

[https://doi.org/10.52326/jss.utm.2023.6\(4\).01657:005.9](https://doi.org/10.52326/jss.utm.2023.6(4).01657:005.9)



INTEGRATED REPORTING QUALITY DETERMINANTS: THE CASE OF BASIC MATERIALS AND INDUSTRIAL COMPANIES

Ana-Carolina Cojocaru (Bărbieru)^{1*}, ORCID: 0000-0001-9271-5932,
Svetlana Mihaila¹, ORCID: 0000-0001-5289-8885,
Veronica Grosu², ORCID: 0000-0003-2465-4722

¹Academy of Economic Studies of Moldova, 61 Mitropolit Gavriil Bănulescu-Bodoni Str., Chisinau, Republic of Moldova

²„Stefan cel Mare” University of Suceava, 13 Univesitatii Str., Suceava, Romania

*Corresponding author: Ana-Carolina Cojocaru (Bărbieru), carolinabarbieru@gmail.com

Received: 11. 02. 2023

Accepted: 12. 10. 2023

Abstract. This study investigates the determinants of integrated reporting quality in the context of basic materials and industrial companies. The motivation stems from the need to enhance reporting quality and provide guidance to companies and academia. Specific hypotheses were formulated, including the influence of profitability, company size, age, and board size on integrated reporting quality. The research aims to offer insights into these factors' impact. The study employs a mixed-method approach involving quantitative regression analysis and qualitative content analysis. Findings reveal that profitability is not a significant determinant of integrated reporting quality, while larger companies exhibit higher-quality reports. Younger firms tend to present more elaborate reports. The study validates the role of board size in enhancing reporting quality. These results contribute to refining integrated reporting standards, enhancing transparency, and guiding strategic decisions for sustainable development.

Keywords: *corporate transparency, empirical analysis, integrated reporting factors, sustainability.*

Rezumat. Această cercetare investighează factorii determinanții ai calității raportării integrate în contextul companiilor din domeniul industrial și al producerii materialelor de bază. Motivația studiului provine din necesitatea de a îmbunătăți calitatea raportării și de a oferi îndrumări atât companiilor, cât și mediului academic. Au fost formulate ipoteze specifice, inclusiv influența rentabilității, dimensiunii și perioadei de activitate a companiei, și dimensiunea consiliului de administrație asupra calității raportării integrate. Scopul cercetării este de a oferi perspective cu privire la impactul acestor factori. Studiul utilizează o abordare mixtă care implică analiza de regresie cantitativă și analiza de conținut calitativă. Concluziile demonstrează că rentabilitatea nu este un determinant semnificativ al calității raportării integrate, în timp ce companiile mai mari prezintă rapoarte de calitate superioară. Companiile mai tinere tind să prezinte rapoarte mai elaborate. În același timp, studiul validează rolul dimensiunii consiliului de administrație în îmbunătățirea calității raportării. Aceste rezultate contribuie la consolidarea standardelor de raportare integrată, îmbunătățirea transparenței și orientarea deciziilor strategice pentru dezvoltare durabilă.

Cuvinte cheie: *transparență corporativă, analiză empirică, factorii raportării integrate, sustenabilitate.*

1. Introduction

The purpose of this research is to identify the factors influencing the improvement of integrated reporting quality in companies within the industrial sector. To achieve this goal, the following objectives have been established:

1. Analyzing and evaluating the quality of integrated reports within the selected sample.
2. Interpreting the obtained data and identifying potential determinants in enhancing the quality of integrated reports.

An analysis of a sample of 35 enterprises has been proposed, located across different continents (Africa, Asia, South America, Australia, and Europe), as indicated on the International Integrated Reporting Council (IIRC) website in the Company Search section. This research is significant for companies, stakeholders, as well as the academic environment.

In general, the results of previous research indicate that companies with higher return on equity (ROE) are more likely to make more extensive and detailed disclosures regarding their corporate social responsibility (CSR) practices [1,2].

These studies have found that higher ROE provides companies with greater available financial resources to invest in CSR projects and initiatives [3]. Furthermore, companies with increased ROE may enjoy a better reputation among investors and consumers, which can motivate them to engage in more comprehensive CSR disclosures [4].

