

Squaring the Circle, or a Quantified Rating of ESG Reports

dr Tibor Hajdu¹, Dr János Lukács², Mrs. Reizinger Dr. Anita Ducsa³

Summary

Issue 2022/2 of Public Finance Quarterly highlights that investors, regulators, business partners and consumers evaluating the viability and long-term performance of businesses do not only rely on traditional business indicators/metrics, but also on non-financial – environmental, social and governance – risks and opportunities. In their decision-making processes, sustainability (ESG) aspects are increasingly emphasised (Boros et al, 2022). Continuing this thread of thought in an accounting approach, this paper draws attention to an underlying issue with the comparability of ESG reports, which is the absence of measurability and the lack of metric measurement systems. While financial statements are quantified mappings of economic events affecting a company, socio-political expectations and their impacts, which are formulated in ESG reports, are difficult to quantify and display in a measurable form. This research focuses on the quantitative and qualitative measurement, reliability and comparability of ESG indicators, data, ratings, scoring systems and metrics. A content analysis of domestic and international sustainability reports has been carried out and has led to the conclusion that the problem in assessing environmental, social and corporate governance performance is not to be found in the lack of data, but in the oversupply of tools and frameworks.

KEYWORDS: ESG indicators, sustainability reports, auditing

JEL CODES: G24, G28, M41, M42, Q01, 056

DOI: https://doi.org/10.35551/PFQ_2023_2_6

1 Corvinus University of Budapest, Master Lecturer, e-mail: tibor.hajdu@uni-corvinus.hu

2 CsC, Corvinus University of Budapest, professor, e-mail: janos.lukacs@uni-corvinus.hu

3 PhD, Corvinus University of Budapest, Associate Professor, e-mail: anita.ducsa@uni-corvinus.hu

Introduction

Sustainability and social responsibility are concepts used day by day. Climate change, which is increasingly noticeable, destabilised energy security, and an inevitable need for corporate social responsibility represent constant challenges. Economic operators need to adapt their operational frameworks to make them compatible with income-generating capacity and environmental and social requirements.

Companies are now required to communicate their actions for sustainability and their corporate social engagement in all forums to ensure that consumers, investors and financiers recognise their efforts. One way of channelling financial and capital flows towards sustainable investments is publishing non-financial information and ESG reports covering data for sustainability-, social-, and employment-related affairs, observing human rights, and issues of ethics and corporate governance.

How to measure such data in a reliable way? What system of indicators should companies use? Is it possible to verify and compare such data? Nowadays, hundreds of rating firms are working to assess the performance of companies in terms of environmental impact assessment (E), the handling of social issues (S), and governance processes (G) with a view to establishing some sort of ranking based on the outcome of that exercise. The research presented below focuses on measurements related to ESG indicators and their reliability, as well as the comparability of a set of indicators. The research results obtained are put in a new perspective by the fact that, on 21 June 2022, the Council of the European Union announced that the European Parliament and the Council reached a provisional agreement on *the corporate sustainability reporting directive*⁴ (hereinafter: CSRD).

Features of the ESG system

The term ESG first appeared in UN report titled «The Global Compact, Who Cares Wins» published in 2004⁵ (The Global Compact, Who Cares Wins, 2004). The report identifies three pillars for ethical financing: environmental, social and governance pillars (E: Environmental, S: Social, G: Governance). A set of indicators is assigned to each pillar to allow companies to be evaluated and their efforts and actions to be rated in terms of sustainable development and financial management. There is no explicit, declared and fixed catalogue system for such indicators, so they may be freely defined. The Environmental Pillar focuses on issues of the ecosystem such as climate change, air- and water pollution, deforestation and land use, as well as the

4 Draft Directive amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting.

5 The report was developed with the involvement of twenty financial institutions from nine countries, and the main objective was to develop guidelines and recommendations allowing for environmental, social and corporate governance issues to be better integrated into asset management- and securities market activities, as well as related research.

loss of biodiversity. The Social Pillar includes aspects relating to the protection of human rights, gender equality policy, labour standards, public health, safety at work, and income distribution. The Governance Pillar includes assessment aspects such as the management- and governing bodies of companies, the issue of board independence and shareholder rights, control procedures, bonuses for managers, and issues of competition law and legality.

Investment intensity for investments taking into account ESG aspects is on the increase, because circular economy, now replacing the linear economic model, prioritises the dimensions of sustainability and recyclability, thereby determining the long-term horizon for capital investments.

However, a standard set of ESG metrics is lacking and there is currently no comparable ESG reporting system. Each company that produces such a report defines for itself what it considers important from an ESG perspective. There is no uniform measurement system for individual factors, nor are there comprehensive industry-wise measurement scales. ESG factors cannot be catalogued: they are constantly changing because they need to respond to any changes in the environment or the economy. Companies issuing ESG reports compile their reports by themselves, and investors identify investments to match their values by themselves.

