

**Proceedings of Voronezh State University** Series: Economics and Management

## Sustainable Development Analysis

Original article UDC 336.63 DOI: https://doi.org/10.17308/econ.2023.2/11096 JEL: C12; C51; G17; G31; G35

# ESG analytics in investment decision making: in search for material information

## O. V. Efimova<sup>1⊠</sup>

<sup>1</sup> Financial University under the Government of the Russian Federation,2 Krasnopresnenskaya emb., 103274, Moscow, Russian Federation

**Subject.** The article considers approaches to determining information that is material for corporate reporting and analyses the way they affect the usefulness of the information presented to stakeholders and required for decision making. The choice of a particular approach determines the identification and formulation of material topics, information sources, and the target audience. Users need to understand the principal approach of the company to determining material information in corporate reporting in order to avoid controversies and unreasonable decisions.

**Objectives.** The purpose of our study was to analyse approaches to defining material information for non-financial reporting and assess their impact on the usefulness of the information for stakeholders, primarily for investors.

**Research methods.** The research involved using methods of comparative, logical, and financial analysis. The materials analysed were standards of financial and non-financial reporting, including frameworks and guidelines. The analysis was performed in order to define the concept of material information and requirements for it as well as suggested methods of identification of material topics and parameters to be presented in corporate reports of organisations. The following standards were analysed: GRI standards; standards by the International Sustainability Standards Board (ISSB); standards of the Sustainability Accounting Standards Board (SASB); Corporate Sustainability Reporting Directive (CSRD), and recommendations on disclosure of financial consequences of climate change of the Task Force on Climate-related Financial Disclosures (TCFD). The analysis of information disclosure practices was performed based on the sustainability statements of leading Russian companies operating in oil and gas industry and in steel industry for 2019–2021. We also used data from ESG ratings and rankings of Russian rating agencies.

**Results and discussion.** The results of our study showed that while basic approaches to defining materiality suggested by leading international initiatives in corporate reporting have a lot in common, there are still crucial differences. The main difference is the focus on either the impact of external factors on the company (financial materiality) or the impact of the company on the society and environment (impact materiality). The understanding of these differences can help stakeholders to integrate the ESG information in the decision making process and use it to substantiate the decisions made. The problems revealed by the study, as well as the dynamic nature of the assessment of materiality of ESG data make it difficult to regulate the process of non-financial disclosure as compared to the disclosure of financial data. At the same time, the existing methods of determining material ESG information, taking into

<sup>🗭 🛈</sup> This work is licensed under a Creative Commons Attribution 4.0 International License

account industry specifics and based on the analysis of the organisation's activities, its context, and requirements of the stakeholders, make it possible to find a practical solution to the problem. **Conclusions.** The conclusions and results of the study can be used to develop recommendations on public non-financial reporting for Russian companies taking into account the requirements of stakeholders.

Keywords: materiality, ESG analytics, ESG information disclosure, decision making.

**For citation:** Efimova, O. V. (2023) ESG analytics in investment decision making: in search for material information. *Proceedings of Voronezh State University. Series: Economics and Management*. (2), 3–17. DOI: https://doi.org/10.17308/econ.2023.2/11096

#### Introduction

Investors and other stakeholders today have access to large amounts of information about various aspects of sustainable development. At the same time, ESG data is highly heterogeneous and includes annual corporate reporting, analytical reviews, ESG ratings and rankings, and other information, which is usually not structured.

The disclosure of information on sustainable development in corporate statements is associated primarily with the ecological and social requirements of the stakeholders<sup>1</sup> (WFE, 2018). A large number of studies (Eccles & Kastrapeli, 2017; Efimova, 2018; Khan et al., 2016) point out that such disclosures have financial consequences. Some authors argue that information disclosure as such can affect the financial performance of a company (Eccles & Kastrapeli, 2017; Freiberg et al., 2019; Grewal et al., 2021; Khan et al., 2016). Most institutional investors, in turn, report that they use ESG data mainly because this information is or will be important from the financial point of view (Amir & Serafeim, 2018). (Freiberg et al., 2019) explains how certain ESG aspects have become financially important and the way they affect the profitability and business valuation. Therefore, companies can benefit from disclosing corresponding ESG information, since it affects their attractiveness to investors (Endovitsky, 2014) and helps to obtain financing on more favourable terms<sup>2</sup>.

Companies which provide stakeholders with information concerning non-financial activities, including ecological and social impact or corporate governance, have to answer a key question: what information is material? (Edgley, 2014; Pyatov et al., 2018). The lack of an unambiguous definition of materiality gives companies freedom when making decisions about information disclosure. While disclosure requirements for financial statements are set out in financial reporting standards, there are no such standards for non-financial statements and companies assess the materiality of information themselves (Edgley, 2014). This, in turn, can lead to greenwashing, i.e. disclosure of mostly positive information about the ecological and social activities of the company without presenting complete information, including negative information indicating unsolved sustainable development problems.