Companies with higher ROE may exhibit greater transparency and responsibility in their activities, as their financial performance is more closely monitored by investors and other stakeholders [5].

However, there are also some studies that have provided contradictory results or have not identified a significant relationship between ROE and CSR disclosure [6]. This could be attributed to differences in methodologies and measurements used in various studies, or to the influence of other factors such as company size or industry.

In conclusion, despite some discrepancies in study results, it is generally observed that ROE has a significant influence on CSR disclosure. This suggests that strong financial performance can encourage companies to make more extensive disclosures regarding their corporate social responsibility practices.

H1. Company profitability has a positive influence on the integrated report quality

Studies in the field indicate that larger companies, with higher assets, revenues, and employee numbers, are more likely to report more extensive non-financial information [7]. This is primarily due to the greater financial resources and capacities they have available to develop and implement non-financial reporting systems, as well as to monitor and report performances in this area. Larger companies are more inclined to provide a more detailed and comprehensive presentation of CSR information compared to smaller ones [8]. In fact, there is a positive correlation between company size and the quality of CSR reporting, suggesting that larger-sized firms can offer a better presentation of their social responsibility practices [9]. As the size of a company increases, so does the pressure exerted on it by various stakeholders, such as investors, consumers, non-governmental organizations, and regulatory authorities, to be more transparent and report non-financial information in more detail [10]. Large companies face higher demand from these stakeholders to justify their impact on the environment and society, as well as to demonstrate their commitment to responsible practices. Larger entities enjoy greater visibility in the market and society at large, being

scrutinized by analysts and being more sensitive to their public image. Consequently, they have more potential users of the financial information they provide, which can lead to a greater demand for information and higher pressure to disclose additional information [11].

Moreover, research also reveals a positive relationship between company size and the level of transparency in non-financial reporting [12]. Larger companies, which have broader exposure and complex interactions with stakeholders, are more likely to adopt international standards and guidelines for non-financial reporting and to follow best practices in this field [13].

In conclusion, it can be inferred that the size of a company has a significant impact on the level of non-financial reporting. Larger companies are more inclined to report more extensive non-financial information due to their greater resources and higher pressure from stakeholders. This brings benefits, including enhancing trust and the company's reputation, as well as aligning with regulatory requirements and business environment expectations.

H2. Integrated report quality is positively influenced by the company's size

Various studies have offered diverse perspectives on the influence of a company's age on the quality of non-financial reporting [14]. Some studies suggest that older companies tend to have more well-established systems and processes, which can contribute to higher-quality non-financial reporting [15]. These companies may have accumulated more experience and knowledge over time, allowing them to better understand the significance of non-financial information and communicate it effectively [16].

On the other hand, there is research supporting that younger entities may exhibit higher levels of innovation and adaptability, which can translate into proactive and comprehensive non-financial reporting. These companies might be more attuned to emerging sustainability issues and have a greater inclination to experiment with new reporting practices. Moreover, the industry context can also play a role. Some studies have found that businesses operating in industries with greater environmental or societal impact are more likely to prioritize and offer better non-financial reporting. This can be attributed to stakeholder pressures, regulatory requirements, and specific reputational risks associated with these industries. It is important to note that the relationship between a company's age and the quality of non-financial reporting is complex and can be influenced by various factors such as organizational culture, stakeholder expectations, regulatory frameworks, and reporting standards. Further research is needed to fully understand the nuances of this relationship and its implications for corporate reporting practices.

Overall, the influence of a company's age on the quality of non-financial reporting remains a subject of ongoing study and debate, with findings varying based on specific contexts and the methodology of each study. There are also studies that have not identified a correlation between a company's age and the quality of non-financial reporting [17].

H3. The quality of the integrated report is positively influenced by the company's operating period

Perspectives on the influence of the board of directors' size on the quality of the integrated report can vary based on research and specific context. Some studies suggest that a larger board of directors can have a positive impact on the quality of the integrated report [18].

A larger board can bring diverse expertise and perspectives, which can contribute to a more comprehensive and well-grounded process of integrated reporting [19]. Different opinions and competencies can enhance oversight and accountability in the reporting process, ensuring that all relevant aspects of the company's performance are considered and communicated appropriately [20].