Diversity in ESG indices and differences in methodologies

The term “index” refers to some kind of rating or ranking. Indices (Moody’s, S&P 500, MSCI, etc.) are a key infrastructure for investors, who must continuously show their performance for clients, regulators, and other stakeholders, as it may be the basis for their investment strategy and decisions (Pagano, Sinclair & Yang, 2018). ESG rating is a scoring framework for measuring and assessing publicly listed or privately owned companies, or industries, or countries for their performance in terms of ESG factors, and then assigning a combined ESG score to their performance. ESG factors are put into a metric system, and then produce a consolidated, composite score (“ESG index”). Using the ESG index as a basis, the investor market will then evaluate and compare corporate ESG strategies and their expected financial and capital market impacts, and, depending on its preferences, decide whether to invest and undertake the underlying ESG risk exposure.

The first index with an ESG content was published in 1990⁶. Today, more than one thousand ESG indices are published by financial services-, investment-, research-, and rating firms, as well as various stock exchanges. No consolidation has yet taken place among the growing number of index providers, despite some acquisitions and mergers; however, based on their number of researchers, global coverage, and

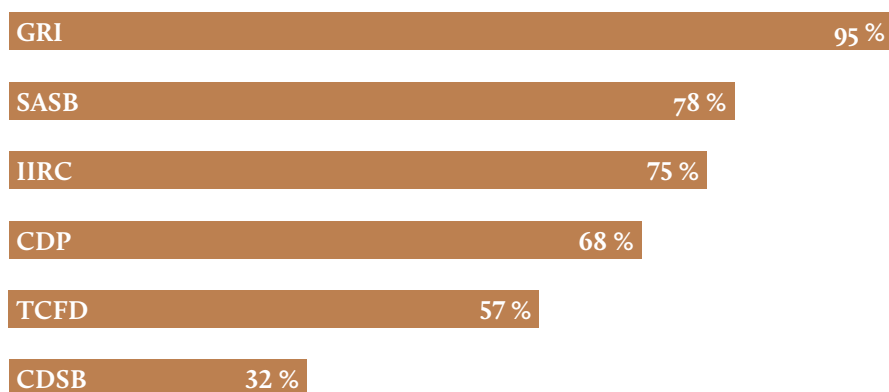
6 The first index with ESG content was founded by Amy Dominy and known as Domini 400 Social Index. The index was first published by the rating firm KLD Research & Analytics Inc., that company was later acquired by MSCI, and the index is still published by MSCI, under the name MSCI KLD 400 Social Index.

product portfolio, some rating companies have become the de facto organisations determining ESG standards. These reference points are also important for companies, as they may change the content of their reports depending on their ESG performance – the metrics set by ESG index providers.

Many researchers have proven that a positive correlation may be shown between indicator components of ESG pillars as well as corporate values and corporate performances (stock prices) (Derwall, 2005, Edmans, 2011, Friede, 2015, Devalle, 2017). ESG ratings have an impact on attracting new investors, as well as on the cost of capital and access to capital.

ESG reports are produced by companies at their own discretion, by taking certain recommendations into account, at most. Such reports (typically annual sustainability reports) are prepared based on voluntary disclosures, or informal responses to surveys (questionnaires) from rating firms. For each recommended disclosure, the proportion of stock exchange reporting guides in which it is referenced is shown in Figure 1.

Figure 1: For each ESG disclosure standard and guideline, the proportion of the 63 stock exchange reporting guides in which it is referenced



Source: SSE (Sustainable Stock Exchange Initiative), ESG Disclosure Guidance Database <https://sseinitiative.org/esg-guidance-database/> – Download date: 24 April 2022

ESG rating firms

ESG rating providers play an increasingly important role in investment processes by assessing companies against a set of metrics. Investors' movements show that passive investments and sustainability needs are slowly gaining ground. Increase in demand is controlled by the changing nature of risks affecting businesses and a growing investor awareness of the financial implications of such risks, especially for climate-related financial risks.

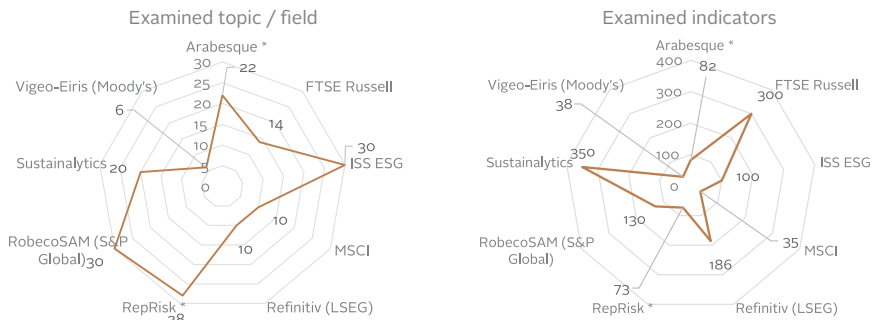
Rating agencies choose from among various ESG metrics subject to their own purposes, weighting such metrics differently. ESG rating providers use a very wide range of data, such as carbon emissions or even gender diversity, and some providers assign ratings to companies based on hundreds of data.

Sustain Ability has published its Rate the Raters reports on the quality of ESG rating providers since 2010. Differences between providers have mainly been due to measurement, i.e. the metrics used to assess different ESG indicators. The second factor is differences in scope, i.e. what attributes are assessed. The third one is weighting, i.e. the level of materiality that each rating provider assigns to each factor.