Studies carried out by I. F. Popadyuk, M. V. Tabakova, and A. V. Vinogradova (Popadyuk et al., 2021) demonstrate that regular guidance and recommendations on disclosure of certain parameters are of critical importance and affect the completeness and relevance of the disclosed information. Specifically, recommendations published by the Bank of Russia<sup>3</sup> provide guidance for public companies as to the information about sustainable development that should be included in their statements. How-

<sup>&</sup>lt;sup>1</sup> World Federation of Exchanges. (2018). *WFE ESG Guidance and Metrics*.

<sup>&</sup>lt;sup>2</sup> UNCTAD. (2017). The role of disclosure in risk assessment and enhancing the usefulness of corporate reporting in decision-making. *United Nations Conference on* 

*Trade and Development Secretariat, 14595(August).* https://unctad.org/meetings/en/SessionalDocuments/ciiisard82\_en.pdf

<sup>&</sup>lt;sup>3</sup> Information letter No. IN-06-28/96 dated 16.12.2021on the recommendations for directors of public joint-stock companies to take into account ESG factors and sustainable development issues.

ever, the fact that the requirements of regulators do not provide clear criteria of materiality based on the operation conditions of reporting organisations results in that companies apply a formal approach to reporting, which reduces the usefulness of non-financial reporting (Freiberg et al., 2019).

Numerous studies demonstrate that publicly available ESG information does not completely meet the needs of investors (Amir & Serafeim, 2018; Jørgensen et al., 2022; KPMG, 2022). This information gap is explained by the fact that reporting organisations comply with the requirements for ESG data disclosure to various degrees and interpret the concept of material information in their own way. As a result, a large number of corporate statements present general information, often in the form of advertising (Madison & Schiehll, 2021). Consequently, at the moment investors do not have access to standardised data necessary to reveal ESG risks and opportunities, while organisations meet the minimal criteria of information disclosure.

There are several problems associated with using ESG data in the decision making process. The first one is the fact that disclosure of information about sustainable development is not mandatory. This allows organisations to decide for themselves whether to publish such statements and what kind of information to publish. The second problem is the existence of various standards and formats of non-financial reporting that companies can use. Some companies choose to publish Corporate Social Responsibility (CSR) reports, while others publish GRI sustainability reports or integrated reports.

The third problem is that external ESG data providers, including rating agencies, use different methodologies. Therefore, ESG ratings and rankings by different agencies are not compatible. This is not just a local problem. Researchers from other countries<sup>4</sup> also mention it. In this regard, it is important to note that the Bank of Russia is working on a model methodology for ESG ratings<sup>5</sup> aiming to unify them and make them more transparent.

Therefore, the authors and the users of non-financial statements face the following questions.

• How do we assess the materiality of the published ESG data?

• How do we work with inhomogeneous ESG data?

• How do we deal with the incompatibility of data and find the causes of inconsistencies?

In our study, we tried to answer these questions.

### Methods and data sources

The methodology of our study was based on a review of the existing literature and a comparative analysis of the standards of financial and non-financial reporting, including frameworks and guidelines, performed in order to define the concept of material information and requirements for it as well as suggested methods of identification of material topics and parameters to be presented in corporate reports of organisations.

Material topics were determined based on the analysis of the standards of financial and non-financial reporting (International Financial Reporting Standards, Guidance on Core Indicators for Sustainability and SDG Impact Reporting (UNCTAD), GRI Sustainability Reporting Standards; International Sustainability Standards Board (ISSB); Sustainability Accounting Standards Board (SASB); and recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)) as well as the results of the analysis of financial and non-financial statements of leading Russian companies operating in oil and gas industry and steel industry aimed at determining the best practices of disclosure of material information.

<sup>&</sup>lt;sup>4</sup> Huber, B. M.; Comstock, M.; Polk, D.; Wardwell, L. (2017). ESG Reports and Ratings: What They Are, Why They Matter. *Harvard Law School Forum on Corporate Governance*.

https://corpgov.law.harvard.edu/2017/07/27/esg-reportsand-ratings-what-they-are-why-they-matter/

<sup>&</sup>lt;sup>5</sup> http://www.cbr.ru/Content/Document/File/144085/ Consultation\_Paper\_17012023.pdf

## Results Approaches to defining the concept of materiality in financial and non-financial reporting

Regulators, investors, and other stakeholders force public companies all over the world to publish sustainability reports. The volume of such reports is growing every year and may vary from 100 to 300 pages. They cover various ecological and social issues, as well as corporate governance (ESG). Developers of the reporting standards point out that reporting organisations should only focus on material topics. However, at the moment there is neither unambiguous definition of the concept "material information", nor threshold values for determining material parameters.

The problem of disclosure of material information has been discussed a lot with regard to financial reporting (Pyatov et al., 2018). It is known that accounting (financial) statements must include material parameters. A parameter is considered material, if its non-disclosure can affect the financial decisions of stakeholders based on the information published in the statement. Every organisation determines the material parameters based on the assessment of each parameter, its nature, and specific situation in which the parameter occurs.