There are also studies supporting a negative relationship between the board of directors' size and the quality of the integrated report. These studies argue that a larger board might face difficulties in decision-making, coordination, and information processing, which can affect the quality and coherence of integrated reporting [21]. A smaller board, with focused and efficient decision-making processes, might be more effective in producing a high-quality integrated report.

Other research has found mixed or inconclusive results regarding the influence of the board of directors' size on the quality of the integrated report. These studies emphasize the importance of considering other factors such as board composition, independence, expertise, and the overall governance structure of the organization, which can interact with board size to influence reporting outcomes [22].

It's important to note that the influence of the board of directors' size on the quality of the integrated report is complex and context-dependent. The specific dynamics of each company, industry, and regulatory environment can play a role in shaping this relationship. Further research is needed to better understand the mechanisms and conditions under which the board of directors' size influences the quality of integrated reporting.

H4. The size of the board of directors has a positive influence on the quality of the integrated report

In conclusion, perspectives on the influence of the board of directors' size on the quality of the integrated report are varied, and results can vary based on the specific study and context.

2. Materials and Methods

The quantitative method was employed to achieve the objectives, involving the collection and analysis of integrated reports from 35 companies for the year 2022. The relationship between independent variables and the quality of integrated reports was tested using a regression model. The cross-sectional analysis was selected instead of a panel analysis, given the availability of fewer relevant data points for analysis and the low variability of the dependent variable over time.

The data used in this research were extracted from the integrated reports of 35 companies in the industrial and basic materials sector for the year 2022.

Table 1 illustrates the sample distribution across categories, based on information obtained from the International Integrated Reporting Council website. It can be observed that the distribution is nearly equal, with a slight predominance of companies in the basic materials sector.

Table 1

Distribution of the sample by company types		
IR categories	Frequency	
	Absolute	Relative
Basic materials	19	54.28571
Industrials	16	45.71429
Total	35	100

Source: Prepared by the authors.

Table 2 presents the distribution of the sample by continents. The companies included in the sample originate from 5 different continents, with a greater presence of South African enterprises due to the mandatory requirement of integrated reporting in that country. The integrated reports were downloaded from the respective company websites.

Table 2

Continent	Frequency	
	Absolute	Relative
Africa	17	48.57143
South America	1	2.857143
Asia	7	20
Australia	2	5.714286
Europe	8	22.85714
Total	35	100

Source: Prepared by the authors.

The regression analysis was performed to test the relationship between independent variables and integrated report quality (IRQ). Because the data available for analysis are limited and the variability over time reduced, cross-sectional approach was applied instead of a longitudinal analysis. The estimated regression model included the following variables.

$$IRQ = \beta_0 + \beta_1ROE + \beta_2S + \beta_3AGE + \beta_4BS + \varepsilon_i, \quad (1)$$

where:

IRQ – integrated reporting quality;

ROE – return on equity;

S – company size;

AGE – company age;

BS – board size.

The model used in this study to assess the quality of integrated reporting was built based on evaluation attributes in line with the IIRC principles. A visual content analysis was conducted to develop this model. Additionally, certain aspects of the dashboard proposed by Pistoni et al. [23] were incorporated, concentrating on four primary components, as: content, context, format, and audit and reliability.

The context assessment involved analyzing if reports featured an introductory section covering established objectives, motivations, manager identification, stakeholders, title, standards conformity, and director's commitment.. The presence or absence of each variable was evaluated, with one point awarded for the presence of the variable and 0 if it was absent. The maximum possible score was 7 points.

Content was evaluated based on its compliance with the IIRC framework requirements, which encompass eight elements and two fundamental concepts: strategy and resource allocation, governance, internal and external organizational environment, risks and opportunities, performance, perspectives, basis of presentation, business model, value creation, and capitals. Each of the ten variables received a score of 0 for lacking these aspects in the report and 1 for the presence and description of the above-mentioned elements and concepts. The maximum score for the content category was 10 points.

The form of the integrated report was evaluated by examining the number of pages, accessibility, and readability/clarity of the report, following the scoring proposed by Pistoni et al.[23], as shown in Figure 1. A score ranging from 0 to 5 was assigned, in accordance with the appreciation levels. The maximum score for the format category was 15 points.

It is important for an integrated report to be concise enough to be accessible and easy to read, without becoming overly long and tedious for readers. The ideal length of the report depends on the target audience and the essential information it needs to contain.

