russia. URL: https://mfc-moscow.com/assets/files/analytics/doklad_ESG_june_2020.pdf (accessed on 28.02.2022). (In Russ.).

[6] Report of the World Commission on Environment and Development: Our Common Future. URL: http://www.un-documents.net/our-common-future.pdf (accessed on 28.02.2022).

[7] What you need to know about impact investing. URL: https://thegiin.org/impact-investing/need-to-know/#what-is-impact-investing (accessed on 28.02.2022).

investments are primarily aimed at minimizing the risks of sustainable development, the hallmark of impact investments is their focus on specific actions to solve existing problems. An example of such investments is green bonds.

2. Motives for Investors to Take into Account the Company's ESG Properties

Previous studies have shown that large investors [9] and those with a long-term horizon [9, 10] are more prone to invest in ESG companies. At the same time, they may have different motives for making responsible investments: some prioritize the results of the ESG policy for the environment and society; others prioritize the financial return due to this policy [11].

With regard to the first group of investors, it is assumed that the importance of social and managerial components in ESG will increase due to the COVID-19 pandemic [12]. Speaking about the relationship between the economic results of the company's operations and its ESG policy, it is worth noting that corporate social responsibility was accompanied by a low financial return back in the 1990s. In later periods, ESG programs began to increase the company's competitiveness by attracting more qualified employees and cheaper capital among other things, while corporate securities had a higher yield with less risk. It is noted that many ESG characteristics, although not all of them [13], are positively related to both the financial performance of the company and its value [14]. The paper [15] shows an increase in stock prices with an increase in at least environmental sustainability indicators and the relationship between the sustainability of an investment portfolio and its risk-adjusted return. It has been confirmed that a corporate policy aimed at reducing a company's exposure to environmental risks increases shareholder value [16]. Also, the disclosure of ESG indicators reduces the risks of corporate financial violations, especially with good external and internal supervision [17].

Companies with lower ESG indicators have lower earnings and risk-adjusted stock returns. In particular, this can be explained both by the interest of investors and consumers in the assets and products more sustainable companies and the weakening of the ESG policy when managers predict low financial performance [18]. At the same time, media reports about the inconsistency of the company's actions with ESG values lead to a significant decrease in its rating. Issuers with smaller capitalization and less liquid stocks that have a good reputation and do not belong to "sinful" industries (production and sale of alcoholic beverages, tobacco products, organization of gambling, etc.) experience the greatest adverse impact [19].

Methodologically the connection between the disclosure of ESG characteristics and stock quotes can be explained by the increase in the informativity of the latter about the company's future earnings. At the same time, the study [20] shows that the disclosure of data on social development is more information content than data on ecology and corporate governance. The impact of the disclosure of ESG indicators on the informativity of the stock prices of those companies that have low sustainability is especially noticeable.

3. Interest of Private and Institutional Investors in Corporate ESG Characteristics

Social costs are the sum of private costs incurred by a particular economic agent and external costs imposed on its counterparties. As shown by Ronald Coase, when an agent, focuses only on their private costs without taking into account the external ones, the equilibrium achieved in the economic system may be inefficient: with small private costs, public costs will be quite high while the ratio of benefits received will be reversed [21].

At present, this inefficient economic balance is observed in relation to expenditures in order to ensure the sustainable development of territories. For example, companies that do not pursue environmental goals in their production and economic activities reduce their own costs but at the same time government spending on levelling their negative impact on the environment increases and economic entities that make environmental expenditures receive a lower relative private benefit. Similarly, investors who do not adhere to the principles of responsible investing reduce their costs for searching and verifying information as well as for changing the strategies of companies, hence increasing the costs of other actors in these areas.

Here we are faced with the so-called "free rider" problem. Let us recall that in economic theory this problem was presented by Mansur Olson who believed that members of large groups unlike small ones will not be engaged in the maintenance of a public good without an external enforcement mechanism even though they receive tangible benefits from using it [22]. The applicability of this problem to the behaviour of shareholders, namely

to the solution of the "principal-agent" problem and the control of the actions of managers by the owners was first shown in [23].