*Conceptual framework of financial reporting* gives the following definition of material information (a similar definition is found in the International Financial Reporting Standards (IAS) 1 *"Financial reporting"*)<sup>6</sup>: information is considered material, if omitting it or misstating it could influence decisions by users based on the financial information about a particular reporting organisation.

When determining the materiality of information, organisations should take into account reasonable expectations as to what effect this information can have on decisions of the main users of their financial statements based on these statements. (Art.11 of the PBU 4/99)<sup>7</sup>.

According to the project of the Federal Accounting Standard for State Institutions 4/2023 "Accounting (financial) statements", which is to replace the existing regulations PBU 4/99, information is considered material, if omitting it or misstating it could influence financial decisions of users based on the financial statement.

Therefore, the materiality of a reporting parameter is determined by a set of qualitative and quantitative factors.

Materiality of information in ESG statements is an issue, which at first seems to be thoroughly studied, similar to financial reporting. At the same time, the problem appears to be rather difficult taking into account all the different requirements and approaches to determining materiality: double materiality, financial materiality, stakeholder materiality, etc. (Table).

The definitions given in Table 1 demonstrate that the standards of financial and non-financial reporting are based on the idea that material information should be disclosed and presented to external users. The standards and guidelines presented in Table 1 consider materiality as a tool for determining the sustainable development topics that companies should include in their reports with regard to ESG risks and opportunities. However, the nature and effect of these risks (as a condition for their inclusion in reports) vary depending on the approach used in each particular standard. As a result, approaches to defining material information differ greatly on the conceptual level. The dual nature of the effect of the ESG factors is shown in Fig. 1.

Fig. 1 shows two conceptual approaches used in the standards and guidelines for non-financial reporting to determine material information: impact on the environment and impact on the company.

<sup>&</sup>lt;sup>6</sup> https://minfin.gov.ru/common/upload/library/2017/ 01/main/MSFO\_IAS\_1.pdf

<sup>&</sup>lt;sup>7</sup> Order of the Ministry of Finance of the Russian Federation No. 43n dated 06.07.1999 (ed. 08.11.2010, revised 29.01.2018) "On the Approval of the Regulations for Accounting and Reporting in the Russian Federation" (PBU 4/99)"

International stan- dards	Definition of materiality	Notes/ Approach to defining materiality
IFRS	Information is material if omitting, misstating or obscuring it could reasonably be expected to influence the decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity.	Financial materiality
ISSB	Sustainability-related financial information is material, if omitting, misstating, or obscuring it could reasonably be ex- pected to influence decisions that the primary users of gen- eral-purpose financial reporting make on the basis of that re- porting.	Financial materiality
IIRC/IR	A matter is material, if it could substantively affect the organ- isation's ability to create value in the short, medium, and long term.	Financial materiality
GRI	Material aspects are those aspects that demonstrate a signifi- cant economic, ecological, and social impact of the organisa- tion or those that significantly affect the judgement and deci- sions of stakeholders.	Materiality of the economic, ecological, and social impact of the organisation
CSRD	Information is material, if its disclosure is necessary for the understanding of the development, activities, and the state of the organisation, as well as for understanding the environ- mental, social, and employment impact of the organisation.	Double materiality
SASB	Financially material issues are issues which are likely to affect the financial position or the operating results of the company and consequently are the most important for investors.	Financial materiality
TCFD	The materiality of climate-related issues is determined in the same way as the materiality of any other information pub- lished in the statement.	Financial materiality

Definitions of material information in financial and non-financial reporting standards

The most famous and widely used non-financial reporting standards, Global Reporting Initiative (GRI) standards, define material topics as topics that represent the organization's most significant **impacts on the economy, environment, and people**<sup>8</sup>. According to the GRI standards, the materiality of the information in sustainable reporting does not depend entirely on financial consequences (Global Reporting Initiative, 2021). ESG topics defined as material cannot be given lower priority based on the fact that the company considers them financially irrelevant. The GRI standard "Material topics 2021" provides a stepby-step instruction for organisations on how to determine material topics (Fig. 2). It also explains how to use industry standards in the process. The standard also contains disclosures for organisations to report information about their process of determining material topics, their list of material topics, and how they manage each of their material topics.

Following the approach presented in Fig. 2, a reporting organisation should first perform a strategic analysis of its activities and the sustainability context, in which it interacts with its stakeholders. It should also overview the actual and potential economic, environmental, and social impacts directly associated with its activities, products, or services. Next, the organisation assesses the significance of its

<sup>&</sup>lt;sup>8</sup> https://www.globalreporting.org/media/zauil2g3/ public-faqs-universal-standards.pdf

