

The Interdependence of CEO Personal Characteristics and Amount of Investments in Environmental CSR Projects

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Abstract

Nowadays, humanity faces a serious issue of creating conditions for sustainable development. Businesses as an integral part of society in which they exist and operate, may potentially play a crucial role in achieving this goal. Their contribution to sustainable development can be made by support and empowerment of ecosystems. As CEO is an intermedium between a company and the society, his characteristics may significantly influence company's strategic decisions and therefore, its level of involvement in ensuring sustainability.

In this paper we analyze the presence of interdependence between CEO personal characteristics and amounts of investments in ecological CSR projects. We consider the level of company's ecological investments as a measure for the level of its ecological responsibility.

We run a multiple regression on a sample of 44 Russian companies, who publish information on ecological projects implementation in non-financial reports.

Despite a number of substantial limitations, we managed to reveal the connection with some of professional activity and education characteristics of CEOs. We also controlled for company size and industry parameters.

The most notable result is a reverse interrelation between CEO tenure (in years) and the level of investments in ecological CSR projects. This may be due to the fact that less experienced directors seek to reinforce their business reputation and accumulate social capital.

Keywords: project management; corporate social responsibility; ecological projects; CEO; personal characteristics.

The relevance of research

American writer and environmental activist Wendell Berry once said: "One does not inherit the Earth from his ancestors, but borrows it from his children". His words are especially relevant today, when responsibility to the environment has become more than an ambiguous statement.

One of the most important goals facing humanity in the 21st century is to ensure sustainable, mutually beneficial and balanced development. The needs of current and future generations cannot be met without respect for ecosystems and the application of international standards that ensure the preservation of key social and environmental values.

The importance of business activity in achieving this goal is becoming increasingly evident. Since business sector companies develop and exist as a part of society, it is in their interest to invest in solving common environmental problems. In other words, business flourishes only when the communities and ecosystems within which it operates are strengthened and supported. [20]

In this regard, an increasing number of companies nowadays are aware of the need to take into account not only the internal effects of their activities, but also the external impact, both positive and negative, on their environment. In particular, companies, especially those operating in so-called "environmentally sensitive" industries, are concerned with minimizing negative externalities to the environment. This can be made through the resumption of resources, reduction of the volume and level of harm caused by the current activities of waste, the use of alternative energy sources etc. These activities are undertaken within the framework of "corporate social responsibility" and are implemented in the form of projects. Such projects are usually called ecological or environmental projects.

Environmental projects, as a rule, are initiatives of companies aimed at preserving, supporting and ensuring the renewal of natural resources, biodiversity, and the development of ecosystems (a set of biological and physical objects of wildlife, for example: water, air, plants, land and living organisms). At the same time, the implementation of such projects can provide benefits for the company itself.

Thus, it is possible to distinguish two conditional levels of influence of corporate social responsibility environmental projects on the economy and society: micro- and macrolevel.

At the micro level, the implementation of environmental CSR projects is related to the financial performance of the company [4; 28] and non-financial indicators, for example, reputation [9; 13] , which is confirmed by scientific research.

At the macro level, the implementation of environmental CSR projects by individual companies is closely linked to the concept of sustainable development. Sustainability is one of the key elements of corporate social responsibility and involves meeting current needs without compromising the ability to meet the needs of future generations. [17]

All of the above means that companies possessing intellectual, physical, financial capital, as well as unique opportunities for managing and attracting resources, are potentially able to make a significant contribution to preventing the reduction of biodiversity and the quality of so-called ecosystem services (i.e. direct and indirect products and benefits derived from ecosystems and related to human well-being). [12]

To realize the potential, companies need the support of researchers not only in the management of natural resources, but also in measuring and managing their impact on biodiversity.

Currently, there are real examples of direct business collaborations with researchers — however, their number is relatively small. Meanwhile, the creation of strategies to protect, restore and strengthen ecosystems remains an important and challenging task for companies. [2]

Since the CEO (Chief Executive Officer) is the decision-maker, including those concerning company's policies and strategies, he is a kind of "link" between the actions of the company and the responses of the external environment. This fact suggests that the effect of ecological policy derives not only from external factors, but also from the characteristics of the manager. Therefore, the selection and training of candidates for this position plays a crucial role not only in relation to the company's activities and the results demonstrated by it, but also to its environment, both local and global.

It is also worth noting the lack of research on this issue on a sample of Russian enterprises.

