and electronic form. For a better overview and orientation in accounting as a whole, it is more practical to unify the form of keeping accounting records.

Conclusions

The state responded to the growing digitization of accounting records by amending the Accounting Act effective from 1 January 2022. Thanks to this amendment, the door to electronic accounting was opened. The definition of an electronic accounting record, the method of processing and storing electronic accounting records has been clarified. The aim of this article was to present the new requirements for digital accounting as well as highlight its advantages. Although the introduction of electronic accounting is an option and not an obligation, thanks to this amendment accounting units no longer have to keep physical documents, they no longer have to worry about them not being destroyed, lost, faded or damaged. Digitization of accounting enables faster search of documents by supplier, amount, date of issue or other selection attributes. The advantage of digital accounting is also the effective control of duplicates, thanks to which it cannot happen that the accounting unit pays an invoice, etc. All the aforementioned advantages of digital accounting help to make accounting processes more efficient, save money, and at the same time advance in a competitive environment while meeting legal requirements.

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ESG Reporting under SASB Standards: Empirical Evidence from Europe

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Abstract: *This paper examines quality of European companies' SASB reporting and is motivated by the recent development in ESG reporting, namely the consolidation process of SASB Standards into IFRS. A total of 76 companies are analysed based on their sustainability or similar reports for years 2020 and 2021. The analytical tools utilized include indices used to assess the quality of reporting based on disclosure topics and corresponding metrics specified in SASB Standards. It is found that the quality of disclosure is very high across all sectors and when compared with previous research, the quality has further increased since 2019. The two main identified reasons why companies do not report certain metrics are confidentiality and not tracking the required information.*

Keywords: *corporate social responsibility reporting, ESG, SASB, sustainability reporting*

JEL codes: M14, Q56

1 Introduction

With sustainability reporting practices on the rise, many financial capital providers have started to seek out information beyond the scope of traditional financial information. This non-financial information includes environmental social and governance (ESG) matters and may complement capital providers' investment decisions. Preferably, the non-financial information should include such information that has the biggest impact on a reporting company's financial performance and value. For this purpose, Sustainability Accounting Standards Board (SASB) began – more than a decade ago – a process of setting standards that would facilitate disclosure on ESG topics for investors, lenders, and other creditors (SASB, 2020). Even though other reporting frameworks – most notably Global Reporting Initiative (GRI) standards (GRI, 2022) – had existed before SASB was founded, none of them focused primarily on the disclosure for investors. As specified in the SASB Conceptual Framework, SASB standards should complement other frameworks which may target various other stakeholders (SASB, 2020, para. 14).

While the research on Corporate Social Responsibility Reporting (CSRR) in general is plentiful (e.g. reviews by Ali et al., 2017; Fifka, 2013; Haidar et al., 2021; Holtbrügge and Dögl, 2012; or Khan et al., 2020), the same cannot be stated for research on SASB. Based on the fact that SASB published its first complete set of standards at the end of 2018, however, this is not surprising, as most of the companies now reporting under SASB standards began doing so in 2020 and 2021 (Figure 1). The research on SASB, albeit scarce, provided some insight into reporting under SASB standards: e.g. Khan et al. (2016) essentially verify on a sample of companies the underlying concept of "financial materiality" which is embedded into the standards; Consolandi et al. (2020) also use the classification of materiality on a sample of companies to estimate how it explains equity returns; and Busco et al. (2020) examine the quality of reporting under SASB standards by analysing non-financial reports and corresponding disclosure topics and metrics set out by SASB industry-specific standards.

This paper targets European companies which report under SASB standards and its goal is to assess the quality of SASB reporting of these companies. Methodology and metrics are taken from Busco et al. (2020), who carried out similar research for year 2019. In this paper, European companies are chosen for two reasons: 1) The consolidation process bringing SASB standards under IFRS might bring more European companies to SASB reporting (this is already observable in Figure 1, where it is the European companies with highest year-on-year increase between 2021 and 2022). 2) In their research, Busco et al. (2020) obtain data for only seven European companies, providing little evidence on the state of SASB reporting in Europe.