Score	0	1	2	3	4	5
Nr. of pages	Not applicable	>201 pages	200-151 pages	150-101 pages	100-51 pages	<50 pages

Figure 1. Form area assessment scoring by number of pages in report.

Source: According to the study of researchers Pistoni et.al. [23].

Score	0	Not applicable
1	Hard copy report	Accessibility of the report
2	PDF file on firm website only	
3	Contents of the report available on the firm website	
4	Interactive platform where the report can be browsed	
5	Possibility to create personalized report; interactive platform; report on social media	

Figure 2. Form area assessment scoring by accesibility of integrated reports.

Source: According to the study of researchers Pistoni et.al. [23].

The availability of the integrated report in various formats is extremely important to ensure accessibility and efficient use of the information contained in the report. Thus, the score that can be applied to different reports were established, according to the Figure 2. Offering the integrated report in different formats, such as digital format, printed format, or an accessible format for individuals with visual impairments, ensures that the information is accessible and usable by diverse categories of readers.

Presenting the report in digital formats allows readers to quickly access and navigate through the content using search, bookmarks, or internal links. It also provides the flexibility to access the report from various devices, such as computers, tablets, or mobile phones, for convenient use. Furthermore, publishing the report in different formats facilitates sharing and distribution of the report to various stakeholders, such as employees, investors, customers, or other organizations. This promotes transparency and effective communication of information. Additionally, online display of the report reduces reliance on printed copies and contributes to environmental conservation by saving natural resources and reducing waste.

The clarity of an integrated report is essential to ensure a proper understanding of the presented information. An integrated report should be written in a clear, concise, and easily comprehensible style. The use of accessible language is recommended, avoiding technical terminology that could be difficult to grasp for readers who are not experts in the specific field. Furthermore, it is necessary for the report to have a clear and coherent structure, employing relevant titles and subtitles to indicate each section and guide the reader through the content. The inclusion of graphs, tables, and other visual elements to illustrate and highlight important information is a crucial aspect for a readable report. Moreover, incorporating hyperlinks that redirect the reader to another page within the report or to an

external cited source is recommended. The reports were evaluated following the scoring system presented in Figure 3.

0	• Report quite not clear; absence of tables, figures, graphs, etc.
1	• Sparse inclusion of graphs and tables; qualitative approach; absence of the index, abbreviations table, etc.
2	• Sufficient utilization of graphs and tables, yet an index with minimal details.
3	• Graphs and tables enhance understanding; balance narrative with visuals; references avoid redundancy in other sections.
4	• Excellent graphs, detailed index, and external hyperlinks for references.
5	• Great layout, cohesive index, linked to narrative and visuals.

Figure 3. Form area assessment scoring by comprehensibility of the reports.

Source: According to the study of researchers Pistoni et.al. [23].

To assess the audit and reliability aspects, consideration was given to conducting an internal audit and third-party verification. A score of 0 was assigned in the absence of these elements, while a score of 1 was attributed if they were present. The maximum score was 2.

The final score representing the quality of the integrated report is the sum of scores for all four categories, with a maximum score of 34 points, Figure 4.

<p style="text-align: center;">Background</p> <ul style="list-style-type: none"> • Objectives • Motivations • Person in charge of IR • Document's beneficiaries • IR title • Consistency with disclosure standards • CEO letter <p>• Maximum score: 7 • Scores: 0 or 1</p>	<p style="text-align: center;">Contents</p> <ul style="list-style-type: none"> • Strategy and resource allocation • Governance • Overview and external environment • Risks and opportunities • Performance • Outlook • Basis of presentation • Business model • Value creation • Capitals <p>• Maximum score: 10 • Scores: 0 or 1</p>
<p style="text-align: center;">Form</p> <ul style="list-style-type: none"> • Number of pages • Accessibility • Readability/clarity <p>• Maximum score: 15 • Scores: from 0 to 5</p>	<p style="text-align: center;">Assurance and reliability</p> <ul style="list-style-type: none"> • Internal audit • External audit <p>• Maximum score: 2 • Scores: 0 or 1</p>

Figure 4. Overview of the scoring model.

Source: According to the study of researchers Pistoni et.al. [23].