All the arguments above emphasize the need to study the relationship between personal characteristics of the CEO and the amount of investments in environmental corporate social responsibility projects.

Thus, the object studied in this work is investments in environmental projects of corporate social responsibility, the subject is the interrelation of their volume with the personal characteristics of the company's executive director.

The purpose of the current study is to indicate the existence of a relationship between manager's personal characteristics and company's level of environmental responsibility. The latter was measured through company's investments in environmental projects.

The scientific novelty of the work is, mainly, that the analysis was conducted on a sample of Russian companies. In addition, we normalized the dependent variable (investments in environmental CSR projects) by size and industry in various ways.

Theoretical basis

To begin, let us briefly dwell on the essence of environmental projects of CSR and some related concepts.

The main concept related to the implementation of environmental projects is corporate environmental responsibility. This is a special type of corporate social responsibility, aimed at protecting wildlife and reducing the negative impact on it.

Generally, corporate social responsibility implies a set of business actions, focused on creating effects for society, stakeholders and the company itself. [33] Such actions are implemented in the form of projects aimed at supporting and (or) strengthening one or several spheres of community.

Note that that a company's social responsibility is a voluntary phenomenon — it is not its duty, and therefore can not be imputed to it legally. However, an increasing number of companies are implementing the principles of CSR in their current activities, considering it not only as a competitive advantage and a tool to strengthen the company's image, but also as a necessary condition for the sustainable development of the economy and society.

All CSR projects combine three key characteristics:

1. Obligations formed and regulated by company's policies and actions

This statement contains three important ideas. Firstly, it is assumed that the process of selecting corporate social responsibility projects includes, among other things, an analysis of their compliance with the company's main goals, its development strategy, declared values. Secondly, a company is the initiator of such projects, and, therefore, a stakeholder, who has the power to implement them and make adjustments in the course of projects. Thirdly, a company signals its potential to

respond to the expectations and requests of other stakeholders through its mission and values (for example, to solve problems of local communities or support their own employees).

2. Actions exceeding legal requirements

In other words, corporate social responsibility includes actions that go beyond timely payments to the state in the form of taxes and to workers in the form of wages.

3. Voluntary actions, impossible to impose on business.

The voluntariness of actions implies the absence of state mechanisms of compulsorily CSR activities implementation. This includes, among other things, the lack of regulatory and legal acts, and, consequently, fines or other sanctions. In other words, the motivation of companies to introduce CSR principles into their activities is not artificial, but natural and is derived from a number of advantages for business. [3]

Environmental projects as a special category of corporate social responsibility projects have their own features. To identify them, let us turn to related concepts.

The concept of environmental projects is closely related to the concept of "environmental project management" (EnvPM). It should not be confused with the concept of "green project management". The latter is a model according to which the project manager should think "environmentally" throughout the life cycle of the project, guided by the decision-making on the possible consequences of the human activities impact on the environment. The management of environmental projects, in turn, involves the use of principles, methods and processes of project management to manage and improve specific elements of the ecosystem in order to achieve sustainability.

The concept of sustainability mentioned in the previous definition is also adjacent to the field we are studying. The definition of sustainability as a response to current needs is widespread, without prejudice to future generations. The implementation of environmental projects implies an impact on the environment — that is, on the resources and benefits used by people. Therefore, it is logical to assume that the implementation of such projects indirectly affects the quality and availability of resources for future generations, the opportunities for the development of the world community and the maintenance of life on the planet. This assumption is confirmed by the Rio Declaration on Environment and Development, which was adopted at the end of the 20th century and is currently one of the main sources of

environmental law for 178 countries around the world. It states: "to achieve sustainable development, the protection of the environment must be an integral part of the development process and can not be considered in isolation from it". [27]

The main, directly related to the implementation of environmental projects — concept of "corporate environmentalism" (CE) is a voluntary initiative at the firm level that exceeds legislative requirements and aims at emissions reduction and use of resources, along with protecting the living nature. [10]

Let us consider the key features that distinguish environmental projects from other types — in particular, the so-called "green" projects. The environmental project is a set of interrelated actions implemented to achieve a sustainable goal of reducing the negative impact on the environment (e.g oil spills, greenhouse gas emissions, groundwater pollution, etc.). "Green" also refers to any projects in which the environmental aspect is taken into account to some extent. In other words, these are projects the implementation of which may potentially affect the state of the environment. At the planning stage of such projects potential effects on the environment can be analyzed and measures for preventing or minimizing the negative impact on it can be developed. However, their purpose is usually not directly related to environmental concerns directly (examples of such projects: road construction, field development , R & D). [29] Thus, the key difference between environmental projects and other projects, having some impact on the environment, is the "environmental" purpose of the project itself.