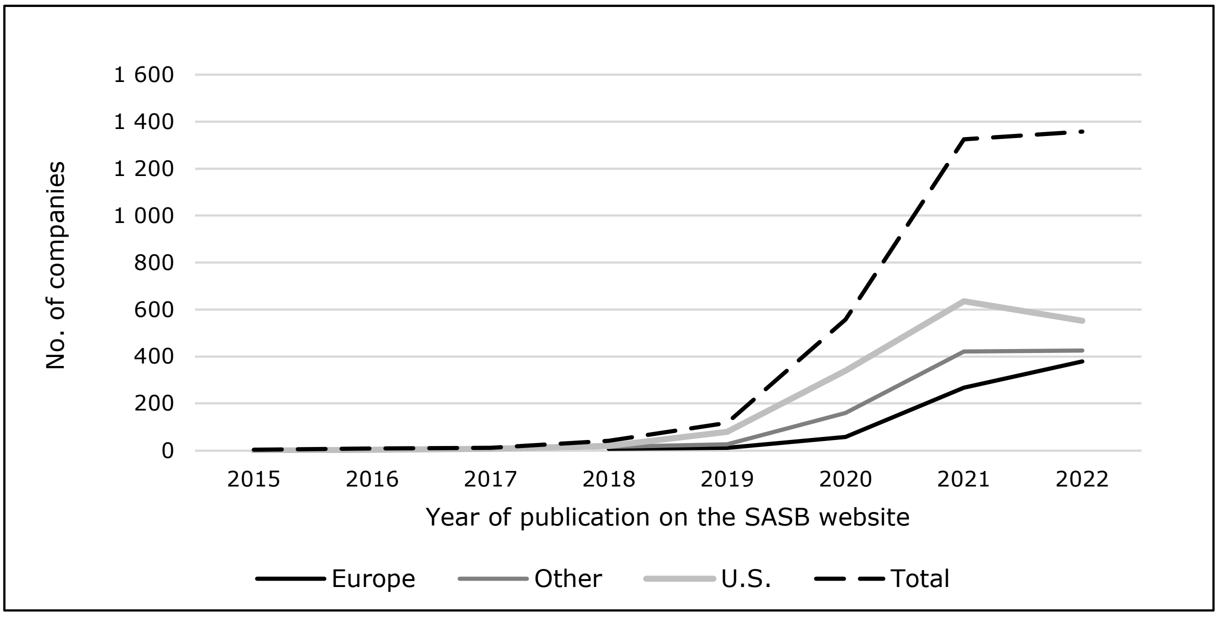
The rest of the paper is structured as follows: Section 2 contains more details on SASB standards and their planned consolidation. In Section 3, the data, the process of their obtainment and the methodology used are described. Section 4 provides results as well as discussion on the main findings. The last section concludes.

2 SASB Standards and Consolidation

One of the four characteristics of SASB standards is that they are "industry-specific". SASB identifies 11 sectors which are further split into a total of 77 industries. The disclosure topics (and therefore also the corresponding metrics) differ by industry, as business models are likely to vary by industry as well (SASB, 2020, para. 19). What may also differ by industry is the number of disclosure topics, e.g. Chemicals industry recognizes up to 12 topics, while Car Rental & Leasing industry only two. Companies may also fall into multiple categories and may assess into which industry (industries) they belong on their own. Moreover, companies are also encouraged to develop their own metrics which would allow for better assessment of ESG matters.

While SASB might be perceived as analogous to Financial Accounting Standards Board (FASB) that is responsible for establishing financial reporting standards in the U.S., the analogy is not exactly accurate. FASB develops in essence national standards, whereas SASB standards are intended to be used globally. Nonetheless, in all of the years between 2017 and 2022, there was a greater number of reporting U.S. companies than companies from Europe or all other countries (Figure 1). However, the share of U.S. companies out of all reporting companies has been steadily declining since 2019 (2019: 67.5%; 2020: 60.9%; 2021: 48.0%; 2022: 40.7%). The number of all reporting companies is rapidly increasing each year and even though year 2022 represents only the first half of the year, there is already an increase over year 2021.

Figure 1 Number of companies reporting under SASB standards by geographical area



Source: SASB, 2022a + authorial computation

Note: SASB includes the publication year in the list of reporting companies, which does not mean the year for which the report was prepared. For the vast majority of companies this means the reporting year is the year preceding the publication year. To account for multiple reports in the same year by the same company, a maximum of one company-entry is included in each year. Data for the year 2022 were obtained in the middle of July 2022 and are therefore incomplete.