Let us note that all shareholders can be divided into private and institutional, investment organizations that professionally manage funds on behalf of their beneficiaries are called this way. In 1950 institutional investors owned 6.1% of all issued shares in the United States but in 2016 this figure turned into 70% and according to forecasts it will increase even more in the coming years [24].

Checking the compliance of the company's activities with ESG values is quite costly for private shareholders. Moreover, the individual shareholder has little leverage to improve this compliance. Therefore, given that other shareholders will enjoy the public benefits received without spending resources (according to the "free rider" paradox), a private investor can very likely refuse to try to change the company's activities.

Institutional investors, unlike private ones, have higher opportunities for influence. In recent years they have shown more and more interest in the ESG indicators of companies [24, 25], for example, in reducing the company's exposure to environmental risks [16]. At the same time, the influence of interests and beliefs of managers of institutional organizations on their involvement in ESG investment is observed. For example, mutual fund managers in the US who donate to the Democratic election campaign invest less in socially irresponsible companies (tobacco, weapons, the ones with poor attitude towards employees, etc.) unlike those who support the Republicans or do not donate at all [26].

According to institutional investors, climate risks are already having financial implications for companies. In this regard, many investors believe that the best method of levelling climate risks is not a refusal to invest but risk management [9]. It has also been confirmed that data on ESG indicators is most often used in investment organizations due to ethical, non-economic reasons, in particular, to predict future financial condition of companies and because of customer requirements [27]. Issuers that enhance perceived sustainability but do not create shareholder value are shunned by institutional investors [16].

Given the large proportion of shares owned by responsible institutional investors, in their activities managers have to take into account their position and strengthen interaction with other activist shareholders who have concerns about the ESG orientation [24]. Let us recall that activist shareholders have such a portion of shares in the company that allows them to participate in annual meetings and put resolutions up to the vote, although they boycott the proposals of others more often than they put forward their own proposals [28]. Activist shareholders have a long–term orientation unlike the corporate raiders that operated in developed countries in 1980s and sought to withdraw the largest sums of money from the company in a short time, for example, by using corporate assets as a bail and directing the loan itself for personal purposes [29].

At the same time, it is worth noting the peculiarity of behaviour among all institutional investors in hedge funds. Unlike other investment organizations, hedge funds are less regulated which allows them to use derivatives, short selling and credit leverage actively to increase returns and mitigate risks. Because of this hedge funds can earn in both rising and falling markets. Payouts to managers of these funds depend on the results of their activities. Moreover, managers often invest their own capital in hedge funds. These features increase the opportunistic interests of managers. Compared to other institutional investors, such funds have short period of existence (3.5 years on average) and it leads to a short-term planning horizon [30].

Thus, the specifics of hedge fund activity suggest their least interest in ESG indicators but in recent years the situation has changed. Unlike other institutional investors, hedge funds are more affected by the negative consequences of information asymmetries and have less access to company management. ESG orientation makes it difficult for them to predict corporate financial results. In this regard, in order to access the necessary information and support of other institutional investors in voting hedge funds also include ESG characteristics in their performance targets [24].

Sovereign wealth funds should also be singled out as a special type of institutional investors in relation to corporate ESG policy. They take into account ESG indicators when making a decision on investing in a company. At the same time, the characteristics of the company's sustainability do not change significantly after investment of the funds. Thereafter, it can be assumed that funds do not have a significant impact on corporate ESG strategies [31].

In order to increase their influence and coordinate their actions, institutional investors are currently uniting with organizations: Investor Stewardship Group (USA), Investor Forum (UK), etc. These organizations get direct access to the board of directors and organize closed meetings with directors to discuss their proposals [32]. Joint actions of institutional investors in order to improve the company's ESG indicators allow stakeholders to receive material benefits consisting of new resources and knowledge as well as time-saving [33].