3. Results and Discussion

Tabel 3 presents relevant descriptive statistics for the analyzed variables. These statistics provide a general overview of the distribution and characteristics of the variables within the data sample. For the dependent variable, CRI (Integrated Report Quality), it can be observed that the mean is 21.614, indicating a central value around which the data are concentrated. It can be noted that, on average, the quality of integrated reports is quite good. The standard deviation of 5.407 reflects the data dispersion around the mean and provides us with a measure of variability.

Table 3

Statistical Summary of Continuous Variables					
Variables	Obs.	Avg	St Dev	Min	Max
IRQ	35	21.614	5.407	12	30
ROE	35	11.23	15.55	-24.9	50.84
S	35	22.708	1.933	18.64	25.81
AGE	35	78.94	46.33	15	165
BS	35	10.2	2.153	6	15

Note: IRQ – integrated reporting quality; ROE – return on equity; S – company size; AGE – company age; BS – board size; Obs. – observation; Avg. - average; St Dev – standard deviation.

The reflected ROE values in the descriptive statistics provide relevant information about the financial performance of companies in the sample. The average ROE of 11.23 indicates the average value of return on equity for the analyzed companies. This can be interpreted as a measure of overall efficiency and profitability of these companies. The standard deviation of ROE at 15.55 gives us a measure of the dispersion of these values around the mean, indicating a greater variation in return on equity among the companies in the sample. The minimum value of -24.9 and the maximum value of 50.84 for ROE allow us to identify the companies with the lowest and highest ROE and evaluate the diversity of their financial performance.

The values of company size, expressed by the natural logarithm of total assets, presented in the descriptive statistics indicate a minimum value of 18.64 and a maximum value of 25.81, with an average of 22.708. The standard deviation of the size value is 1.933, indicating that most companies are of similar size.

The operating period of the analyzed companies varies from 15 to 165, with an average of 78.94 and a standard deviation of 46.33, indicating a greater variation in terms of company age within the sample. The board size recorded minimum values of 6 and maximum values of 15 points, with an average of 10.2 and a standard deviation of 2.15.

Table 4

Pearson correlation coefficients					
	IRQ	ROE	S	AGE	BS
IRQ	1.0000				
ROE	0.0296	1.0000			
S	0.3233	0.1808	1.0000		
AGE	0.3162	-0.1102	0.4177	1.0000	
BS	0.3832	0.1476	-0.0365	0.3240	1.0000

Note: IRQ – integrated reporting quality; ROE – return on equity; S – company size; AGE – company age; BS – board size.

Table 4 presents Pearson correlation coefficients between the analyzed variables. These coefficients provide information about the direction and strength of linear relationships between pairs of variables. The values of the Pearson correlation coefficients range between -1 and 1. A correlation coefficient of 1 indicates a perfect positive correlation, while a coefficient of -1 indicates a perfect negative correlation. A coefficient close to 0 suggests a lack of linear correlation between variables.

It can be observed that the Pearson correlation coefficients presented in the table have positive values for the associations between profitability, company size, company age, and board size. The strongest positive linear correlation is observed for the board size variable.

Table 5

The results of the linear regression

	Coefficients	Standard Error	P-value
IRQ	16.4689	13.1803	0.2211
ROE	-0.2155	0.4215	0.6129
S	0.1174	0.0639	0.0761
AGE	0.1047	0.5411	0.8480
BS	0.0462	0.0203	0.0303

Note: IRQ – integrated reporting quality; ROE – return on equity; S – company size; AGE – company age; BS – board size.

A multiple linear regression analysis was conducted to test the research hypotheses. Table 5 presents the results of the regression regarding the relationship between the quality of the integrated reports and the selected variables. The adjusted R-squared coefficient is 0.1729, meaning that approximately 17% of the variation in integrated report quality can be explained by the proposed model. The table presents the regression coefficients for all explanatory variables in relation to the dependent variable, integrated report quality. The results do not validate the first hypothesis, showing a non-significant negative correlation between ROE and the quality of integrated reports, with a p-value of 0.6129. The test/statistics results indicate that the proposed hypothesis was not validated at the specified p-value. Consequently, there is not enough statistical evidence to support the formulated hypothesis. These findings suggest that the quality of integrated reports presented by companies in the industrial and basic materials sector is not influenced by the level of profitability.

