

COMPARISON OF RESULTS OF VARIOUS METHODS ASSESSING INTERNAL CSR INFORMATION IN THE COVID ERA

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Abstract

The growing importance of sustainability has been projected via the multi-stakeholder model into the Corporate Social Responsibility of businesses. This global trend has been welcomed by the EU leaders who, along with a section of European businesses, perceive it as an intrinsic necessity and an opportunity for an increase in competitiveness. With 2020 came the COVID-19 pandemic and its impact extends to 2021 and beyond. Consequently, the official CSR reporting via reports has changed and led to a fragmented picture. It is highly relevant to perform a Czech case study of 20 top businesses to assess their internal CSR information through a battery of methodologic instruments and compare the results. The yielded visualization, based on a quantitative analysis of keywords and qualitative simplified Delphi methods of their reports, sheds a new light on the CSR and its methodology and calls for further explorations.

Key words: Corporate Social Responsibility (CSR), COVID-19, methodology, reporting.

JEL Code: C80, D22, M14.

Introduction

Our post-modern and highly competitive global society desires sustainable growth with an ongoing prosperity linked to the *universal perpetuitas* (Schüz, 2012). The first milestone in a modern evolution of the concept of sustainability is the Universal Declaration of Human Rights (“UDHR”) of the United Nations (“UN”) in 1948. This concept of sustainability represents a value judgment and is based on environmental (planet), social (people) and economic (profit) pillars with the aim to reconcile available resources and needs as an increasing world population emerged (MacGregor Pelikánová et al, 2021). The second milestone occurred due to the individualist focus and a move from Keynesian economic theory to neoliberal theory (Balcerzak & MacGregor Pelikánová, 2020) culminating in the UN Report of the World Commission on Environment and Development Report: Our Common Future prepared by the Brundtland Commission, published as the UN Annex to document A/42/427 in 1987 (MacGregor

Pelikánová, 2019) . The third milestone is represented by the Resolution made during a historic UN Summit in September 2015 and entitled Transforming our world: the 2030 Agenda for Sustainable development (UN Agenda 2030), which brought with it its 17 Sustainable Development Goals (SDGs) and 169 associated targets (MacGregor et al., 2020). The success of the concept of sustainability depends upon the engagement of all stakeholders and in the case of businesses, this is to be achieved by their Corporate Social Responsibility (CSR), i.e. their commitment to all three sustainability pillars (Vveinhart & Sroka, 2020).

The review of the theoretic background boosted by a literature review (1.) creates a solid foundation which allows, through the employment of multi-jurisdictional and multi-disciplinary data with a battery of methods (2.), a highly interesting pioneering case study. Namely, reports about the CSR of the 20 largest Czech businesses are explored and assessed by various methods addressing quantitative aspects (frequency and ratio of key words) as well as qualitative aspects (Delphi relevancy (3.)). The table and chart visualization points to the fragmentation of these reports, along with other surprising trends, as well as towards the need to reconsider the operation of employed methodologic instruments. This ultimately leads to conclusions offering pioneering propositions about the CSR and its methodology and calling for further studies.

1 Theoretic background and literature review

The success of the concept of sustainability is feasible only with universal support, i.e. a multi-stakeholder model and cross-sector partnership are desirable (Van Tulder et al, 2016), if not necessary (Van Tulder & Keen, 2018).

The concept of sustainability with SDGs and CSR with its six categories has been incorporated in the EU strategies, policies and legislation, see e.g. the updated Directive 2013/34/EU (Balcerzak & MacGregor Pelikánová, 2020). Although the EU law has rather facultative and soft features regarding CSR, large undertakings, i.e. public interest entities with more than 500 employees, are required to include in their management report a non-financial statement with their CSR information (MacGregor Pelikánová, 2019). This duty is projected in the national laws of EU member states and should create an incentive and motivation for EU businesses to go ahead with the CSR (Van Tulder et al, 2016;.Van Tulder & Keen, 2018) and report about it. This effect should be magnified during the COVID-19 pandemic which is a challenge for many people's certainty, but at the same time it is a great opportunity: to create a real, sustainable renaissance (D'Adamo, 2021).