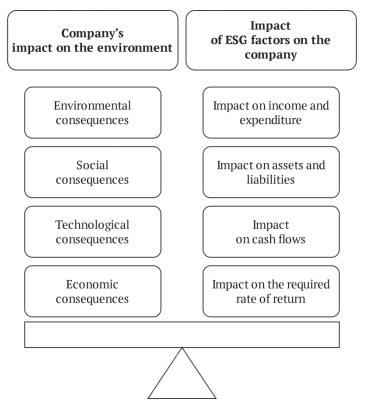
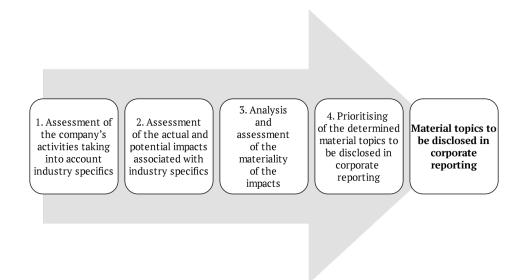


Fig. 1. Dual nature of the effect of the ESG factors on companies and their environment



*Fig. 2.* The process of determining material topics for sustainable reporting [compiled by the author based on GRI 3: Material Topics 2021]

identified impacts to prioritise them. In the final step, to determine its material topics for reporting, the organisation prioritises its impacts based on their significance in compliance with the applicable GRI Sector Standards. This allows the organisation to make sure that it did not miss any topics that could be material for its sector.

A different approach is used in SASB standards and TCFD guidelines. The Sustainability Accounting Standards Board (SASB) published systematic standards for ESG reporting for 77 in-

dustries. According to the SASB definition, information is material, if there is a "substantial possibility that disclosure of the omitted fact would have been perceived by a reasonable investor as a significant change to the "general set" of available information"9. As we can see, this definition is similar to the one given in the International Financial Reporting Standards and stresses the importance of meeting the needs of investors and other finance providers in information. The SASB definition of materiality only focuses on the non-financial information that is associated with financial results and the cash flows of the company. Therefore, this definition focuses on the external impact on the company and consequently considers only the financial consequences of ESG risks and opportunities relevant for the financial assessment of its value (Efimova, 2021). This approach to defining materiality allows investors to perform a qualified assessment of the way sustainability aspects can affect the cash flows and risks of the company, which, in turn, will affect their market value. Standards published by the International Sustainability Standards Board (ISSB) regarding the disclosure of sustainability-related financial information are also based on the concept of financial materiality.

Financial materiality of ESG factors varies greatly depending on the industry, because not all factors are significant for every enterprise and every sector. (Eccles, 2020) points out that materiality standards, and therefore corporate reporting standards, should be developed individually for each sector. Otherwise, information disclosure will be incoherent and even misleading (Eccles, 2020). The SASB Materiality Map is a popular tool, which is widely used to determine sustainable development issues that can affect the financial state and performance indicators of companies in particular industries<sup>10</sup>. Furthermore, financially material ESG issues can be company-specific even within one industry due to different strategies and business models. Finally, the aspects that are currently considered financially material can become immaterial over time. Therefore, materiality should be considered as an organisation-specific and time dependant concept (Freiberg et al., 2019).

We can thus say that there are two main approaches to defining the materiality of non-financial information in corporate reporting: financial materiality and materiality of environmental and social impact (as shown in Fig. 3).

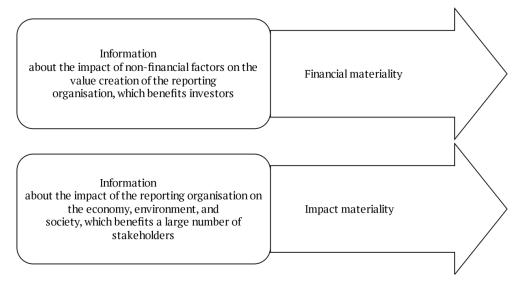


Fig. 3. Two approaches to defining the materiality of non-financial information

<sup>&</sup>lt;sup>9</sup> https://www.sasb.org/blog/materiality-the-word-that-launched-a-thousand-debates/

<sup>&</sup>lt;sup>10</sup> Sustainability Accounting Standards Board, Materiality Map, 2019, https://www.sasb.org/standards-overview/ materiality-map/.

We should note that the two approaches are complementary, rather than alternative. Indeed, the impact of the organisation and its activities on the economy, environment, and people can also have positive and negative consequences for the organisation itself. These consequences can be operational, reputational, and often financial (Edgley et al., 2015; Spiridonov, 2015). For instance, the use of nonrenewable energy sources has a negative impact on the environment and can increase the expense of the organisation due to environmental and social laws and regulations. It will thus have financial consequences for the organisation.

Understanding such impacts is therefore an essential condition for determining the issues that are financially material for the organisation. Furthermore, even if some topics are not financially material as of the date of the reporting, most economic and environmental impacts of the organisation are bound to become financially material over time. The dynamics in the assessment of factors that over time become material (or immaterial) for the company and its stakeholders is a matter of research. In particular, the dynamic nature of materiality is studied in (Freiberg et al., 2019; Kuh et al., 2020). Climate change is an example of an environmentally material issue which is also becoming financially material.