The second hypothesis was validated, indicating that companies in the industrial and basic materials sector of larger sizes are more likely to provide high-quality information in their integrated reports. The results reveal a positive correlation between company size and integrated report quality, with a p-value of 0.0761, at a significance level of 10%. The credibility, economic importance, and social impact of larger companies generate demands from stakeholders for more information regarding social responsibility practices.

The results obtained in the analysis contradict hypothesis 3, with a p-value below the significance level ($p=0.8480$). This finding indicates that there is no significant positive influence of one variable on the other. This outcome may be attributed to the tendency of younger organizations to craft more sophisticated reports in alignm.

The last hypothesis was confirmed, with results showing a positive relationship with a p-value of 0.0303. In this regard, it can be concluded that a board of directors composed of more members will influence the presentation of a high-quality integrated report. This

determining factor can be explained by the involvement of the expertise of several specialists, resulting in a readable and concise report.

4. Conclusions

Analyzing studies in the field of integrated reporting has led to the idea that there is a need to highlight the determinants that contribute to the improvement of integrated reporting quality. This aspect is crucial for companies that have not yet adopted integrated reporting. The uncertainty these companies face might hinder them from initiating integrated reporting, as they might not know what, how, and in what form they should present their reports to obtain benefits rather than the opposite. In this regard, the research aimed to provide an answer to companies and the academic environment regarding the factors that determine high-quality integrated reporting. Furthermore, this is the first study that investigated integrated reporting quality in the context of the industrial and basic materials sector.

Findings reveal that profitability is not a significant determinant of integrated reporting quality, while larger companies exhibit higher-quality reports. Younger firms tend to present more elaborate reports. The study validates the role of board size in enhancing reporting quality.

This research is subject to several limitations specific to its field of application. First, focusing on the industrial and basic materials sector limits the possibility of generalizing the obtained results to other sectors. Second, the surveyed sample is relatively small. In future research, it would be useful to expand the sample by focusing on various sectors to enhance the generalization of results. Finally, longitudinal studies could be considered to track the evolution of integrated reporting quality over time.

While integrated reporting encompasses financial and non-financial data, evaluating the latter's quality remains a persisting challenge. Subsequent research ought to prioritize developing techniques for assessing non-financial information's quality and its holistic impact on the overall quality of integrated reporting.

It is also important to assess the impact of integrated reporting quality on stakeholders' decisions and behavior. Future research can analyze how integrated reporting quality influences investment decisions, public perception, and relationships with the business environment.

Future research can contribute to the development and improvement of standards and guidelines related to integrated reporting. By evaluating current practices and identifying areas for improvement, researchers can contribute to the development of more effective and relevant guidelines to ensure integrated reporting quality.

Simultaneously, technological advancements like artificial intelligence and big data analysis can play a significant role in assessing integrated reporting quality. Future research should explore how these technologies can be used to enhance the collection, analysis, and presentation of information in integrated reporting.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Nawaiseh, M.E. Do firm size and financial performance affect corporate social responsibility disclosure: employees' and environmental dimensions?. *American Journal of Applied Sciences*. 2015, 12(12), pp. 967-981.