Nevertheless, some businesses may perceive the commitment to sustainability via CSR as a negative burden generating costs without returns, i.e. a waste, while others can treat CSR as an impulse for improvement in all three spheres of sustainability (economic, environmental and social), as an instrument to improve their own financial performance and a foundation for their marketing and other strategies (MacGregor Pelikánová et al, 2021). This line of thought includes the stakeholder theory, pursuant to which the business engagement with CSR leads to a value creation, an improvement of the business reputation and branding, and ultimately an increase in market share (Ting et al, 2019). However, this assumption is only feasible provided that proper communication is materialized, i.e. internal CSR information needs to be conveyed (MacGregor Pelikánová, 2019; MacGregor Pelikánová et al, 2021). What is the reality of this ephemeral phenomenon?

2 Data and Methods

Official internal CSR reporting can be included either in general annual reports, respectively in the section labelled as the management report, or in special CSR (Sustainability) reports. A holistic and empirical approach suggests the use of a case study in order to compare various methods assessing such internal information and to enjoy the benefits of the Meta-Analysis (Silverman, 2013). Logically, this comparison should be done regarding the same period, ideally the current period – the COVID era, and regarding a group of businesses doing such reporting and sharing at least some features. From this perspective, the obvious choice is the selection of the largest businesses (based on the most recent revenues from one jurisdiction – Czech). From the pool of the 37 Czech businesses with the largest annual revenues in 2019, only 20 provided an annual report and/or CSR report in English. Table 1, below, provides their information, the first number indicates the rank of the selected business based on revenue (1-20) and the second number indicated the general rank of these selected businesses based on their revenue (1-37).

Tab. 1: Top 20 Czech businesses by 2019 revenue and with the CSR information in EN

Rank.	ID	Business	Rank.	ID	Business
1.1.	177041	ŠKODA AUTO a.s.	11.14.	14915	Metrostav a.s.
2.2.	28356250	EPH, a.s.	12.18.	18050646	Třinecké železárny, a. s.
3.3.	45274649	ČEZ, a. s.	13.19.	64945880	Penny Market s.r.o.(REWE)

4.4.	26185610	AGROFERT, a.s.	14.20.	26463318	OTE, a.s.
5.6.	61672190	UNIPETROL, a.s.	15.22.	60193336	O2 Czech Republic a.s.
6.8.	28477090	Alpiq Energy SE	16.28.	268577	Siemens, s.r.o.
7.9.	63474808	MORAVIA STEEL, a.s.	17.31.	25702556	ČEPS, a.s.
8.10.	45788235	Continental Barum s.r.o.	18.35.	931	METALIMEX a. s.
9.12.	43872247	BOSCH GROUP ČR	19.36.	46995129	BOSCH DIESEL s.r.o.
10.13	49450301	MOL ČR, s.r.o.	20.37.	26919389	Inventec (Czech), s.r.o.

Source: Own processing by the authors based on the Internet search of the Top CZ businesses by Revenue

The employed source for official reporting is the CSR report of the given business and if it is not available, then the annual report. The search was done in March 2021 and focused exclusively on the text, i.e. images and audio-visual parts of reports were not considered. Due to the nature of these official statements, the content text analysis is to be employed (Vourvachis & Woodward, 2015) and this inherently brings forth the issue of the selection between the literate, golden rule, mischief and teleological interpretation approaches.

Conventionally, the quantitative method with scanning and calculating the total number of the appearances of pre-set key words in the given source, i.e. the absolute frequency (frq), is the method par excellence. However, despite its quantitative feature pointing to the objectiveness, it is the subject of wide criticism based on its formalism and promptness to lead to completely misleading results. This can be partially offset by considering the ratio between the total number of the appearances of pre-set key words in the given source and the total number of all words included in the given source (aw), i.e. the relative ratio. To put it differently, the absolute frequency value is converted into a much more comparison-friendly relative ratio value while using the following formula: $ratio = \frac{frq}{aw}$.

As a viable and totally different option one can mention the qualitative Delphi method using the panel of experts (Okoli & Pawlowski, 2004). Here, each expert reads each and every report and statement and ranks the CSR information based on its concreteness, measurability and actionability. Then the ranking (+ meaning general and weak information, ++ meaning concrete and actionable information, +++ meaning genuine and actionable commitment with control and enforcement features) by all experts in the panel is compared and adjusted (MacGregor Pelikánová, 2019). Both the rather quantitative automatic scanning (automatic word counting with frq and ratio) and the rather qualitative reading (Delphi with panel) can lead to binary data allowing for the logistic regression (Sobol method/indexes) and to more variable

data allowing for the analysis of variance ANOVA. For an advanced text analysis, the Latent Dirichlet Allocation (“LDA”), i.e. a generative statistical model linked to the machine learning toolbox and to artificial intelligence toolbox could be employed (Blei, 2003). A further alternative is the use of indexes, such as the CSRHub/ESG Index. All these methods, instruments and indexes can feed the Meta-Analysis which truly proves that here we know and have more information than what we had believed (Silverman, 2013).