The requirement that companies must consider both approaches in their non-financial reporting is known as a concept of double materiality. This means that companies should report on their own environmental and social impacts (impact materiality) as well as on the financial risks that sustainability issues pose for them and their investors (financial materiality). This approach to materiality presumes a larger number of recipients of disclosed information because the company's impact is important for both investors, who want to assess the environmental and social consequences of their investment, and consumers, employees, and civil society in general. Let us note that the Corporate Sustainability Reporting Directive (CSRD)<sup>11</sup> is based on the principle of double materiality and implies that organisations must report on their impact on the environment and people as well as on the way sustainability issues affect the organisations.

Another approach based on stakeholder materiality defines materiality from the point of view of its significance for the company's stakeholders. The GRI reporting standard contains a definition of stakeholder materiality. The GRI 101 standard is based on the materiality principle which involves the economic, environmental, and social impacts of the organisation and its significant influence on the judgements and decisions of stakeholders.

According to this approach, the content of non-financial statements is determined during interactions with stakeholders. When choosing disclosure topics, companies consider the results of surveys and round table discussions with the corresponding groups of stakeholders in order to identify the information that stakeholders view as material.

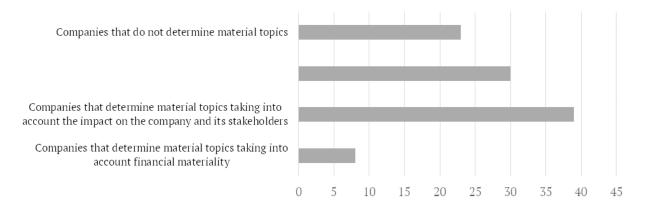
Dialogues and other forms of interactions with stakeholders are control tools that ensure understanding and thorough consideration of the inner perspective (i.e. the company's impact on the stakeholders). Such interactions result in the disclosure of non-financial information material for a particular organisation. This means that the industry specifics is also considered, because not every topic is equally material, and disclosure reflects their relative priority for stakeholders.

Results of international studies<sup>12</sup> (KPMG, 2022) demonstrated that most G250 companies (77 %) assess the materiality of disclosed information (Fig. 4).

The results of the survey demonstrated that 39 % of the leading international companies use

<sup>&</sup>lt;sup>11</sup> https://finance.ec.europa.eu/capital-markets-unionand-financial-markets/company-reporting-and-auditing/ company-reporting/corporate-sustainability-reporting\_en

<sup>&</sup>lt;sup>12</sup> KPMG. (2022) Big shifts, small steps. *Survey of Sustainability Reporting* 2022. https://assets.kpmg.com/content/dam/kpmg/sg/pdf/2022/10/ssr-small-steps-big-shifts.pdf



## The percentage of companies applying a particular approach to determining material ESG topics, % (2022)

*Fig. 4.* Approaches to materiality assessment used by leading international companies [compiled by the author based on KPMG: Survey of Sustainability Reporting 2022]

the principle of double materiality and consider the impact of the ESG factors on both the company and its stakeholders. 30 % determine material topics based on the impact on the company, its stakeholders, and the society in general (the most comprehensive approach). 8 % focus on the financial materiality of the ESG information entirely. 23 % do not have any specific criteria for determining the materiality of disclosed information. We can assume that G250 companies are under a lot of pressure from their stakeholders, who demand the disclosure of more information regarding the social impact of the companies, while disclosure of financial consequences for the companies is mandatory.

Therefore, we can conclude that although approaches to defining materiality suggested by leading international initiatives in corporate reporting have a lot in common, there are essential differences. The understanding of these differences can help stakeholders to integrate the ESG information in the decision making process and use it to substantiate the decisions made.

## Discussion

In order to determine what non-financial information is material for business decision making, both the reporting party and the users should understand the principles of determining material information and be able to assess and compare the materiality of ESG topics disclosed by a particular organisation and other companies operating in the sector.

Due to their complexity, diversity, and unpredictability of the consequences, sustainable development problems hinder the assessment of the materiality of disclosed information. Sustainable development problems are complex because they involve a large number of participants. For instance, the problem of waste cannot be solved by a single enterprise, because it requires the participation of all stakeholders, including the state, consumers, manufacturers, waste managers, and society in general. Therefore, materiality of a sustainability issue for a particular organisation depends on the way responsibility is distributed between the participants and whether the organisation can facilitate changes at either the individual or system level. These aspects are hard to determine, as they change depending on the context and time.

The consequences of sustainability problems are highly unpredictable. The existing uncertainty explains the urge to find short term solutions, while the creation of social and environmental materiality for a large number of stakeholders is a long term process. However, long term results are highly uncertain, which makes the final economic value unpredictable. Therefore, when assessing the materiality of ESG topics, companies prefer topics with a short term rather than long term impact.

Sustainability-related problems are of an evaluative nature, because stakeholders often have conflicting interests, which makes it impossible to consider them as being entirely economic, environmental, or social topics. Changes in the interests of stakeholders can make ESG topics more or less material over time.

Therefore, when assessing materiality, it is necessary to thoroughly analyse ESG problems in order to prevent selective information disclosure, which reduces the usefulness of the information for the users.