Information on the implementation of environmental projects of CSR is provided in non-financial reports. Companies also cover other corporate social responsibility projects in non-financial reports. Within this research, we are interested in one of the six categories of projects listed in Table 1. The area of projects we consider is also called "environmental protection".

Table 1. Project categories by CSR areas covered in non-financial reports of companies

CSR area	Examples of project categories in non-financial reports
Environmental	Environmental protection and protection of water resources Protection of atmospheric air Protection and rational use of land Waste management (including processing)

	Conservation of biodiversity
Regional Policy	<p>Creating Jobs</p> <p>Creation, repair, reconstruction of infrastructure</p> <p>Modernization of productions</p> <p>Organization of holidays and cultural events</p>
Charity	<p>Regional charity</p> <p>Address charity</p> <p>Sponsorship</p>
Labor protection and occupational safety	<p>External audit of compliance with industrial safety requirements</p> <p>Liability Insurance</p> <p>Ensuring labor safety</p> <p>Training on labor protection and occupational safety</p>
Social support of employees	<p>Additional paid holidays (registration of marriage, birth of a child, etc.) Support of mothers with many children and pregnant women</p> <p>Support for employees on sick leave</p> <p>Accident insurance</p> <p>Prophylaxis of occupational diseases</p> <p>Spa and sanatorium recreation and recreation</p>
Employee development and training	<p>External training programs for employees</p> <p>Business games and other internal training events</p> <p>Self-study projects (remote learning and testing)</p>

Table 1. Project categories by CSR areas covered in non-financial reports of companies

Environmental CSR projects usually implemented within the framework of the company's Environmental Policy. It is worth explaining why investments in environmental CSR projects, reported by companies', are not regular contributions to environmental protection and support. Each of the funded initiatives has a unique objective, which must be achieved within a certain time period. Examples of such objectives are given in the following excerpts from non-financial reports of companies: "Reduction of the volume of discharges of pollutants with sewage into Belaya river by 17.5% since 2017 "[38] " In the PJSC "Lenenergo " chargers for electric vehicles are installed as part of the transfer of corporate transport to electromotive. In the reporting year, 34 battery chargers were installed, in total, 139 sets are planned to be installed". [37] "Reduction in the share of waste sent to disposal for all subsidiaries that have a negative impact on the environment for the period 2014-2016" [39] In the case of environmental CSR projects, the purpose and timing of its achievement determine the amount of planned funding. Thus, there is a traditional "iron triangle" of project management: the three key constraints within which a project is being implemented — every environmental CSR project has a purpose and a time limit stated in Environmental Report, the volume of investments is declared by company in subsequent reports.

In addition to the above-mentioned, more constraints arise within the implementation of environmental CSR projects. Additional constraints include compliance with environmental legislation, public expectations, accounting for public values, management of public relations, ensuring occupational safety and health at work. [29]

A lot of researchers point to the fact that the personal characteristics of the manager explain the differences in both the level and the effectiveness of implementing corporate environmental responsibility.

Figure 2 contains CEO personal characteristics, the significance of which was identified by foreign researchers.

Figure 2. Determinants of the company's environmental performance and level of responsibility

In addition, many authors [5; 7; 8; 10; 14; 25; thirty; 31; 34] indicated the relationship of environmental performance with the characteristics of the company itself. Table 2 lists a set of significant factors, as well as the direction of communication with each of them.

Table 2. Characteristics of enterprises associated with the implementation of environmental projects

It is easy to see that in the table above there are no company indicators that have an inverse relationship with the level of environmental responsibility of the company. However, there are many studies, the results of which indicate the existence of enterprise characteristics negatively related to the level of corporate social responsibility in general.

At present, the need to involve companies in environmental support is largely determined by the expectations of their external environment. Understanding the relationship between manager's personal characteristics and the company's environmental responsibility can be useful in selecting and preparing potential successors, able to participate in environmental support activities, increasing both the value and reputation of the company for stakeholders, and improving (or at least preserve) the quality of ecology for future generations.

Hypotheses

All of the above indicates the need to test a number of hypotheses.

Hypothesis 1. Companies in which the position of general director is held by woman, will invest more in the implementation of environmental projects CSR, rather than the company where this position is occupied by a man.