The significant bulk of data about CSR extracted from internal statements can be pretty heterogenous and, in order to achieve more homogeneity and clarity, the CSR information should be split in six CSR categories linked to well accepted key words (MacGregor Pelikánová, 2019): sustainability, CSR, environment, employees, social community, human rights, anti-corruption, R&D. So what results about the CSR itself and CSR methodology can be extracted from internal official statements? This can be empirically addressed with the employment of visualization and modeling of results based on the yielded data.

3 Assessment of official CSR reporting – perhaps environment and employees, for sure fragmentation and the need for methodologic change

The assessment of the official internal CSR reporting of the selected 20 top Czech businesses is to be completed based on either their special CSR (Sustainability) reports and if these are not available then their annual reports. Their content analysis focusing on quantitative aspects (automatic word scanning - frq) and on qualitative aspects (Delphi with panel for reading and scoring) has brought forth the results included in Table 2.

Tab. 2: Table comparison of the total number of key words (frq) and CSR category relevancy via Delphi (+)

Business	CSR in General		6 CSR categories (frq/relevancy in + or ++ or +++)					
	Sustain (frq)	CSR (frq)	Environment protection	Employ matters	Social	Human rights	xcorruption	R&D
ŠKODA AUTO a.s.	174	13	221/+++	181/+++	179/++	15/+	7/+	17/+++
EPH, a.s.	55	0	224/++	149/+++	104/+	5/+	3/++	0/+
ČEZ, a. s.	173	4	160/++	248/+++	52/++	2/+	3/+	0/+

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AGROFERT, a.s.	2	3	48/++	66/+	56/++	0/0	2/+	0
UNIPETROL, a.s.	1	0	54/+++	17/+++	5/+	0/0	0/0	2/+
Alpiq Energy SE	0/0	0/0	0/0	0/0	8/+	0/0	0/0	0/0
MORAVIA STEEL, a.s.	1	3	39/++	64/++	30/++	2/++	0/0	0/0
Continental Barum s.r.o.	244	0	62/+++	150/+++	23/++	20/++	17/++	8/++
BOSCH GROUP ČR	160	14	104/+++	10/++	76/+++	13/++	3/+	0
MOL ČR, s.r.o.	115	0	70/+++	39/++	23/++	9/++	1/+	5/+
Metrostav a.s.	1	0	24/+	16/++	18/+	0/0	1/+	1/++
Třinecké železářny, a. s.	1	3	39/++	64/++	30/++	2/++	0/0	0/0
Penny Market s.r.o.(REWE)	8	0	1/+	2/++	0/0	0/0	0/0	0/0
OTE, a.s.	96	5	261/+++	388/+++	109/++	48/++	12/++	0/+
O2 Czech Republic a.s.	4	0	22/+++	62/+++	18/++	5/++	2/+	0/+
Siemens, s.r.o.	9	2	37/++	5/++	43/++	9/++	137/+++	0
ČEPS, a.s.	0	0	25/++	17/++	2/+	0/+	0/+	0/++
METALIMEX a. s.	0	0	2/+	14/++	4/+	0/0	0/0	0/0
BOSCH DIESEL s.r.o.	7	0	22/+	2/++	9/+	0/+	0/+	0/+++
Inventec	44	0	230/++	118/+++	226	8/++	14/++	14/++

Source: Own processing by the authors based on the Internet search of the Top CZ businesses by Revenue

Manifestly, based on the total number of key words and the CSR relevancy of the conveyed message in official reports, three propositions can be made – about general institutionalization, about particular CSR category preferences and about methodology (Tab. 2). Firstly, the most popular CSR category is “Employees”, followed by “Environment” and the least popular CSR category is “Fight against corruption” closely followed by “R&D”.