2. Iredele, O.O. Examining the association between quality of integrated reports and corporate characteristics. *Heliyon*. 2019; 5(7): pp. 1-8.
3. Gaio, C.; Henriques, R. Social responsibility and financial performance: the case of STOXX Europe Index. In *Corporate Social Responsibility*, Orlando B., IntechOpen, 2020, pp. 201-218.
4. Arshad, R.; Othman, S.; Othman, R. Islamic corporate social responsibility, corporate reputation and performance. *International Journal of Economics and Management Engineering* 2012, 6(4), pp. 643-647.
5. Veronica Siregar, S.; Bachtiar, Y. Corporate social reporting: empirical evidence from Indonesia Stock Exchange. *International journal of Islamic and Middle Eastern finance and management* 2010, 3(3), pp. 241-252.
6. Hidayat, W.W. The influence of size, return on equity, and leverage on the disclosure of the corporate social responsibility (CSR) in manufacturing companies. *International Journal of Education and Research* 2017, 5(8), pp. 57-66.
7. Lee K.H. Does size matter? Evaluating corporate environmental disclosure in the Australian mining and metal industry: A combined approach of quantity and quality measurement. *Business Strategy and the Environment* 2017, 26(2), pp. 209-223.
8. Yuan, Y.; Tian, G.; Yi Lu, L.; Yu, Y. CEO ability and corporate social responsibility. *Journal of Business Ethics* 2019, 157, pp. 391-411.
9. Malik, F.; Wang, F.; Naseem, M.A.; Ikram, A.; Ali, S. Determinants of Corporate Social Responsibility Related to CEO Attributes: An Empirical Study. *SAGE Open* 2020, 10(1), pp. 1-12.
10. Duran, I.J.; Rodrigo, P. Why do firms in emerging markets report? A stakeholder theory approach to study the determinants of non-financial disclosure in Latin America. *Sustainability* 2018, 10(9), 3111.
11. Frias-Aceituno, J.V.; Rodríguez-Ariza, L.; García-Sánchez, I.M. Explanatory factors of integrated sustainability and financial reporting. *Business strategy and the environment* 2014, 23(1), pp. 56-72.
12. Sierra-García, L.; García-Benau, M.A.; Bolas-Araya, H.M. Empirical analysis of non-financial reporting by Spanish companies. *Administrative Sciences* 2018, 8(3), pp. 29.
13. Spallini, S.; Milone, V.; Nisio, A.; Romanazzi, P. The dimension of sustainability: A comparative analysis of broadness of information in Italian companies. *Sustainability*, 2018,13(3), 1457.
14. Withisuphakorn, P.; Jiraporn P. The effect of firm maturity on corporate social responsibility (CSR): do older firms invest more in CSR?. *Applied Economics Letters* 2016, 23(4), pp. 298-301.
15. Tiron-Tudor, A.; Nistor, C.S.; Ștefănescu, C.A.; Zanellato, G. Encompassing non-financial reporting in a coercive framework for enhancing social responsibility: Romanian listed companies' case. *Amfiteatru Economic* 2019, 21(52), pp. 590-606.
16. D'Amato, A.; Falivena, C. Corporate social responsibility and firm value: Do firm size and age matter? Empirical evidence from European listed companies. *Corporate Social Responsibility and Environmental Management* 2020, 27(2), pp. 909-924.
17. Činčalová, S.; Hedija, V. Firm characteristics and corporate social responsibility: The case of Czech transportation and storage industry. *Sustainability* 2020, 12(5), 1992.
18. Vitolla, F.; Raimo, N.; Rubino, M. Board characteristics and integrated reporting quality: An agency theory perspective. *Corporate Social Responsibility and Environmental Management* 2020, 27(2), pp. 1152-1163.
19. Akhtaruddin, M.; Hossain, M.A.; Hossain, M.; Yao, L. Corporate governance and voluntary disclosure in corporate annual reports of Malaysian listed firms. *J. Appl. Manag. Account. Res* 2009, 7, pp. 1-19.
20. Chen, C.J.; Jaggi, B. Association between independent non-executive directors, family control and financial disclosures in Hong Kong. *J. Account. Public Policy* 2000, 19, pp. 285-310.
21. Alnabsha, A.; Abdou, H.A.; Ntim, C.G.; Elamer, A.A. Corporate boards, ownership structures and corporate disclosures. *Journal of Applied Accounting Research* 2018, 19(1), pp. 20-41.
22. Songini, L.; Pistoni, A.; Tettamanzi, P.; Fratini, F.; Minutiello, V. Integrated reporting quality and BoD characteristics: An empirical analysis. *Journal of Management and Governance* 2021, 25, pp. 1-42.
23. Pistoni, A.; Songini, L.; Bavagnoli, F. Integrated reporting quality: An empirical analysis. *Corporate Social Responsibility and Environmental Management* 2018, 25(4), pp. 489-507.

Citation: Cojocaru (Bărbieru), A.-C.; Mihaila, S.; Grosu, V. Integrated reporting quality determinants: the case of basic materials and industrial companies. *Journal of Social Sciences* 2023, 6 (4), pp. 6-17. [https://doi.org/10.52326/jss.utm.2023.6\(4\).01](https://doi.org/10.52326/jss.utm.2023.6(4).01).

Publisher's Note: JSS stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright:© 2023 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Submission of manuscripts:

jes@meridian.utm.md