In previous studies [31], the relationship between the gender of the general director and the effectiveness of the implementation of environmental CSR projects was revealed. Also the direct dependence of the level of emotional intelligence and investments in environmental projects is statistically proven. [16] Moreover, there are scientific confirmations of the hypothesis that the level of emotional intelligence is related to gender and is higher for women. [23] All of the above suggests a link between the volume of investments in environmental CSR projects and the gender of the CEO, so the level of investments in these projects should be higher in companies where the CEO is a woman.

Hypothesis 2. Companies, whose general directors have higher level of education will demonstrate higher levels of investments in environmental CSR projects.

Previous works contain evidence in favor of a positive relationship between the level of education of CEO and the level of environmental responsibility of the company. [11] Some researchers have found that people with higher education have the ability to deeply understand complex and ambiguous problems, in particular those affecting the environment, and therefore demonstrate greater awareness and more responsible attitude to such problems. [15] Moreover, there is

scientific evidence of a correlation between the level of education received and the level of readiness to invest in initiatives aimed at improving the environment. [24] In this regard, it can be assumed that the level of education of the CEO is one of the key factors explaining the level of investments in environmental CSR projects.

Hypothesis 3. The general directors who have a degree in humanities will invest more in the implementation of environmental CSR projects, compared to those with a degree in economics.

Some researchers believe education itself determines values and beliefs, which, in turn, influence the behavior of the individual. [18] There is some evidence that the field of CEO education determines the strategic decisions he makes [32] The implementation of environmental CSR projects is in essence a strategic decision, since it affects not only the company itself, but also its environment in the long term. Some authors indicate a positive link between education in humanities, in particular, related to the environment, and the level of students' sensitivity to environmental problems. In addition, there are studies that indicate a positive relationship between the level of CSR and the degree in humanities and a negative — with the degree in economics. [1; 25] Based on the arguments above, we assume that a degree in humanities should be associated with a higher level of investments in environmental CSR projects.

Hypothesis 4. The CEO's MBA degree is associated with higher levels of investments in environmental CSR projects, rather than its absence.

According to previous studies, most MBA educational programs do not require a thorough study of sustainability and environmental issues, and these topics are mainly covered in the economic context. [6] In other words, these areas of activity are considered as business cases, analyzed in terms of potential benefits for business from involving in them. [19] There is evidence that business training significantly strengthens students' confidence that sustainability is an integral part of the company's performance. [26] In this regard, we assume that graduates of MBA programs will be more prone to a rationally weighted choice in favor of implementing environmental projects, since such activities are an opportunity to increase both personal well-being and the company's performance.

This assumption is supported by the results of regression analysis of other researchers: according to them, companies, in which CEO has an MBA degree, demonstrate higher levels of both CSR [21] and environmental responsibility [30].

Hypothesis 5. CEO tenure is positively related to the company's investment level in environmental CSR projects.

We believe that with increasing the duration of the CEO's time record in the organization, his loyalty and commitment to the company increase. Thus, CEO eventually becomes more interested in its development and strengthening. Taking into account the fact that the implementation of CSR projects, in particular, environmental projects, can contribute to strengthening the reputation of both company and its manager [22], long-time directors, presumably, will be more inclined to invest in such projects. This assumption is confirmed by the results of the work of Slater and Dickson-Fowler [30], where a positive dependence of the level of environmental responsibility of the company and CEO tenure was indicated.

Methodology and data

The database of the Russian Union of Industrialists and Entrepreneurs was used as a source of data on companies' investments in environmental projects. Currently it contains 726 reports on 164 companies published since 2000. [35]

At the stage of collecting data on the volume of environmental investments, we faced a number of limitations, mainly related to missing data.

The latest available reports in the National Register are dated 2015. Initially, it was planned to collect data on all areas of CSR in order to further calculate the share of investments in environmental projects in the total volume of investments in CSR projects. However, in the process of selecting reports, it turned out there are many omissions in the specified report database. For example, the reports for 2013 and subsequent years are not available to at least a third of the companies in the Register. Moreover, the most recent publications of most of the above companies in the Register are dated 2008–2009, and in some cases — the beginning of the 2000s. That is, non-financial reports of more than 50 companies, for some reasons, have not been published in the Register for the last 8 years or more.