In November 2021, IFRS Foundation (2021) announced that Value Reporting Foundation (VRF) – which, among other things, houses SASB standards – will consolidate into a newly established board, the International Sustainability Standards Board (ISSB), which falls under IFRS. According to the recent news (IFRS Foundation, 2022), the consolidation process should be completed in August 2022. Companies which are already reporting under SASB standards are encouraged to remain doing so, because SASB standards should ultimately also transition into IFRS Sustainability Disclosure Standards (SASB, 2022b). The analogy between ISSB and International Accounting Standards Board (IASB) that is responsible for establishing financial reporting standards now seems to be more accurate, as both IFRS standards and SASB standards (or in the future IFRS sustainability standards) are intended to be used globally.

3 Methodology and Data

On its website, SASB (2022a) provides a list of companies reporting under SASB standards. For each company, there is information about the sector and the industry it falls into, the country, the publication year as well as a direct link to the report. To obtain a complete list of companies suitable for this research, the following steps were taken: 1) Filtering out publication years 2020 and older – this paper attempts to assess the quality of SASB reporting in the most recent years (reporting years 2020 and later). 2) Elimination of all non-Europe countries – this paper targets solely European companies. 3) Removal of extra entries for any company with multiple entries, so that each company is represented only once and with the most recent report – multiple entries happened mainly because of companies having an entry for both publication years as well as having more than one direct link due to separately disclosed SASB Index and separately disclosed sustainability/annual report. After this procedure, a total of 456 European companies were left, which also represents the basis for sampling. Table 1 shows the number of those companies in each sector.

Table 1 European SASB reporting companies by sector (publ. years 2021 and 2022)

SASB Sector	No. of companies	% of companies
Consumer Goods	23	5.0%
Extractives & Minerals Processing	62	13.6%
Financials	74	16.2%
Food & Beverage	21	4.6%
Health Care	29	6.4%
Infrastructure	59	12.9%
Renewable Resources & Alternative Energy	6	1.3%
Resource Transformation	59	12.9%
Services	28	6.1%
Technology & Communications	49	10.7%
Transportation	46	10.1%
Total	**456**	**100.0%**

Source: SASB, 2022a + authorial computation

Out of the 456 companies, the UK had by far the largest representation of 122 (26.8%) companies, followed by Germany (44 companies; 9.6%) and France (41 companies; 9.0%). On the other end, there was only nine companies (2.0%) from Central and Eastern European countries altogether. After structuring the data, we performed proportionate stratified random sampling (strata representing sectors) and obtained a sample of 76 companies for further analysis, as shown in Table 2. The sample includes 40 industries across all 11 sectors. Geographically, the sample is represented by 15 countries, with the most prevalent being again the UK (25 companies; 32.9%), followed by Germany (9 companies, 11.8%) and Switzerland (7 companies; 9.2%).

Table 2 Analysed SASB reporting companies by sector

SASB Sector	No. of companies	% of companies
Consumer Goods	3	3.9%
Extractives & Minerals Processing	10	13.2%
Financials	10	13.2%
Food & Beverage	4	5.3%
Health Care	5	6.6%
Infrastructure	11	14.5%
Renewable Resources & Alternative Energy	1	1.3%
Resource Transformation	9	11.8%
Services	5	6.6%
Technology & Communications	9	11.8%
Transportation	9	11.8%
Total	**76**	**100.0%**

Source: SASB, 2022a + authorial computation

Note: some sectors in the sample do not exactly correspond with their percentage to the shares in Table 1 (e.g. Financials). This is due to four companies which reported under an industry standard different from the industry on SASB's list. These companies were not excluded, but were rather evaluated according to the industry they deemed to fit in the most.

To assess a quality of reporting under SASB standards, three indices consistent with Busco et al. (2020) are used. The first of them, Disclosure Topic Compliance Index (*DTCI*), measures the degree of compliance to the SASB standards at the disclosure topic level and is measured as the number of disclosure topics for which the reporting company reports at least one accounting metric to the total number of disclosure topics. Then, Financial Relevance Compliance Index (*FRCI*) measures the "quality" of compliance with SASB standards and takes into consideration also the number of value drivers impacted by the disclosure topic. Lastly, Financial Intensity Compliance Index (*FICI*) measures "intensity" of financial relevance and takes into account also whether the degree of impact is high, adding essentially an extra layer to *FRCI* (for more detailed information about each of the metrics used please refer to Busco et al., 2020). Naturally, if *DTCI* equals 100.0% (meaning company reports at least one metric on all of the disclosure topics as prescribed in the corresponding industry-specific standard), then both *FRCI* and *FICI* also equal 100.0%, as no value driver, whether moderately or highly impacted by corresponding disclosure topics, could be potentially missing. If *FRCI* is greater than *DTCI*, then a company does not report on all disclosure topics, but likely reports on the more financially relevant ones. Analogically, if *FICI* is greater than *DTCI*, a company reports to a greater extent on those topics deemed to have high impact on the value drivers. Information about the impact of disclosure topics on value drivers is found in the Industry Research Briefs for each industry in SASB's archive (SASB, 2022c).