The basis of the research: the problem with measurability

The measurability of ESG means a quantitative measurement of the indicators for each of the (environmental, social and governance) pillars, and ESG rating means the placement and scaling of an entity in a common coordinate system according to homogeneous aspects. The hypothesis of an efficient capital market assumes that information should provide fast and reliable signals to enable investors to decide on a capital allocation that is efficient and rational for them. And disclosures of information – in particular, financial and accounting statements reflecting business and economic events – should be based on standards and guidelines that make them comparable and measurable on a common scaling system. However, for the indicators of the E, S and G pillars and for their disclosure, there are no standards yet to allow for comparison and scaling.

Figure 2: Number of ESG themes and indicators examined by each rating agency (own editing)



Source: <https://www.msci.com>, <https://www.environmental-finance.com>, <https://www.refinitiv.com>, <https://www.sustainalytics.com>, <https://www.issgovernance.com>, <https://www.spglobal.com>, <https://content.ftserussell.com>, <https://www.reprisk.com>, <https://arabesque.com> – Date of download: 2022. 05. 07.

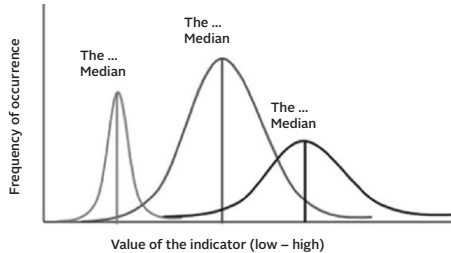
Some of the ESG indicators cannot even be interpreted in the context of traditional financial analysis. They are not directly measurable in numerical terms, because they formulate norms of behaviour or action. ESG factors include a number of issues that are not part of traditional financial analysis but may be relevant for investments or in terms of materiality. In addition, the number of areas and indicators examined in pillars E, S and G differs significantly, as shown in Figure 2.

A measurability problem is posed by the inconsistency of data and that of the ESG factors measured, because companies responding to the same questions – about, for example, the health status of their employees, or the composition of their corporate management – will use different indicators and metrics. Three problems may emerge with measurability:

- ▶ not all companies use the same indicator (metric) to measure a question;
- ▶ companies apply different metrics for the same question;
- ▶ there is no data to compare.

If companies use different indicators and/or metrics to measure the same question and such metrics are not comparable, then responses to the same question will differ in terms of standard distribution, standard deviation, mean value, as well as maximum and minimum values (see: Figure 3). Thus, data will become inconsistent, making ESG performance assessments impossible to interpret (Kotsantonis & Serafeim, 2019).

Figure 3: Possible standard deviations of ESG metrics for the same question



Source: own editing based on Kotsantonis & Serafeim (2019)

Comparability and measurement gaps

A critical point in ESG rating is the definition of a reference point for indicators (the benchmark), which may be a measurement level within an industry group, or a universal, absolute measurement level. If an ESG indicator assigns the highest performance score to the best-performing company and the lowest one to the worst-performing company, the rest of the companies will spread in the range between the two scores. This is a critical point in relation to differences in ESG ratings, as the designation of the best and the worst performances will determine the benchmarks for scores of the sample. A reference range can be constructed, if the elements of the sample represent a universal industry group, in which case a metric-based

measurement of ESG performance will inevitably involve distortions (for example, gas and oil companies will be grouped together with food and tech companies). A more realistic comparison is allowed by a performance indicator for a group within a homogeneous industry, but only if the activities of the given company have a clean profile and are not characterized by a diversified portfolio (Kotsantonis & Serafeim, 2019). ESG rating agencies may measure the same concept in different ways, and ESG rating methodologies may compensate for a low score assigned to one area by assigning a high score to another one (Escrig-Olmedo et al., 2019, Windolph, 2011, Delmas & Blass, 2010). In the same category, a lower score and a higher one may offset each other and be given the same score as the average rating of the two factors. ESG ratings communicate ratios and descriptions, and there are no overall scores that represent corporate sustainability performance in a single score (Escrig-Olmedo et al., 2019, Liern & Pérez-Gladish, 2018).

Regulations and Accounting

In the field of accounting, the European Union focuses its most important regulatory element to accountability, thereby encouraging the flow of financial resources towards sustainable activities. The EU's Non-Financial Reporting Directive (NFRD) requires public interest entities with more than 500 employees to prepare a sustainability report. Directive (2014/95/EU) provides clear guidance for all, and represents greater transparency and accountability on social and environmental issues.

The rules of NFRD will be superseded by the CSRD directive, which is currently awaiting adoption. Many stakeholders considered that the earlier term “non-financial” was inaccurate, as it implied that the information in question was not of financial significance. As mentioned before, such information is of increasing financial importance. This fact has led to the new directive now using the term “sustainability information”. The CSRD Directive will modify EU law pertaining to certain large companies and small and medium-sized enterprises with a view to requiring them to disclose information about their operations, and actions addressing social and environmental challenges. For companies already subject to the NFRD, applying the CSRD will be mandatory as of 1 January 2024. For other large companies, the effective date of application is 1 January 2025; and for listed small and medium-sized enterprises, small and non-complex credit institutions, and captive insurance undertakings, the requirements will apply from 1 January 2026.

The CSRD Directive would, *for the first time, introduce a general EU-wide auditing (assurance) requirement* for sustainability reporting information, as it stipulates that sustainability information, like financial information, must be audited and certified by statutory auditors. This clearly means that the importance levels of the two types of reports will be aligned. After examining international auditing standards, one can clearly conclude that they have not even been able to follow earlier requirements related to the NFRD. The NFRD Directive had stipulated the requirement that auditors must verify the fact whether a company has provided non-financial information.