In most cases, the reports do not contain final amounts of investments in the CSR directions. To obtain the necessary amount, we made some calculations, such as adding up all the costs of individual projects. In addition, in some cases, the

amount was given in dollars. We then multiplied this amount by the average annual ruble / dollar rate in the corresponding year. When transferring amounts from the given currency (in our case — dollars) to the functional (rubles), depending on the category of the indicator, three different exchange rates can be used:

- exchange rate for incoming balances — the exchange rate at the end of the previous year (on the day preceding the reporting period);
- rate for restatement of closing balances — exchange rate at the end of the current year (as of the last day of the reporting period);
- rate for recalculation of "turnover" indicators for the period (revenues, profits, cash flows, etc.) — weighted average rate.

The values of the exchange rates above for 2015 are shown in Table 3.

The duration of most projects we considered exceeds 1 year. Proceeding from this, it can be assumed that the investments are more or less evenly distributed over time, while some of the funds are reserved before the beginning of a project. In this regard, when translating the sums of investments, the weighted average ruble / dollar rate for 2015 was used.

Table 3. Ruble / dollar exchange rates for conversion of indicators from presentation currency to functional currency

During the collection of the database, it also became clear that there is a lot of missing data within one report. However, the omissions basically concerned not environmental, but other categories of corporate social responsibility projects. For example, in many companies' reports on specific CSR areas, the main goal, and often — a fairly detailed description, names and the period in which the projects were implemented are indicated, though, there is no information on the amount of investments. Also, in some cases, the amount was specified indirectly, but there is no data for calculating the final investment amount. For example, the volume of investments in external training projects for JSC "SGChE" employees from 2013 to 2015 is indicated as a percentage of the wage fund. At the same time, information on the size of the wage fund in the report is missing for all three years.

A detailed study of non-financial reports resulted in a collected database of 53 companies from which, for a sample of 44 companies, information on the amount of investments in environmental CSR projects is available for at least one year. As can be seen in Figure 3, the main share of the sample is represented by companies in the chemical, oil and gas, extractive and energy sectors.

Companies included in the sample, the industries in which they operate, as well as their core business in OKVED. Codes were collected from the All-Russian Classifier of Economic Activities OK 029-2014 [36].

The volume of investments in environmental projects for 44 sample companies of corporate social responsibility is shown in Table 4.

The nominal values of investments in environmental projects of CSR are not representative themselves, first of all, for the reason that the sample companies differ in size. To ensure comparability of investment volumes, we calculated the ratio of investments in environmental CSR projects and one of the scale indicators for each company. The most commonly used indicators are those related to company's size: the amount of assets and revenue. Also, some authors use logarithmic values of these indicators. It was decided to alternately use all four options for the "company size" variable: the amount of assets, the amount of revenue, the natural logarithm of assets and the natural logarithm of revenue.

Personal characteristics of the general directors were originally collected from "Ruslana" database — the product of the Van Dyke Bureau, the largest rating agency. However, here we again faced a lot of constraints.

Firstly, there is a lot of missing data. Secondly, completed questionnaires, from which information on previous work experience, education, etc. can be obtained, are available only 4 out of 53 managers. Thirdly, the date of birth, which allows to set the variable "age", is known not for all of the executive directors. Fourthly, for some companies the tenure of the current CEO in this position is unknown. Here we also faced the following restriction: the directors of individual companies entered this position in 2016 or 2017, while the available data on the volume of investments is limited to 2015.

Later we completed the missing data from open sources, such as company websites and press publications. We did not manage to overcome only one limitation: in all companies in our sample, the post of CEO is occupied by men. This does not give us the opportunity to check the connection with gender.

A part of the collected database of characteristics of executive directors and companies is given in Table 5.

Thus, the analysis was based on cross-sectional data, i.e. data for one year for companies operating in different sectors of the economy.

The econometric analysis was chosen as a research method. A number of multiple regression models with different normalization of the dependent variable was tested.

So, the dependent variable in the first model (Figure 4) was the initial investment amount in environmental CSR projects. In addition to the characteristics of the general director, we controlled for company size and the industry average. The most common measures of company size are: assets, revenues, as well as natural logarithms of these indicators. We examined them in turn in different specifications.

Figure 4. The scheme of the model with the dependent variable "the volume of investments in environmental projects of corporate social responsibility"

In the second and third models (Figure 5), we tried to smooth out the differences between companies in size and calculated the ratio of investment volume to the size (assets or revenue) of the company.

Figure 5. The generalized scheme of models with the dependent variable "the ratio of the volume of investments in environmental CSR projects to the assets or revenues of the company".