Of great interest are the results of the study performed by the RAEX agency<sup>13</sup>, which came to the conclusion that there is a large gap between the assessment of the climate policies adopted by companies and published in their statements and the implementation of such policies measured using "Effectiveness" indices. Climate-related corporate policies and documents demonstrated the highest level of development (over 66 %). The effectiveness index of disclosure of climate-related information was 63.4 %. The effectiveness of the actual measures aimed at climate protection was significantly lower: the experts estimated it to be about 43.5 %. The experts thus came to the conclusion that the Russian companies ranked as the most responsible with regard to climate issues, mostly focus on reporting and developing climate policies and plans rather than on their actual implementation. Our study revealed another problem associated with information disclosure. Even a high degree of transparency of corporate reporting cannot protect users from greenwashing, because material information is believed to be about policies and plans rather than actual measures. Although disclosure of the process of materiality assessment shows how companies determine their priority ESG issues, such assessment does not include information about the proposed solutions and their effectiveness.

While the internal analysis of materiality is of great importance for determining the ESG topics to be disclosed, users, and primarily investors, need to assess the effectiveness of ESG risk and opportunity management by particular companies (Fig. 5).

As we have mentioned above, ESG information disclosure is neither standardised nor mandatory for many companies, while external ESG ratings vary depending on the evaluator, which poses a significant difficulty for investors. It is important to obtain available information from several sources, including corporate reporting as well as external data, including ESG ratings, rankings, analytical reviews, etc. Data obtained from various sources ensures greater reliability of ESG information assessment. Therefore, it is essential to understand in what way sources of ESG data differ and how they can be used in the decision making process, including their integration in traditional financial analysis taking into account that ESG risks and opportunities can have the most significant impact on business and its short and long term stability.

#### Conclusions

The ability to determine material ESG issues and the reasons for such materiality is becoming of greater importance for both corporate governance and for ensuring the effectiveness of capital investment by external investors and other finance providers.

The choice of either a financial materiality approach or stakeholder materiality approach determines the rest of the process of information disclosure in corporate reporting, which becomes available to stakeholders. The choice of approach determines identification and formulation of material topics, information sources, and the target audience. Determining the materiality of information, companies face controversies, when certain ESG aspects are mate-

<sup>&</sup>lt;sup>13</sup> On the ranking of Russian non-financial companies paying the most attention to their climate impact (raex-rr. com)

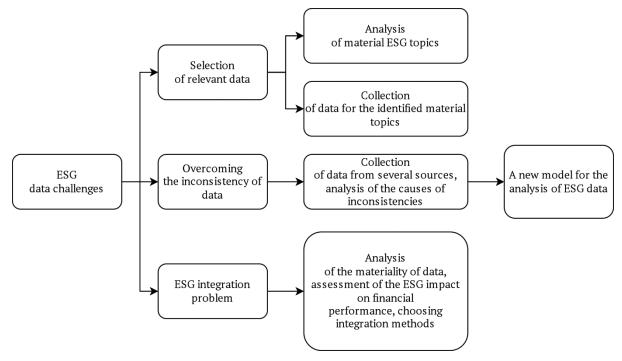


Fig. 5. ESG data analysis for investment decisions

rial from one point of view and immaterial from another. Following their short term objectives, companies and investors pay attention to the financial consequences of ESG decisions, which are manifested in the growth of expenditure on ecology and occupational safety and hinder the company's financial performance. At the same time, the assessment of the contribution to long term objectives of sustainable development included in most ESG ratings and presented in a large number of corporate statements encourages companies to take into account and disclose the aspects of their activities that have a social impact. Therefore, there is an ethical issue associated with determining the materiality of disclosed information.

This leads us to the conclusion that the assessment of materiality should be based on understanding of the problems companies face when pursuing sustainable development goals, as well as on the list of priority ESG topics. The main problem is that materiality be default depends on the context. This means that the degree of materiality of ESG aspects can vary depending on the industry and the company. The company management and stakeholders should assess materiality based on the company's context and determine specific risks and opportunities. For this, comprehensive methods of analysis of sustainable development are required.

The noted problems, as well as the dynamic nature of the assessment of materiality of ESG data make it difficult to regulate ESG information disclosure as compared to disclosure of financial information. It is harder to ensure the compatibility of ESG, because the dynamic nature of materiality shows itself at different moments and with different intensity. The industry the company is operating in is also of great importance. Nevertheless, there are methods that help to increase the substantiality of decisions regarding the materiality of ESG data for companies and investors.

Our study demonstrated that methods of data collection and analysis required to determine material ESG information need to be further elaborated, taking into account the complexity, uncertainty, and evaluative nature of sustainability issues. Considering the fact that materiality is a dynamic concept that can change over time, we should stress the possibility to use and elaborate modern analytical tools of ESG analysis, including scenario analysis and risk assessment methods.