4. Insiders' Interest in the Company's ESG Characteristics

Under Russian law, insiders are issuers; management companies; members of the board of directors; employees with access to insider information; those who have a direct or indirect right to dispose of at least 25% of votes of certain persons in the supreme governing body; securities trading organizers; representatives of authorities, audit, credit, insurance organizations, information and credit agencies, etc. This term is already being considered in the US: top managers of companies, members of the board of directors and shareholders owning more than 10% of shares are considered insiders. In this paper we will be guided by the latter approach since, firstly, it will make it possible to compare the obtained results with the conclusions of international studies and, secondly, it will allow determining the impact on the ESG indicators of the company of the most knowledgeable and numerous groups of insiders.

According to Oliver Williamson's discretionary management model, the separation of ownership and control in a corporate firm result in managers seeking to maximize personal utility rather than profit. At the same time, they are required to provide the owners with a minimum income [34]. William Baumol believed that managers seek to maximize revenue since it is the maximum revenue at the minimum required level of profit that best satisfies their interests [35, 36]. Robin Marris considered the growth rate of the firm to be the key indicator of managers and argued that in order to increase their managers agree to merge with another firm, even if this leads to a decrease in shareholder value [37]. From the point of view of Richard Cyert and James March, groups of individual actors (managers, employees, shareholders, etc.) are formed in large firms and their interests are realized depending on the strength of these groups and the compromises reached between them [38].

Adolf Berle and Gardiner Means, using the example of the US, showed that the separation of ownership and control and the dispersal of ownership among a large number of small shareholders without the possibility of their significant influence in developed countries in 1930s led to the fact that the largest corporations were actually managed by managers in their own interests [23]. Thus, a special case of the agent (principal-agent model) was observed, first described by Michael Jensen and William Meckling [39], that the principal (shareholder) is obliged to bear additional costs of control of the agent (manager) and may have costs of divergence (lost opportunities).

At the same time, taking into account the previously shown increase in the share of ownership of institutional investors, it can be concluded that there is a decrease in the opportunities for insiders to influence.

In relation to the implementation of the ESG policy, the actions of insiders should be considered from two points of view. According to the first one, insiders may seek to increase ESG indicators to achieve better corporate financial results, including increasing personal income through this. According to the second point of view, insiders pursuing opportunistic interests and manipulating the market based on the use of their private information want to derive personal financial gain.

It should be noted that laws prohibiting such manipulation exist both in Russia and in many other countries but their effectiveness is rather low [40, 41]. This is largely due to the lack of prosecution of violators [41]. The influence of insiders is especially strong in countries with weak state control [42]. At the same time, a number of researchers believe that it is necessary to legalize insider trading. Companies do not always disclose all corporate information as it is very expensive and the data may be seen as untrustworthy or may be misinterpreted. Thereafter, there may be a significant discrepancy between the market and fair prices of the company's shares. At the same time, insiders who have information will make securities quotes fairer by trading on the market and the effect of insider trading will depend on other market participants' ability to identify it [43, 44]. Moreover, insider trading can increase the manager's interest in the welfare of the company which, in particular, was confirmed by the example of managers whose contractual payments are tied to corporate revenue [45].

It has been shown that in a partially opaque firm, in contrast to a fully transparent one, positive information

Table 1

Research Hypotheses

Part of shares owned by:		insiders	
		Small	Large
Institutional investors	Small	Average ESG indicators (hypothesis H_1)	Low ESG indicators (hypothesis H_0)
	Large	High ESG indicators (hypothesis H_2)	–*

Source: author's calculation.

Note: * — case when large parts of shares are owned by both insiders and institutional investors at the same time is impossible.

that is not available to external investors can increase insiders' income [46]. As private information used in insider trading, data on R&D and the planned budget changes regarding it were considered. This data can provide insider trading advantage [47].

Both family and state enterprises regard their control as permanent, family enterprises deteriorating their environmental and social performance, and state enterprises enhancing their social performance. If the influence of outsiders is strengthened then there is an increase in both environmental and social characteristics of firms [48].

Thus, based on the above, considering the combined effects of insiders and institutional investors, let us suppose that:

H_0: Issuers with a large part of shares owned by insiders and a small part by institutional investors have low ESG indicators in the Russian stock market.