According to the currently effective standard, ISA 720, – titled ‘The auditor’s responsibilities relating to other information in documents containing audited financial statements’ –, ‘the auditor’s opinion on financial statements does not apply to other information, nor does this International Standards on Auditing require the auditor to obtain audit evidence beyond anything necessary to form an opinion on the financial statements’ (ISA 720).

The cited standard requires the auditor to read non-financial information and consider whether there is a material inconsistency between the other information and the financial statements, or whether there is a material inconsistency between the other information and the auditor’s knowledge obtained in the audit. In relation to reporting obligations, the standard requires the auditor to include a section on the other information, but also to state that “the auditor’s opinion does not cover the other information and, accordingly, the auditor does not express (or will not express) an audit opinion or any form of assurance conclusion thereon” (ISA 720).

According to some indications, the IAASB (International Auditing and Assurance Standards Board) will be required to follow the European Union regulation related to non-financial reporting, which is currently still being formed. This statement is strongly supported by the fact that the CSRD directive allows Member States to open a market for sustainability assurance services to so-called *independent assurance services providers (IASP)* and allows Member States to allow auditors other than statutory auditors to issue a sustainability assurance opinion.

Describing the research

The methodologies of the research consisted primarily of the study of theoretical sources, analysis of indicator databases, comparative analysis, synthesis, and then content analysis based on set theory and mathematical logic.

The primary objective was to analyse the accounting reliability of the identified and measured metrics.

According to the hypothesis set, published data do not allow for comparisons between companies in terms of ESG performance, and data presented in ESG indicators often fail to meet the concept of measurability and they cannot be collected from a closed system of accounting records.

The purpose of accounting statements is to give a reliable and fair view of the assets-, financial- and income situation of a company. If, by law or voluntarily, the reporting obligation of a company is supplemented by a sustainability-, social responsibility-, or ESG report, then naturally a reliable and fair view is also expected there.

The second objective of the research was to assess whether the ESG metrics currently in use can meet the criterion of comparability. If one wants to measure, assess and rank companies in terms of their ESG performance, then such measuring should be carried out on the same basis, ensuring comparability and relevance.

The research was based on ESG metrics from two authoritative organisations. One of them is NASDAQ (National Association of Securities Dealers Automated Quotations), which is a stock exchange in the United States of America. The other organisation is the World Bank; the data framework used and recommended by it provides information on 17 key sustainability topics, as summarised in Table 1.

Table 1: Sustainability themes as proposed by the World Bank (own editing)

Environment	Society	Governance
Emissions and pollution	Education	Human Rights
Natural Capital	Employment	Management Efficiency
Energy Usage and -Security	Demography	Stability and Proper Operations
Environmental/Climate Risk	Inequalities	Economic Environment
Food Safety	Health	Gender Equality
	Freedom of Access	Innovation

Source: [Sovereign ESG Data Methodology](#) | [Sovereign Environment Social Governance Data \(World Bank\)](#)

The World Bank’s framework organises data into themes it believes are key for financial sector actors to consider when assessing investments for their contribution to sustainable development. Under these key themes, more than 80 indicators are defined, and their evaluation would have diverted the focus of the research. Therefore, a decision was made in favour of the data set used and recommended by NASDAQ, as nearly all recommended metrics are also featured in the World Bank data set.

NASDAQ has had a sustainability programme for many years. This programme is used by listed companies, investors, organisations setting rules and standards, and other exchanges as a vehicle for their sustainability analysis teams to keep in contact. The analysis presented was prepared on the basis of the NASDAQ Reporting Guide, which has been severally improved since its release in 2017. The basis for measurements is summarised in Table 2.

Table 2: The indicators used by NASDAQ

 Environmental Information (Environmental - E)	 Social Information (Social - S)	 Governance Information (Corporate Governance – G)
Greenhouse Gas Emissions	CEO Pay Ratio	Board Diversity
Emissions Intensity	Gender Pay Ratio	Board Independence
Energy Usage	Employee Turnover	Incentivised Pay
Energy Intensity	Gender Diversity	Collective Bargaining
Energy Mix	Temporary Worker Ratio	Supplier Code of Conduct
Water Usage	Non-Discrimination	Ethics & Anti-Corruption
Environmental Operations	Injury Rate	Data Privacy
Climate Oversight	Global Health & Safety	ESG Reporting
Climate Oversight / Management	Child & Forced Labour	Disclosure Practices
Climate Risk Mitigation	Human Rights	External Assurance

Source: [2019-ESG-Reporting-Guide.pdf \(nasdaq.com\)](#)

Measurability and verifiability

The indicators recommended by NASDAQ as priorities for the ESG index were examined. The concepts of measurability – real and reliable measurability – and verifiability were examined. Figure 4 shows the questions for which answers were sought.

Figure 4: What does the ESG indicator show? (own editing)

What does the indicator show?		
Why is it measured?	How is it measured?	
Why is it disclosed?	How is it disclosed?	Link to existing frameworks

The responses for three indicators – selected subjectively – are shown in Table 3.