#### References

Amir, A. Z., Serafeim, G. (2018) Why and how investors use ESG information: Evidence from a global survey. *Financial Analysts Journal*. 74 (3), 87–103. https://doi.org/10.2469/faj.v74.n3.2

Eccles, R. G. (2020) Dynamic Materiality And Core Materiality: A Primer For Companies And Investors. *Forbes*. 1–9. https://www.forbes.com/sites/bobeccles/2020/01/17/dynamic-materiality-and-core-materiality-a-primer-for-companies-and-investors/#1c-23b4a42e6a

Eccles, R. G., Kastrapeli, M. D. (2017) How Principle and Pragmatism Can Create Sustainable Value through ESG The Investing Enlightenment. *State Street*. 1–40.

Edgley, C. (2014) A genealogy of accounting materiality. *Critical Perspectives on Accounting*. 25 (3), 255–271. https://doi.org/10.1016/j.cpa.2013.06.001

Edgley, C., Jones, M. J., Atkins, J. (2015) The adoption of the materiality concept in social and environmental reporting assurance: A field study approach. *British Accounting Review.* 47 (1), 1–18. https://doi. org/10.1016/j.bar.2014.11.001

Efimova, O. V. (2021) Factors of sustainable development to be considered in the financial modelling of investment projects. Proceedings of Voronezh State University. Series: Economics and Management. 2, 99–111. (In Russian). https://doi.org/10.17308/ econ.2021.2/3381

Efimova, O. V. (2018) Integrating sustainability issues into investment decision evaluation. *Journal of Reviews on Global Economics*. 7 (7), 668–681. https://doi.org/10.6000/1929-7092.2018.07.61

Endovitsky, D. A. (Ed.) (2014) Analysis of the investment attractiveness of the firm. Moscow: Knorus. (In Russian).

Freiberg, D., Rogers, J., Serafeim, G. (2019) How ESG issues become financially material to corporations and their investors. *Harvard Business School*. 20–056, 36.

Global Reporting Initiative. (2021) Materiality and topic Boundary. *GRI*. https://www.globalreporting.org/ how-to-use-the-gri-standards/questions-and-answers/materiality-and-topic-boundary/%0Ahttps:// www.globalreporting.org/standards/questionsand-feedback/materiality-and-topic-boundary/

Grewal, J., Hauptmann, C., Serafeim, G. (2021) Material Sustainability Information and Stock Price

## **Conflict of Interest**

The author declares the absence of obvious and potential conflicts of interest related to the publication of this article.

Informativeness. *Journal of Business Ethics*. 171 (3), 513–544. https://doi.org/10.1007/s10551-020-04451-2

Huber, B. M.; Comstock, M.; Polk, D.; Wardwell, L. (2017) ESG Reports and Ratings: What They Are, Why They Matter. *Harvard Law School Forum on Corporate Governance*. https://corpgov.law.harvard.edu/2017/ 07/27/esg-reports-and-ratings-what-they-are-whythey-matter/

Jørgensen, S., Mjøs, A., Pedersen, L. J. T. (2022) Sustainability reporting and approaches to materiality: tensions and potential resolutions. *Sustainability Accounting, Management and Policy Journal*. 13 (2), 341–361. https://doi.org/10.1108/SAMPJ-01- 2021-0009

Khan, M., Serafeim, G., Yoon, A. (2016) Corporate sustainability: First evidence on materiality. *Accounting Review*. 91 (6), 1697–1724. https://doi.org/10.2308/ accr-51383

KPMG. (2022) Big shifts, small steps. *Survey of Sustainability Reporting 2022*. https://assets.kpmg. com/content/dam/kpmg/sg/pdf/2022/10/ssr-small-steps-big-shifts.pdf

Kuh, T., Shepley, A., Bala, G., Flowers, M. (2020) Dynamic Materiality: Measuring What Matters. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn. 3521035

Madison, N., Schiehll, E. (2021) The effect of financial materiality on esg performance assessment. *Sustainability (Switzerland)*. 13 (7). https://doi. org/10.3390/su13073652

Popadyuk, I. F., Tabakova, M. V., Vinogradova A. V. (2021) Materiality concept application in non-financial reporting. *Journal of Legal and Economic Studies*. 1, 144–147. (In Russian).

Pyatov, M. L., Solovey, T. N., Sorokina, A. S., Gusnieva, A. A. (2018) Non-financial reporting in the economy: History of 19th – early 21st century. *St Petersburg University Journal of Economic Studies*. 34 (3), 465–492. (In Russian). https://doi.org/10.21638/ spbu05.2018.306

Spiridonov, S. A. (2015) Applying the Concept of Materiality to Financial Statements – Proposed Changes from the IASB. *MSFO na praktike*. 12. (In Russian).

UNCTAD. (2017) The role of disclosure in risk assessment and enhancing the usefulness of corporate reporting in decision-making. *United Nations* 

Conference on Trade and Development Secretariat. 14595 (August). https://unctad.org/meetings/en/ SessionalDocuments/ciiisard82\_en.pdf%0Ahttps://  $unctad.org/meetings/en/SessionalDocuments/ciiis-ard 82\_en.pdf$ 

World Federation of Excanges. (2018) *WFE ESG Guidance and Metrics*.