H_1: Issuers with a small part of shares owned by both insiders and institutional investors have average ESG indicators in the Russian stock market.

H_2: Issuers with a small part of shares owned by insiders and a large part by institutional owners have high ESG indicators in the Russian stock market (shown in *Table 1*).

MATERIALS AND METHODS

The methodology of the study is based on the institutional theory of a firm [49, 50], which assumes the presence of transaction costs in the interaction of agents and their proneness to opportunistic behaviour.

The research is based on the company's shareholder structure data as of the end of 2021 from Yahoo Finance as well as corporate ESG estimates from Sustainalytics, Inc., one of the leading providers of corporate sustainability data that analyse more than 20,000 companies from 172 countries.[8] 20 issuers were considered — Yahoo Finance contains data on the main stakeholders of all of them, while Sustainalytics, Inc. calculates the ESG rating (the representativeness of the sample in terms of property characteristics was confirmed using a z-test, the calculations is presented below). Let us note that the selected ESG rating consists of sustainability risk indicators in two dimensions: exposure and governance quality.[9]

The following indicators were analysed in the study:

- part of shares owned by institutional investors (share of institutions);
- part of shares owned by insiders (share of insiders);
- overall ESG risk assessment (ESG);
- environmental risk assessment (E);
- social risk assessment (S);
- governance risk assessment (G).

Descriptive statistical methods were used at the initial stage. Next, a hierarchical cluster analysis of the ownership structure characteristics was carried out — by part of shares owned by institutional investors and insiders. The analysis was carried out by the method of middle connection using the square of the Euclidean distance. Number of clusters are set based on the jump in the agglomeration coefficient.

After that, the existence of a relationship between cluster groups in terms of individual indicators of

[8] Sustainalytics. Who We Are. URL: https://www.sustainalytics.com/about-us (accessed on 28.02.2022).

[9] ESG Risk Ratings. A consistent approach to assess material ESG risk. URL: https://www.sustainalytics.com/esg-data (accessed on 28.02.2022).

Table 2

Indicators of issuers of the Russian stock market at the end of 2021

Indicator	Mean	Median	Max	Min	S.D.
Share of institutions	14.31	6.92	83.60	1.85	19.77
Share of insiders	48.03	55.18	88.35	0.00	26.94
ESG	32.81	34.40	48.20	15.90	7.44
E	10.32	13.90	22.00	2.20	7.49
S	8.73	9.95	16.60	7.00	5.03
G	7.15	8.15	15.80	3.00	4.72

Source: author's calculation.

the company's ownership structure and their ESG risk assessment (overall and for all components) was investigated using analysis of variance. A model was determined that best describes it in relation to the statistically identified significant dependence based on the performed regression analysis. Five models were considered:

1) linear;
2) reverse;
3) logarithmic;
4) quadratic;
5) exponential.

The accuracy of the model was determined by the R^2 determination coefficient (shows the proportion of change in the dependent variable explained by the independent) and the standard error (a measure of uncertainty; accuracy of predicting the dependent characteristic based on new independent data).

Next, the Pearson correlation coefficients between the various components of the overall ESG score are calculated. To test hypotheses about the mutual influence of low and high portions of institutional investors and insiders on corporate ESG characteristics, the following groups of companies were identified:

- the ones having low rates of participation in ownership of both institutional investors and insiders;
- the ones having low rates of participation in ownership by institutional investors and high rates of participation in ownership by insiders;
- the ones having high rates of participation in ownership by institutional investors and low rates of participation in ownership by insiders;
- other companies.

The presence of dependence of this company classification and their ESG characteristics was investigated with the help of dispersion analysis.

FINDINGS AND DISCUSSION

Earlier it was noted that in the United States the predominant portion of shares today belongs to institutional investors. In the Russian Federation they play a much smaller role. On average, only 14.3% of assets of the studied issuers belong to institutional owners, 48% belong to insiders (shown in *Table 2*). Across 214 issuers of the Russian stock market these figures are 7.6% and 67% respectively. At a significance level of 95%, results of the z-test indicate that there are insignificant differences in the characteristics of the ownership of the issuers under study and all those whose data on the ownership structure is available too. Subsequently, the sample may be regarded as representative according to these indicators.