Table 3: What, how and why is it measured? (own editing)

Questions	Emissions intensity	Global health and safety	Ethics and anti-corruption
What does the indicator show?	Total greenhouse gas emissions per factor.	Does your company follow an occupational health and/or global health and safety policy?	Does your company follow an ethics and/or anti-corruption policy? What percentage of your employees have formally certified their compliance with the Regulations?
Why is it measured?	The indicator puts the resource efficiency of the organisation in context as compared to the economic value created by it.	The indicator shows the extent to which the workforce is aware of the corporate objectives that define health and safety management principles.	This metric sheds light on corporate values and commitment to high standards of ethical behaviour, demonstrates efforts made in good faith to prevent unlawful acts, and may reduce the financial risks associated with government fines.
How is it measured?	Annual emissions is divided by different amounts of economic output.	Companies that create, publish and regularly update a policy in this area will answer in the affirmative.	Companies that create, publish and regularly update a policy in this area will answer in the affirmative.
Why is it disclosed?	It serves as a benchmark for competitiveness, a risk management indicator, and a KPI for economic efficiency.	It is used for assessing the effectiveness and scope of risk management.	It is used for assessing the effectiveness and scope of risk management.
How is it disclosed?	As a number, and later as a trend (if possible, compared to historical and industry averages).	As a text, with appropriate reference to public content, if any.	As a text, with appropriate links to public content.
Link to existing frameworks	<ul style="list-style-type: none"> ▶ GRI: 305-4 ▶ SDG: 13 ▶ UNGC: Principles 7 and 8 ▶ SASB: General problem / greenhouse gas emissions, energy management 	<ul style="list-style-type: none"> ▶ GRI: 103-2 (See also: GRI 403: Occupational health and safety, 2018) • SDG: 3 ▶ SASB: General problem/ health and safety of workers 	<ul style="list-style-type: none"> ▶ GRI: 102-16, 103-2 (See also: GRI 205: Anti-corruption 2016) ▶ SDG: 16 ▶ UNGC: Principle 10

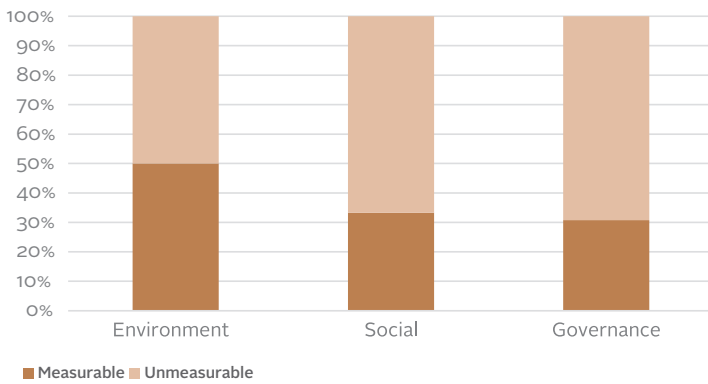
*This means that it has been checked whether the frameworks presented earlier deal with that indicator and, if so, where to find it.

The first selected metric may be objective, but only for companies that are otherwise also required to keep records of their greenhouse gas emissions and to have it verified by a verification specialist.

During the examination of the indicators, it was found that indicators based on internal company surveys to which respondents can answer yes or no, do not meet the concept of measurability. Together, these indicators affect the way the market sets prices for companies and their activities.

The metrics used by NASDAQ, shown in Table 2, were examined to identify the metrics for which data reporting is possible on the basis of auditable financial accounting records – of a closed system – that are consistent with the basic concept of accounting. The following diagram (Figure 5) shows the distribution of the indicators identified.

Figure 5: Matching NASDAQ indicators to the concept of measurability



Source: own editing

Of the indicators proposed by NASDAQ, environmental metrics performed the best and, as shown, half of them can be measured and verified by using data connected to accounting records. Only one third of the social indicators meet the concept of measurability. Governance indicators are the worst performing metrics, as only 30% of them are measurable and verifiable reliably.

Of assets managed, used, or owned by it, of the liabilities thereof, and of its economic operations, the company keeps records which show changes in assets and liabilities in a fair and transparent manner, in a closed system, and on a continuous basis. It prepares its financial statements on this basis.

For most of the examined indicators, the required data cannot be collected from this closed system and can only be extracted subjectively from corporate management systems currently in operation.

This means that the company can influence the image formed about it and can control the evolution of the corresponding ESG score through subjective data reporting.

Qualitative analysis of sustainability reports and ESG reports

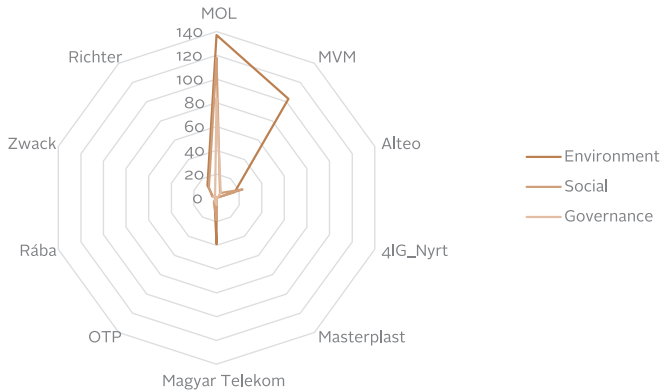
The other strand of the research aims to show the data disclosed, and the ways such data are disclosed, by companies having ESG ratings that have been selected subjectively but in a well explained way. According to the selection methodology, listed national and international companies were selected, by ensuring that multiple industries be presented. Thus, the selected companies belong to industries such as: oil and gas, energy, chemicals, manufacturing and trading activities, information technology and consultancy, financial services. In total, statements of 21 large companies were examined, with care taken to include both national and international companies in each industry.