**Olga V. Efimova**, Dr. Sci. (Econ.), Prof., Professor of Business Analysis Department of Financial University under the Government of the Russian Federation, Moscow, Russian Federation

E-mail: OEfimova@fa.ru ORCID ID: 0000-0002-3574-6916 Received 04.04.2023 Accepted 03.05.2023



**Вестник Воронежского государственного университета** Серия: Экономика и управление

#### Анализ устойчивого развития

Научная статья УДК 336.63 DOI: https://doi.org/10.17308/econ.2023.2/11096 JEL: C12; C51; G17; G31; G35

## ESG-аналитика в системе принятия инвестиционных решений: в поисках существенной информации

### **О. В. Ефимова**<sup>1⊠</sup>

<sup>1</sup> Финансовый университет при Правительстве РФ, Краснопресненская наб., 2, 103274, Москва, Российская Федерация

**Предмет.** В статье исследуются подходы к пониманию существенности информации корпоративной отчетности и анализу их влияния на достижение целей предоставления заинтересованным пользователям полезной информации, необходимой для принятия решений. Выбранная перспектива определяет отбор и формулировку существенных тем, источников информации и целевой аудитории. Пользователям необходимо понимать принципиальные установки компаний к определению существенности отчетной информации во избежание противоречий и принятия необоснованных решений.

**Цели.** Исследование принципиальных подходов к определению существенной информации нефинансовой отчетности и оценка последствий их влияния на полезность данной информации для заинтересованных пользователей, прежде всего инвесторов.

**Методы исследования.** В процессе исследования использовались методы сравнительного, логического и финансового анализа. В качестве основных объектов сравнительного анализа были выбраны стандарты финансовой и нефинансовой отчетности, включая фреймворки и руководящие основы, с целью определения понятия существенности отчетной информации и требований к ней, а также методов идентификации существенных тем и показателей для раскрытия их заинтересованным пользователям. Для целей сравнительного анализа были отобраны стандарты отчетности в области устойчивого развития (GRI); международные стандарты устойчивого развития (ISSB); стандарты учета в области устойчивого развития (SASB); Директива корпоративной отчетности устойчивого развития (CSRD), а также рекомендации по учету финансовых последствий климатических изменений Task Force on Climate-related Financial Disclosures (TCFD). Анализ практики раскрытий информации был выполнен на основании данных отчетов об устойчивом развитии крупнейших российских компаний нефтегазовой и металлургической промышленности за период 2019–2021 г. Кроме того, в процессе исследования были использованы данные ESG-рейтингов и рэнкингов российских рейтинговых агентств.

**Результаты и обсуждение.** Результаты исследования позволили выявить, что принципиальные подходы, заложенные в определение существенности ведущими международными инициативами в области корпоративной отчетности, имеют не только много общего, но и принципиальные различия, главным, среди которых является преимущественная ориентация на учет влияния внешних факторов на компанию (финансовая существенность) и влияния компании на общество и окружающую среду (существенность воздействия). Понимание данных различий позволит заинтересованным пользователям быть более подготовленными к практическому использованию ESG-информации в процессе обоснования принимаемых решений. Выявленные в ходе исследо-

🐵 This work is licensed under a Creative Commons Attribution 4.0 International License

<sup>©</sup> Ефимова О. В., 2023

вания проблемы оценки существенности ESG-информации и ее динамический характер создают объективные сложности для регулирования процесса подготовки нефинансовой отчетности по сравнению с раскрытием финансовых данных. Вместе с тем уже имеющиеся методы отбора существенной ESG информации, учитывающие отраслевую специфику и опирающиеся на результаты анализа деятельности организации, среды ее окружения и требований заинтересованных сторон, создают условия для практического решения данной проблемы.

**Выводы.** Выводы и результаты исследования могут быть использованы для разработки рекомендаций по формированию публичной нефинансовой отчетности российских компаний с учетом требований основных заинтересованных сторон.

**Ключевые слова:** существенность, ESG аналитика, раскрытие ESG-информации, принятие решений.

**Для цитирования:** Ефимова, О. В. (2023) ESG-аналитика в системе принятия инвестиционных решений: в поисках существенной информации. *Вестник Воронежского государственного университета. Серия: Экономика и управление.* (2), 3–17. DOI: https://doi.org/10.17308/econ.2023.2/11096

#### Конфликт интересов

Автор декларирует отсутствие явных и потенциальных конфликтов интересов, связанных с публикацией настоящей статьи.

**Ефимова Ольга Владимировна**, д-р экон. наук, профессор, профессор департамента бизнес-аналитики, Финансовый университет при Правительстве Российской Федерации, Москва, Российская Федерация

E-mail: OEfimova@fa.ru ORCID ID: 0000-0002-3574-6916 Поступила в редакцию 04.04.2023 Подписана в печать 03.05.2023