It is also important to note the overall significant level of ESG risks of Russian market issuers: on average, it is 32.8% which corresponds to a high level of risk according to the scale of Sustainalytics, Inc. At the same time, there is not a single issuer with a risk that would be less than

10 — which is considered to be an insignificant level. The worst average scores are for environmental risks, although they also have the largest standard deviation (scatter of risk levels). The latter may be due to the fact that environmental risks, unlike the others considered, are most relate to the industry specifics of the company.

The cluster analysis carried out in relation to each of the characteristics of ownership made it possible to determine whether it can be considered low or high (shown in *Table 3*).

Only the overall assessment of ESG depends on the indicators of the ownership structure, considered separately, namely, the portion of shares owned by institutional investors, there is no relationship with the insiders' part of shares (shown in *Table 4*).

Most accurately the relationship between the portion of ownership of institutional investors and the overall ESG assessment can be described using a quadratic model: an increase in the share of institutional shareholders leads to a decrease in the estimated ESG risk but its rate is less than changes in the portion of shares of institutional owners (shown in *Table 5*). At the same time, it is worth mentioning that although this model is statistically significant, its R^2 determination coefficient is only 0.312 which indicates the presence of other factors that explain 68.8% of the changes in the dependent variable.

The presence of a relationship between portion of shares held by institutional investors and the overall ESG assessment, but not its individual components, can be explained by the low level of interrelation of the latter: a significant correlation exists only between social and managerial risks (shown in *Table 6*).

Table 3

Average ownership of Russian stock market issuers by cluster groups at the end of 2021, %

Cluster group number	Share of institutions	Share of insiders
1	7.11	1.14
2	40.82	25.71
3	83.60	46.15
4	–	64.14
5	–	82.15

Source: author's calculation.

Table 4

Variance analysis of the ESG risk assessment from the portion of shares owned by institutional investors or insiders

Source of Variation	Type III Sum of Squares	df	Mean Square	F Statistic	Sig.
Overall ESG risk assessment					
Share of institutions	328.302	2	164.151	3.852	0.042
Share of insiders	235.616	4	58.904	1.081	0.401
Environmental risk assessment					
Share of institutions	68.552	2	34.276	0.956	0.410
Share of insiders	143.555	4	35.889	1.009	0.444
Social risk assessment					
Share of institutions	10.361	2	5.180	0.750	0.492
Share of insiders	37.591	4	9.398	1.653	0.230
Governance risk assessment					
Share of institutions	51.707	2	25.853	2.882	0.092
Share of insiders	52.783	4	13.196	1.256	0.344

Source: author's calculation.

Table 5

Interrelation models for portions of shares owned by institutional investors and ESG risk assessment

Model type	R^2 determination coefficient	Fisher's F-criterion	Number of degrees of freedom1	Number of degrees of freedom2	Statistical significance
Linear	0.139	2.895	1	18	0.106
Reverse	0.204	4.626	1	18	0.045
Logarithmic	0.176	3.849	1	18	0.065
Quadratic	0.312	3.852	2	17	0.042
Exponential	0.146	3.069	1	18	0.097

Source: author's calculation.

Table 6

Pearson's correlation coefficient between the components of the ESG risk assessment

Indicator	Environmental risk assessment	Social risk assessment	Governance risk assessment
Environmental risk assessment	1		
Social risk assessment	0.393	1	
Governance risk assessment	0.273	0.659*	1

Source: author's calculation.

Note: * — correlation is significant at the level of 0.01.

The results of the following variance analysis have shown that when considering both selected indicators of the ownership structure in total: portions of shares owned by both institutional investors and insiders, they are not related to ESG risk assessments (shown in *Table 7*). Apparently, this is due to the previously confirmed lack of insiders' influence on the characteristics of the company's sustainability which in turn may be caused by other interests of this group of actors or by the divergence of their interest in ESG indicators: the presence of both strongly and weakly interested groups as well as those who are perceiving the company's contribution of its sustainability to its financial condition positively or negatively.