As part of the research, the ESG reports of the selected companies were analysed. If a given company had produced no separate ESG report, then its integrated and sustainability reports were in the focus of the analysis, as all the data featured in an ESG index can be extracted from these reports.

Venn diagrams and radar charts were produced for the analysis to examine the measured and/or published data sets by industry and also by ESG indicator. The following figures show the number of responses to each of the three ESG factors.

Among Hungarian companies, MOL stands out, but most of them are invisible when looking at the numbers of their disclosed, publicly available data (Figure 6). In its publicly available database, MOL covers 137 environmental, 118 social and 84 governance issues in total. In comparison, the data published by other Hungarian companies in total seems insignificant.

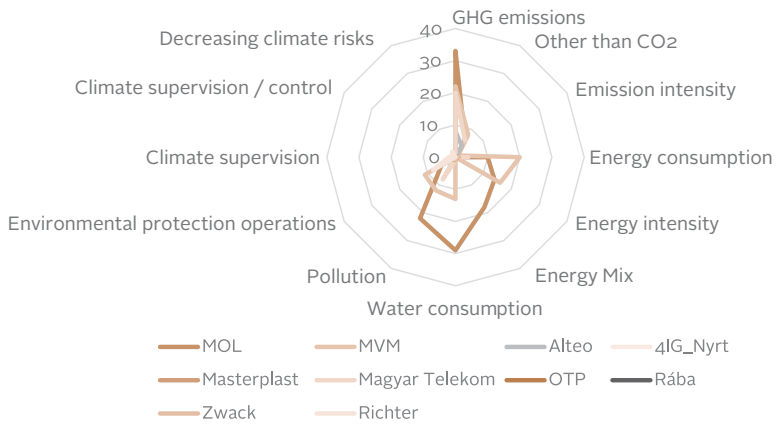
Figure 6: Number of ESG indicators used by Hungarian companies



Source: own collection of data

Looking at the three sets of indicators one by one, companies perform best on environmental issues (Figure 7), reporting significantly less data on social and governance issues.

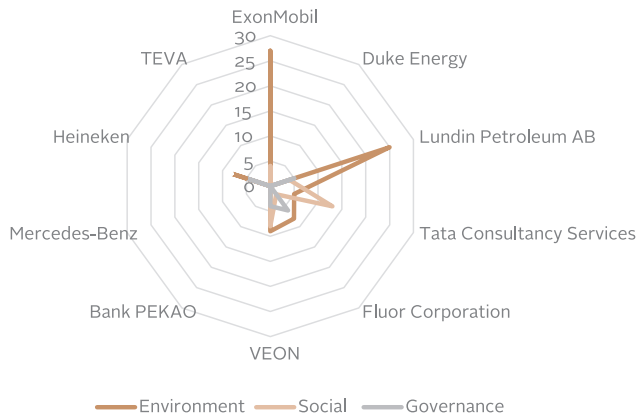
Figure 7: Number of ESG indicators used by Hungarian companies



Source: own collection of data

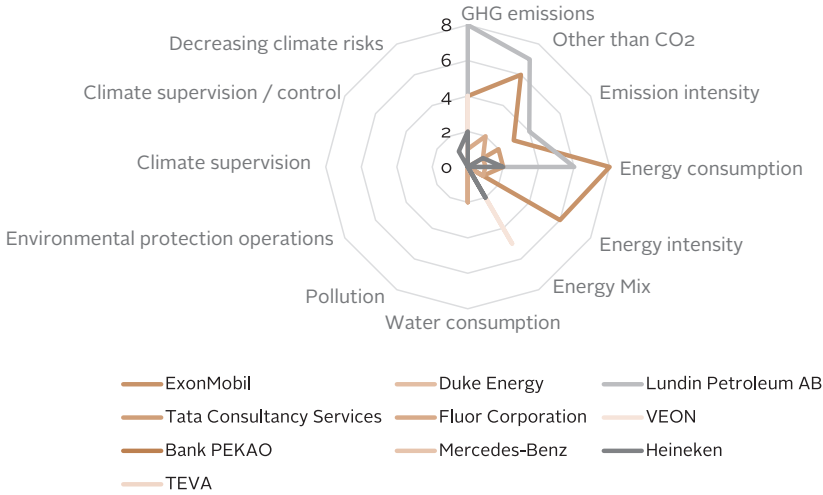
The picture is rather similar when looking at international companies. Here again, the evolution of the total set of indicators is presented first (Figure 8), and then, as it was also true for this group that it was the environmental issues they performed the best, a radar chart was also produced for this group (Figure 9).