Secondly, certain businesses go for a highly developed and institutionalized CSR (ŠKODA AUTO, BOSCH Group, Siemens – all of them having a German origin) while others merely deal with CSR in a basic manner (AGROFERT) or pass on it completely (ALPIQ ENERGY, Penny Market - REWE). Misleading and/or inconsistent statements are presented by businesses which have issues with the satisfaction of the EU law and/or Czech law (AGROFERT). Thirdly, the results of the quantitative key words calculation and of the qualitative Delphi assessment are not similar, i.e. regarding official reports the content analysis brings different results depending upon the selection of the quantitative automatic key words scanning and calculating or of the qualitative manual Delphi scoring assessment.

A visualization of quantitative text analysis via a general chart comparison of the frequency and ratio of CSR categories key words of all 20 businesses combined (Fig. 1) and via particular chart comparisons regarding each business separately (Fig. 2) can offer a new perspective to propositions offered merely by table comparison of the total number of key words and CSR relevancy via Delph (Tab. 2).

Fig. 1: General chart comparison of the frq and ratio of CSR categories - combined

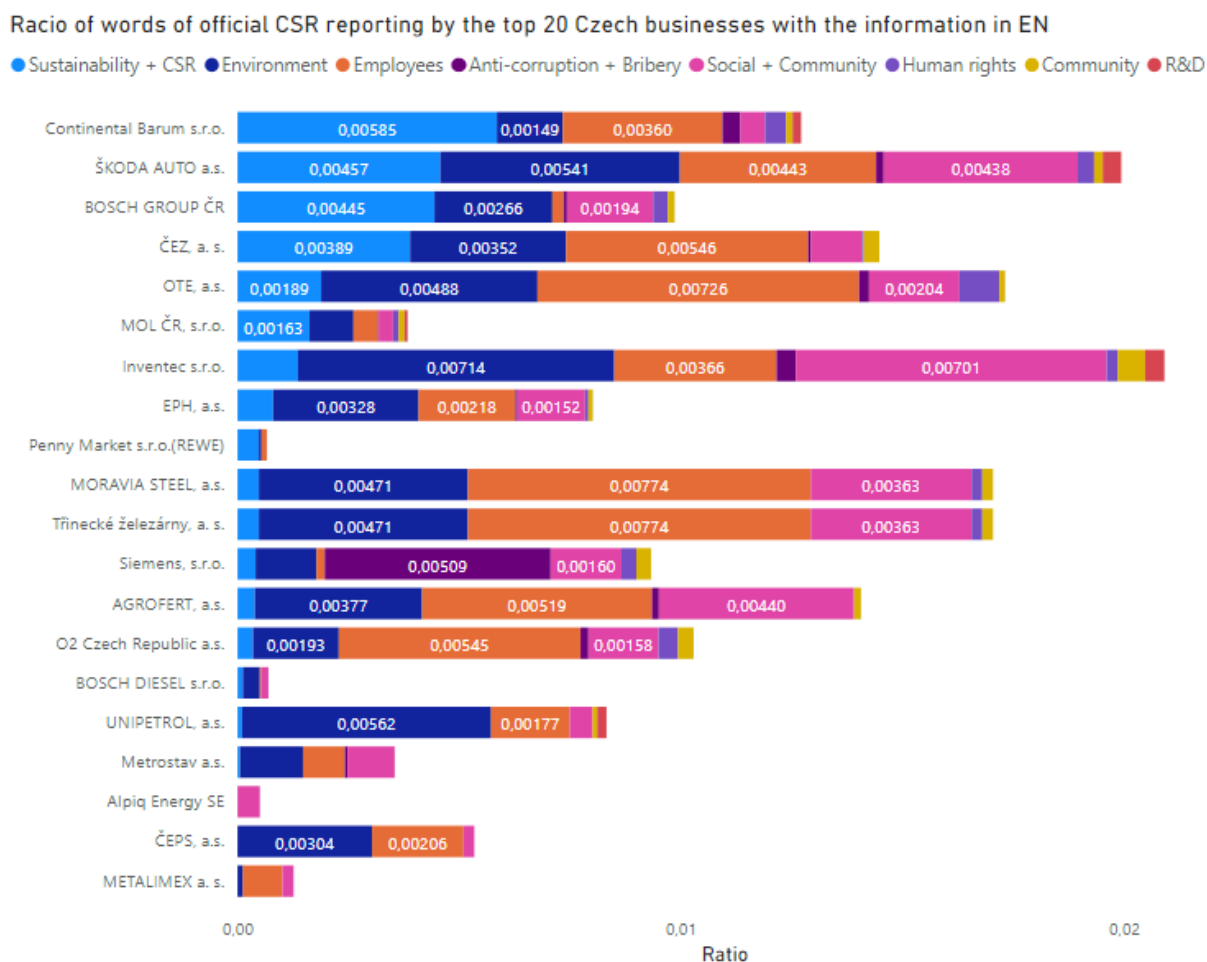


Source: Own processing by the authors.