4 Results and Discussion

Table 3 presents the results. As can be seen, companies across all sectors provided very good to nearly perfect information on the disclosure topics. This is consistent with an overall *DTCI, FRCI* and *FICI* scores higher than 90.0%. *FRCI* and *FICI* do not strongly differ from *DTCI* values in any sector. Only in one sector, *FRCI* and *FICI* differ by more than 5% from *DTCI*, and that is in the Consumer Goods sector, which also happens to be most poorly performing one in terms of topics coverage. The lowest value of *FICI* is primarily caused by a company not reporting on a Data Privacy topic, which was deemed to have high impact on multiple value drivers. Sector Food & Beverage, however, reached *FICI* *score* of 100%, meaning all the companies in this sector reported on all topics deemed to have high impact on value drivers, despite not covering all topics (*DTCI* score of 96.4%).

Overall, 49 companies (64.5%) reached *DTCI* score of 100.0% and 54 companies (71.1%) *FICI* score of 100.0%. Table 4 provides comparison with results of Busco et al. (2020). Both mean and median values of all three indices identified in this study are higher than those identified by Busco et al. (2020), with mean values showing bigger differences due to two sectors performing under *DTCI* score of 50 % in the comparable study. Two of the sectors showed worse results (in both cases on all three indices) in this paper than in the comparable study – Consumer Goods and Transportation – which are also the two worst performing sectors identified in this paper.

Table 3 Results by sector

Sector	*DTCI*	*FRCI*	*FICI*
Renewable Resources & Alternative Energy	100.0%	100.0%	100.0%
Food & Beverage	96.4%	97.2%	100.0%
Services	96.0%	95.2%	96.0%
Extractives & Minerals Processing	95.6%	94.3%	97.1%
Infrastructure	94.1%	93.5%	90.3%
Technology & Communications	93.7%	93.8%	89.8%
Financials	92.0%	92.9%	96.7%
Health Care	91.5%	91.2%	87.0%
Resource Transformation	91.3%	90.0%	89.9%
Transportation	86.0%	83.8%	85.8%
Consumer Goods	85.0%	79.1%	75.9%
Total	**92.5%**	**91.7%**	**91.6%**

Source: SASB, 2022a; reports of analysed companies + authorial computation

Table 4 Comparison of results with previous research

	This paper n = 76			Busco et al. (2020) n = 91		
Index	*DTCI*	*FRCI*	*FICI*	*DTCI*	*FRCI*	*FICI*
Mean	92.9%	91.9%	91.7%	70.5%	70.7%	71.2%
Median	93.7%	93.5%	90.3%	79.6%	77.8%	76.9%

Source: Busco et al., 2020 + authorial computation

The very good state of SASB reporting identified in this paper can be attributed to companies' efforts in following the disclosure topics. Nearly all of the analysed companies provided some sort of index in which they provided information in the structure of SASB standards. This index then contained the direct answers or provided links to other parts of a company's report (combinations also occurred). In some cases, the index was a separate document. A smaller number of companies also provided GRI index. Moreover, some companies used the SASB and GRI codes from the standards as identifiers and added them to the corresponding chapter titles. If companies did not report some metrics, it was mainly due to: 1) information being confidential and 2) metric not being tracked by the company.

Conclusions

With the process of consolidation of SASB standards into IFRS, more European companies may find attractive to communicate their ESG matters in accordance with an established framework such as SASB standards. Over the past 5 years, there has already been a rapid increase in companies around the world reporting under SASB. This paper targeted European countries and it was found that European companies reporting under SASB standards report ESG information of high quality and that this quality has further increased since 2019. Companies used mostly indices with structure reflecting that of SASB standards to ease the process of finding disclosure topics. It was also found that there are almost no companies in Central and Eastern Europe which report under SASB standards.

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