Figure 8: Number of ESG indicators used by large international companies



Source: own collection of data

Figure 9: Number of environmental questions and of answers to them in reports



Source: own collection of data

Based on the analysis, the hypothesis was confirmed here too: the data disclosed do not allow for a comparison between companies in terms of their ESG performance, since not only are different sets of data to be evaluated, but data are subjectively compiled, often published as PDF files, and only available as downloadable files. Very few – only two – of the companies selected had published their data in a retrievable way that may be referenced – in this case as an Excel file – for several years back.

Conclusions and recommendations

All stakeholders have a legitimate demand that businesses not only provide strong financial performance, but also one that is sustainable and has a positive impact on society and the environment. However, quantifying these latter aspects is not easy. It is only possible by using transparent, comparable, sound, consistent, accountable, and credible indicators. ESG metrics, while helping to understand a company's ESG risk exposure, should include relevant information about strategy, governance, performance and outlook. The environmental criteria should focus on the impact of the company on the planet. The social elements should clarify the company's diversity, inclusiveness, social responsibility, data privacy, labour standards, product security, responsible sourcing and sustainable supply chain issues. And governance aspects should focus on organisational practices, controls and procedures that are used to ensure that the company actually does what it has undertaken to do. As experienced from the research, companies focusing on ESG tend to use renewable energy

sources to a greater extent. They recycle their inputs and outputs. They are more economical, and have lower employee turnover, risk-free suppliers and customers, and effective compliance. They are compliant with rules, pay less fines, have no corruption or litigation cases, and have a smaller gender pay gap. Their employees are represented in management, more diverse, more inclusive, more giving, and more charitable. They operate by maintaining higher levels of transparency and higher standards of ethics, with all these having an overall positive impact on sustainability, the environment and society.

Based on the research results it is clear that, though the market would be keen to assess companies in terms of their ESG performance, and society, consumers and investors are increasingly interested in companies that are sustainable and also demonstrate outstanding social performance, companies are not sufficiently prepared to meet this challenge. For their ESG performance to be accepted by the market as verified and fair, they need not only to expand the content and improve the quality of their sustainability reports, but also to address a number of other challenges. An in-exhaustive list of such challenges include:

- ▶ internal documentation and handling of ESG indicators,
- ▶ the inclusion of relevant ESG data in corporate risk management,
- ▶ integrating ESG metrics into performance management and remuneration systems,
- ▶ formal integration of ESG data into board practices and oversight,
- ▶ disclosure of ESG data in stand-alone sustainability reports,
- ▶ disclosure of ESG data in financial statements,
- ▶ creating products and services related to sustainability.

Most of these tasks are linked to the European Union's Corporate Sustainability Due Diligence (CSDD) Directive. Companies are expected to prevent harmful environmental processes in their value chains by integrating sustainability into their corporate governance systems. In addition, they are required to take into account human rights, impacts on the climate and the environment, as well as their own long-term resilience, when making business decisions.

Disclosing ESG information and integrating it into day-to-day practices will undoubtedly promote the due diligence requirement. It is essential to ensure – and this is also the aim of European legislators – that disclosures and data reporting requirements do not place an unrealistic burden on companies. Uniform rules will eliminate uncertainty and uniform requirements will ensure a level playing field for all business activities, capital investment projects and investments by making environmental, social and governance performance comparable.

An additional direction of the research can be formulated along the lines of the above. Whether a level playing field is ensured is an aspect that can also be checked by using the methodology of rating agencies. Additionally, it is considered important to answer two more questions. (1) What rating do rating agencies assign to the same company or group of companies? (2) Is there a significant relationship between the performance of companies and the score given by individual rating firms?

In order for the research to be based on fair and reliable data, it is essential that the data used by the rating firms are consistent.

The CSRD directive, referred to above, provides that the European Financial Reporting Advisory Group (EFRAG) is responsible for developing European standards.

Based on the research, it is fair to say that the standards to be developed must comply with the concepts of measurability and verifiability. The one-year deadline for developing reporting standards (ending 30 June 2023 for the first set of standards) seems rather short. The second part of the package of standards will have to be industry-specific and prepared by a deadline of 30 June 2024. The CSRD directive also requires companies to prepare their annual reports – by including sustainability reports as a separate part in them – in XHTML format. All the above also forms part of the European Union’s digital finance strategy,⁷ a fact that researchers can only welcome, as preparing this paper has also been made rather difficult by the need to extract data from reports in different formats.

References

Articles and books

1. Boros, A., Lentner, Cs., Nagy, V. (2022) A fenntarthatóság új szempontjai: a nem pénzügyi jelentések európai gyakorlatának elemzése, *Pénzügyi szemle*, 2022/2 DOI: https://doi.org/10.35551/PSZ_2022_2_2
2. Delmas, M., & Blass, V. D. (2010). Measuring corporate environmental performance: the trade-offs of sustainability ratings. *Business Strategy and the Environment*, Volume 19, Issue 4, Page(s) 245–260. DOI: <https://doi.org/10.1002/bse.676>
3. Derwall, J., Bauer, R., Guenster, N., & Koedijk, K. G. (2004). The Eco-Efficiency Premium Puzzle. *Financial Analysts Journal*, Volume 61, Issue 2. March/April 2005, Page(s) 51–63. DOI:10.2469/faj.v61.n2.2716
4. Devalle, A., Simona, F., & Cantino, V. (2017). The linkage between ESG performance and credit ratings: A firm-level perspective analysis. *International Journal of Business and Management*, Vol. 12, No. 9, Aug. 2017, Page(s) 53–65. DOI:10.5539/IJBM.V12N9P53
5. Edmans, A. (2011). Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial Economics*, Volume 101, Issue 3. September 2011, Page(s) 621–640.
6. Escrig-Olmedo, E., Fernández-Izquierdo, M. Á., Ferrero-Ferrero, I., Rivera-Lirio, J. M., & Muñoz-Torres, M. J. (2019). Rating the raters: Evaluating how ESG rating agencies integrate sustainability principles. *Sustainability*, Volume 11, (3), 915. DOI:10.3390/SU11030915