We also attempted to define the dependent variable in a manner similar to the approach in one of the studies, namely: calculate deviations of the company's indicators from the industry average. We did this for all three dependent variable from previous models (Figure 6). Unfortunately, the results of testing such models were statistically insignificant.

Figure 6. The generalized scheme of models with the dependent variable "deviation of the values of the variable models 1–3 from the average branch value of this variable"

Results and limitations of analysis

Tables 6–7 illustrate the mathematical results of the regression analysis. Only the first model was statistically significant. At the same time, graphical analysis showed a possible logarithmic connection with the experience, so such specifications also were built. For model 1, both the results of testing the specifications with tenure and the logarithm of tenure are presented here. In general, the results of the corresponding specifications are similar.

Table 6. Results of the regression model with the dependent variable "the volume of investments in environmental projects of corporate social responsibility" (direct relationship with the variable length of service)

Table 7. Results of the regression model with the dependent variable "the volume of investments in environmental projects of corporate social responsibility" (logarithmic relationship with variable length of service)

We also note that one of Gauss-Markov basic conditions — unbiasedness of coefficient estimates — is not fulfilled, which indicates the possibility to interpret only the direction, and not the degree of interrelation of variables.

Like any research, this work was carried out within a number of restrictions, some of which were mentioned earlier:

- High heterogeneity of data. The bias of regression coefficients estimates results in the ability to interpret only the signs, but not the magnitudes of the coefficients. In other words, we can interpret the results of the analysis only in terms of the direction of the relationship.
- Limited sampling. Caused by the difference in companies' approaches to the provision of data on CSR. In other words, reports of a significant number of companies in the RSPP database, contain no numerical data on the volume of investments in CSR projects, including environmental. Some organizations do not consider publishing the actual numbers necessary due to the lack of clear requirements for the format of providing information.
- Possible additional distortion of data. Connected with the vagueness of formulations in a number of reports. For example, in most reports, the variable we are interested in, is named somewhat like "investments in the implementation of environmental measures" or "investments in environmental protection" and is contrasted with the indicator "compulsory contributions to environmental protection". In some cases, only "environmental protection costs" appear in the reports. At the same time, it is not completely clear whether these expenses are mandatory, voluntary, or the specified item includes aggregate information on both categories of expenditure.
- The impossibility of testing the hypothesis of a connection with gender. The reason is the absence of women in top management positions in sample companies. Perhaps this phenomenon is due to Russian specifics — however, the question goes beyond the current work and requires a deeper study.

Discussion and further directions of research development

In the course of this paper, we confirmed the hypothesis that there is a direct link between the level of environmental investments and the level of education of CEO, as well as a degree in the humanities. Also, the assumption of a negative relationship with the availability of technical education was confirmed. The results we obtained correspond to those in foreign studies.

Unusual in terms of analysis of previous work is the negative relationship with CEO tenure. Such a result can be explained, on the one hand, by the fact that directors with less experience can increase social capital (business ties) and strengthen their reputation through the implementation of environmental initiatives. On the other hand, long-term directors may be more skeptical about the feasibility of environmental projects, considering investing in them as a kind of "black hole": that is, believing that the invested funds will not reach their ultimate goal fully because of the practical impossibility to track the effectiveness of their implementation in the short term. In addition, more "experienced" directors can circumvent the requirements of environmental legislation through powerful business ties.

The obtained results, in our opinion, can be useful to the Board of Directors and to the shareholders who make decisions on the appointment of CEO, since they allow to take into account the potential impact of the characteristics of education on the future level of company's environmental responsibility at the stage of candidates consideration.

Secondly, there are opportunities to plan educational programs for general directors with a greater emphasis on the humanitarian aspects of company's activities (sustainability, ecology, etc.).

Thirdly, it is important for the state and society to understand the fact that larger companies and companies from "eco-dependent" industries are more actively investing in environment support.

Fourthly, the appointment of CEOs who have characteristics associated with higher levels of environmental investments, potentially can increase the investment attractiveness of the company. Note that today companies compete for investments in sustainable, environmental and social projects, including those in the impact-investment market.

Finally, the results obtained bring opportunities for future research, since we did not encounter similar works based on Russian companies data.

The analysis of previous works and available data indicates the need for a number of improvements to deepen the study, namely:

- Creating a more complete classification of environmental projects. This would give opportunities for analyzing the relationship between the manager's personal characteristics and the company's investments in various types of environmental projects.
- Completing an existing research database on the personal characteristics of Russian CEOs. This goal can be achieved through surveys, interviews, observations. This, in conjunction with the previous paragraph, could potentially increase the sample size for further research.