The analysis via a general chart comparison of the frequency and ratio of CSR categories key words of all 20 businesses combined (Fig. 1) partially supports the 1st proposition offered by the table comparison of the total number of key words and CSR relevancy via Delph (Tab. 2), namely about the CSR category popularity – “Employees” and “Environment” v. “Fight against corruption” closely followed by “R&D.” However, a more detailed look at each of these

businesses individually brings more complexity and fragmentation – see the particular chart comparison of the ratio of both general CSR and CSR categories key words of each of these top 20 businesses individually (Fig. 2).

Fig. 2: Particular chart comparison of the ratio of general CSR and CSR categories - each



Source: Own processing by the authors.

The analysis via the particular chart comparison of the ratio of both general CSR and CSR categories key words of each of these top 20 businesses individually (Fig. 2) provides a very differentiated picture and magnifies the differences pre-indicated by the table comparison of the total number of key words and CSR relevancy via Delph (Tab. 2) and the general chart (Fig. 1). It corrects the 1st proposition by revealing that the leading role of “Environment” and “Employees” is neither absolute nor universal, see their absence or ratio value under 0.0015 (Fig. 2). It partially supports the 2nd proposition about differences across businesses, i.e. that certain businesses go for a highly developed and institutionalized CSR much more than others do (Fig. 2). The German winners proposed by the comparative table - ŠKODA AUTO, BOSCH

Group, Siemens (Tab. 2) ranked decently as in the particular chart, but not in a unified manner, i.e. ŠKODA AUTO does match better than the BOSCH Group and Siemens and the most striking difference is in the “Employees”. Due to its formalistic approach, AGROFERT ranked decently here, but naturally once the study goes beyond a mere word calculation plus ratio and frequency concerns and engages in a deeper understanding, then the bright picture (Fig. 2) gets fewer flattering colors (Tab. 2). Businesses passing on CSR (reporting) as stated by the table (Tab. 2) - ALPIQ ENERGY, Penny Market - REWE) came across in the same manner via this particular charter. Regarding the 3rd proposition, the particular chart provides (i) a clear warning against the misleading use of quantitative methods, especially automatic scanning with absolute frequency (Tab. 2) and opting for general visualization (Fig. 1) and (ii) strongly litigates for the employment of Meta-Analysis reconciling, especially the Delphi qualitative scoring outcome with particular quantitative ratio completed for each business individually.

Conclusion

The official internal CSR reporting provides a highly interesting message about the pro-sustainability self-representation by businesses, especially the selected 20 top Czech businesses, and about the methodological adjustments to be completed with respect to quantitative and qualitative content analysis, its general and particular visualization and the elements and aspects to be included in the Meta-Analysis. Based on the performed case study, i.e. the content analysis of official inside reporting about the CSR with the use of general CSR and 6 CSR categories key words, three propositions emerge.

Firstly, businesses generally prefer the “Environment” and “Employees” categories and neglect the “R&D” category. However, the visualization points out that this proposition is neither absolute nor universal and supports the 2nd proposition about fragmentation and significant differences between businesses in their 6 CSR categories commitments. Indeed, the Delphi method and particularly visualization demonstrates that certain businesses, especially those related to German holdings, go for a highly developed and institutionalized CSR much more so than others businesses, especially Czech businesses which violate the EU law. Thirdly, the Meta-Analysis of the official CSR reporting leads to important methodologic points. The qualitative content analysis by the Delphi method, along with the use of ratio and visualization, especially the particular visualization regarding each involved business, are extremely useful and can correct inherent deficiencies of the, so far, heavily preferred quantitative content analysis based exclusively on scanning and automatically calculating the total number of key

words (frq). Naturally, these propositions are pioneering and need to be confirmed by future studies entailing both official and unofficial reporting of a larger number of business, from various jurisdictions and over time, i.e. in a longitudinal manner.

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