7 European Strategy for data [European data strategy](#) | [European Commission \(europa.eu\)](#)

7. Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, Vol. 5, No. 4, Dec. 2015, Page(s) 210–233. DOI: 10.1080/20430795.2015.1118917
8. Kotsantonis, S., & Serafeim, G. (2019). Four things no one will tell you about ESG data. *Journal of Applied Corporate Finance*, Volume 31, Number 2, Page(s) 50–58. DOI: <https://doi.org/10.1111/jacf.12346>
9. Liern, V., & Pérez-Gladish, B. (2018). Ranking corporate sustainability: A flexible multidimensional approach based on linguistic variables. *International Transactions in Operational Research*, Volume 25, Issue 3, Page(s) 1081–1100. DOI:10.1111/itor.12469
10. Pagano, M. S., Sinclair, G., & Yang, T. (2018). Understanding ESG ratings and ESG indexes. In *Research handbook of finance and sustainability*. Edward Elgar Publishing. (2018) Edited by Sabri Boubaker, Douglas Cumming and Duc K. Nguyen ISBN 9781786432629, Pages: 339–371 DOI:10.4337/9781786432636.00027
11. Windolph, S. E. (2011). Assessing corporate sustainability through ratings: challenges and their causes. *Journal of Environmental sustainability*, Volume 1, Issue 1, Article 5, Page(s) 37–57. DOI:10.14448/JES.01.0005

Downloads and accesses

12. The Global Compact (2004) Who Cares Wins, Connecting Financial Markets to a Changing World. Recommendations by the financial industry to better integrate environmental, social and governance issues in analysis, asset management and securities brokerage. Swiss Federal Department of Foreign Affairs and United Nations. *United Nations Department of Public Information*, 57899 December 2004. Letöltés dátuma: 2022. 04. 09.
13. Transforming Our World: The 2030 Agenda For Sustainable Development (2015) United Nations, A/RES/70/1, sustainabledevelopment.un.org, Pdf. *United Nations, Department of Economic and Social Affairs, Sustainable Development* – <https://sdgs.un.org/publications/transforming-our-world-2030-agenda-sustainable-development-17981> – Letöltés dátuma: 2022. 04. 23.
14. SDG Indicators, Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, Pdf. *United Nations, Department of Economic and Social Affairs, Statistics Division* – <https://unstats.un.org/sdgs/indicators/indicators-list/> – Letöltés dátuma: 2022. 04. 23.
15. Refinitiv (2022) Environmental, Social and Governance Scores from Refinitiv, March 2022. An LSEG Business – https://www.refinitiv.com/content/dam/marketing/en_us/documents/methodology/refinitiv-esg-scores-methodology.pdf – Letöltés dátuma: 2022. 05. 07.
16. MSCI ESG Ratings Methodology (2022) Methodology Document MSCI ESG Research LLC, April 2022. – <https://www.msci.com/documents/1296102/21901542/ESG-Ratings-Methodology-Exec-Summary.pdf> – Letöltés dátuma: 2022. 05. 07.

17. Sustainalytics (2021) ESG Risk Ratings - Methodology Abstract, Version 2.1 January 2021. Sustainalytics, a Morningstar company – https://connect.sustainalytics.com/hubfs/INV/Methodology/Sustainalytics_ESG%20Ratings_Methodology%20Abstract.pdf – Letöltés dátuma: 2022. 05. 07.
18. ISS (2021) ISS ESG Corporate Rating, Methodology & Research Process, 2021. – <https://www.issgovernance.com/file/publications/methodology/Corporate-Rating-Methodology.pdf> – Letöltés dátuma: 2022. 05. 07.
19. S&P Global Ratings (2020) Environmental, Social, And Governance Evaluation Analytical Approach Dec. 15, 2020 – https://www.spglobal.com/_assets/documents/ratings/research/100048049.pdf?utm_medium=cpc&utm_source=google&utm_campaign=CSA_Search – Letöltés dátuma: 2022. 05. 07.
20. FTSE Russell (2020) ESG Ratings and data model, Integrating ESG into investments, Product overview, 2020. <https://research.ftserussell.com/products/downloads/ESG-ratings-overview.pdf> – Letöltés dátuma: 2022. 05. 07.
21. RepRisk (2021) RepRisk methodology overview, RepRisk AG, April 2022 – <https://www.reprisk.com/news-research/resources/methodology#pdf> – Letöltés dátuma: 2022. 05. 07.
22. Arabesque S-Ray (2020) Methodology (v.2.6) September 2020 – <https://arabesque.com/docs/sray/S-Ray%20Methodology%20v260.pdf> – Letöltés dátuma: 2022. 05. 07.