References

1. Arce, D.G.M. Conspicuous By Its Absence: Ethics and Managerial Economics // *Journal of Business Ethics*. – 2004. – 54 – pp. 261–277.
2. Armsworth, P.R., Armsworth, A.N., Comton, N., Cottle, P., Davies, I., Emmett, B.A., Fandrich, V., Foote, M., Gaston, K.J., Gardiner, P., Hess, T., Hopkins, J., Horsley, N., Leaver, N., Maynard, T., Shannon, D. The ecological research needs of business // *Journal of Applied Ecology*. – 2010. – Vol. 47, Issue 2 – pp. 235-243.
3. Banerjee, S.B. Corporate social responsibility: The good, the bad, and the ugly // *Critical Sociology*. – 2008. – Vol. 34, Issue 1 – pp. 51-79.
4. Bansal P., Clelland I. Talking trash: Legitimacy, impression management, and unsystematic risk in the context of the natural environment // *Academy of Management Journal* – 2004. – 47 – pp. 93-103.
5. Baumann-Pauly, D., Wickert, C., Spence, L.J., Scherer, A.G. Organizing Corporate Social Responsibility in Small and Large Firms: Size Matters // *Journal of Business Ethics*. – 2013. – Vol. 115, No. 4, Special Issue on Organizing CSR – pp. 693-705.
6. Benn, S., Dunphy, D. Action research as an approach to integrating sustainability into MBA programs // *Journal of Management Education* – 2009. – 23(3) – pp. 276-295.
7. Berrone, P., Cruz, C., Gomez-Mejia, L.R., Larraza-Kintana, M. Socioemotional Wealth and Corporate Responses to Institutional Pressures: Do Family Controlled Firms Pollute Less? // *Administrative Science Quarterly*. – 2010. – Vol. 55, No. 1 – pp. 82-113.
8. Blomback, A., Wingren, C. Challenging the importance of size as a determinant for CSR activities // *Management of Environmental Quality: An International Journal* – 2009. – 20 – pp. 255-270.

9. Chang, Y.-T., Danao, D. Green Shipping Practices of Shipping Firms // Sustainability. – 2017. – 9(5) – pp. 829-851.
10. Chrun, E., Dolsak, N., Prakash, A. Corporate Environmentalism: Motivations And Mechanisms // Annual Review of Environment and Resources. – 2016. – Vol. 41 – pp. 341-362.
11. Cottrell, S. Influence of sociodemographics and environmental attitudes on general responsible environmental behavior among recreational boaters // Environment and Behavior – 2003. – 35 – pp. 347–375.
12. de Groot, R.S., Alkemade, R., Braat, L., Hen, L., Willemen, L. Challenges in integrating the concept of ecosystem services and values in landscape planning, management and decision making // Ecological Complexity. – 2010. – 7 – pp. 260-272.
13. Dogl, C., Holtbrugge, D. Corporate environmental responsibility, employer reputation and employee commitment: an empirical study in developed and emerging economies // The International Journal of Human Resource Management. – 2014. – Vol. 25, Issue 12 – pp. 1739-1762.
14. Erhemjamts et.al. Corporate Social Responsibility and Its Impact on Firms' Investment Policy, Organizational Structure, and Performance // Journal of Business Ethics. – 2013. – Vol. 118, No. 2 - pp. 395-412.
15. Ewert, A., Baker, D. Standing for where you sit: An exploratory analysis of the relationship between academic major and environment beliefs // Environment and Behavior – 2001. – 33 – pp. 687-707.
16. Ezzi, F., Azouzi, M.A., Jarboui, A. Does CEO emotional intelligence affect the performance of the diversifiable companies? // Cogent Economics & Finance – 2016. – 4.
17. Fontaine, M. Corporate Social Responsibility and Sustainability: The New Bottom Line? // International Journal of Business and Social Science. – 2013. – Vol. 4, No. 4 – pp. 110-119.
18. Frank, R., Gilovich, T., Regan, D. Does studying economics inhibit cooperation? // Journal of Economic Perspectives – 1993. – 7 – pp. 159-171.
19. Giacalone, R.A., Thompson, K.R. Business ethics and social responsibility education: Shifting the worldview // Academy of Management Learning & Education – 2006. - 5(3) – pp. 266-277.
20. Hohnen, P. Corporate Social Responsibility: An Implementation Guide for Business. – International Institute for Sustainable Development, 2007. – 104 p.