Thus, on the basis of the calculations carried out, all the assumptions previously proposed may be refuted.

Results of the research confirm the conclusions made in papers [24, 25] on the presence of interest in the ESG indicators of companies from the side of institutional investors. The previously shown interest in the environmental [16] (climatic [9]) risks of the company was not revealed which is probably due to the lack of priority attention of Russian institutional owners to one of the areas of ESG transformation.

Also, the study does not confirm that insiders can have a positive or negative effect on the increase in ESG characteristics [48]. Apparently, this is due to a weak connection between the implemented ESG strategies and the competitiveness and profitability of companies so far.

Given the above, further research should be aimed at analysing the interrelation between sustainability indicators and the financial condition of Russian market issuers. As shown in the paper [16], investors have no interest in securities if the improvement in perceived environmental friendliness occurs without an increase in shareholder value. Thereafter, the possibility that both institutional shareholders and insiders have a strong interest in the sustainability of companies cannot be ruled

Table 7

Variance analysis of the ESG risk assessment from portions of shares owned by institutional investors and insiders

Source of Variation	Type III Sum of Squares	df	Mean Square	F Statistic	Sig.
Overall ESG risk assessment	141.549	3	47.183	0.829	0.497
Environmental risk assessment	166.432	3	55.477	1.807	0.199
Social risk assessment	18.082	3	6.027	0.881	0.478
Governance risk assessment	68.838	3	22.946	2.767	0.088

Source: author's calculation.

out, however due to the fact that corporate ESG strategies have not yet brought significant financial benefits in the Russian market, responsible investment behaviour is not gaining ground.

LIMITATIONS

The limitation on the interpretation of study results is due to the methodological features of all rating estimates, in particular, opportunistic behaviour from the component side: in order for the issuer to "buy" the agency's assessment, they must like it [51]. It should also be understood that the nature of ESG estimates is subjective to a greater extent than financial ones [52]. Hence, the ratings of bonds are approximately the same with all rating agencies, while the ESG ratings diverge significantly [53]. This is especially evident in relation to social and managerial components [54]. To offset these limitations, this study chose one of the most recognized and widely used ESG ratings.

CONCLUSIONS

The conducted research showed low ESG indicators of issuers whose securities are traded on the Russian market. This may be due to the peculiarity of their ownership structure, namely, a small share of institutional investors. Due to the "free rider" problem, institutional shareholders are more motivated to influence the adoption and implementation of corporate ESG strategies, since this way their opportunities are greater in comparison with private ones. Thus, in order to increase the sustainability of Russian companies, it is necessary, first of all, to strengthen the interest of institutional market players in ESG characteristics. It is also possible to do this with the help of legislative consolidation of the ESG orientation of non-state pension funds, financial institutions, etc.

Based on the shown neutral attitude of insiders ESG indicators, the presence of another feature of the Russian market can be assumed, namely, current lack of a connection between implemented ESG strategies and the financial results of companies. In this regard, it is worth recommending to actively include ESG indicators in the methods of banking institutions for determining the cost of a loan as well as in the requirements for obtaining different forms of support from the state; to expand the knowledge of employees and potential investors about the benefits of sustainable companies; to actively cover examples of ongoing corporate ESG policy in the media.

The development of targeted measures to increase the interest of company stakeholders in their ESG characteristics and, thereafter, the gradual ESG transformation of the Russian economy will increase its sustainability and environmental, social and economic security.

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ABOUT THE AUTHOR

Valentina V. Karginova-Gubinova — Cand. Sci. (Econ.), Researcher in the Department of Regional Economic Policy, Institute of Economics of the Karelian Research Centre of the Russian Academy of Sciences, Petrozavodsk, Russia
https://orcid.org/0000-0002-8630-3621
vkarginowa@yandex.ru

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