21. Huang, S.K. The Impact of CEO Characteristics on Corporate Sustainable Development // Corporate Social Responsibility and Environmental Management – 2013. – 20 – pp. 234-244.
22. Jiraporn, P., Chintrakarn, P. How do powerful CEOs view corporate social responsibility (CSR)? An empirical note // Economics Letters. – 2013. – 119 – pp. 344-347.
23. Joseph, D.L., Newman, D.A. Emotional intelligence: An integrative meta-analysis and cascading model // Journal of Applied Psychology. – 2010. – 95 – pp. 54-78.
24. Kollmuss, A., Agyeman, J. Mind the Gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? // Environmental Education Research. – 2002. – Vol. 8, Issue 3 – pp. 239-260.
25. Manner, M.H. The Impact of CEO Characteristics on Corporate Social Performance // Journal of Business Ethics. – 2010. - Vol. 93, Supplement 1: ABOUT GLOBAL LEADERSHIP AND GLOBAL ETHICS, AND A POSSIBLE MORAL COMPASS – pp. 53-72.
26. Neubaum, D.O., Pagell, M., Drexler, J.A., Jr., McKee-Ryan, F.M., Larson, E. Business education and its relationship to student personal moral philosophies and attitudes towards profits: An empirical response to critics // Academy of Management Learning & Education – 2009. - 8(1) – pp. 9-24.
27. Report of The United Nations Conference on Environment And Development (Rio de Janeiro, 3-14 June 1992). Annex I: Rio Declaration on Environment and Development. URL: <http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm>
28. Sharfman M.P., Fernando C.S. Environmental risk management and the cost of capital // Strategic Management Journal – 2008. – 29 – pp. 569-592.
29. Sholarin, E.A., Awange, J.L. Environmental Project Management: Principles, Methodology, and Processes – Springer, 2016. – 406 p.
30. Slater, D.J., Dixon-Fowler, H.R. The Future of the Planet in the Hands of MBAs: An Examination of CEO MBA Education // Academy of Management Learning & Education. – 2010. – Vol. 9, No. 3 SUSTAINABILITY IN MANAGEMENT EDUCATION – pp.429-441.
31. Tang, Y., Qian, C., Chen, G., Shen, R., How CEO Hubris Affects Corporate Social (Ir)Responsibility // Strategic Management Journal. – 2015. – 36 – pp. 1338-1357.
32. Wiersema, M.F., Bantel, K.A. Top Management Team Demography and Corporate Strategic Change // The Academy of Management Journal. – 1992. – Vol. 35, No. 1 – pp. 91-121.

33. Wood, D.J. Measuring corporate social performance: a review // *International Journal of Management Reviews* – 2010. – Vol. 12, No. 1 – pp. 50-84.
34. An'shin V.M. Strategicheskie I organizatsionnye aspekty upravleniya proektnymi sistemami s uchetom kontseptsii ustoychivogo razvitiya [The strategic and organizational aspects of project management systems based on the concept of sustainable development]. *Rossiyskiy zhurnal upravleniya proektami* [Russian Journal of Project Management]. – 2013. – Vol 4, No.3, pp. 3–12.
35. Natsionalniy Registr i Biblioteka korporativnykh nefinansovykh otchetov [National Register and Corporate non-financial report library]. Rossiyskiy soyuz promyshlennikov I predpriniateley [Russian Union of Industrialists and Entrepreneurs]. URL: <http://www.rspp.ru/simplepage/157>
36. Obscherossiyskiy Klassifikator Vidov Ekonomicheskoy Deyatel'nosti OK 029-2014 (Red. 2) [Russian Classifier of Types of Economic Activity OK 029-2014 (Ver. 2)]. URL http://www.consultant.ru/document/cons_doc_LAW_163320/
37. Otchet o sotsial'noy otvetstvennosti i korporativnom ustoychivom razvitii PAO "Rosseti" 2015 [PJSC Rosseti Corporate social responsibility and Sustainability report 2015].
38. Otchet ob ustoychivom razvitii PAO ANK "Bashneft" 2015 [PJSC SOC Bashneft Sustainability report 2015]
39. Ecologicheskiy otchet OAO "Gazprom" 2013 -2014 [PJSC Gazprom Ecological report 2013-2014]