

**Investor Reactions to a Voluntary Tax-related Sustainability Reporting Standard:
Evidence from GRI 207: Tax**

ABSTRACT

We investigate the capital market reaction to events leading up to the introduction of the first standard for tax-related sustainability reporting, Global Reporting Initiative (GRI) 207. GRI is the dominant standard for sustainability reporting, which is voluntarily adopted by GRI reporting firms. Utilizing event study methodology, we document significant negative average cumulative abnormal returns (CAR) surrounding GRI 207 introduction events for a sample of GRI-reporting firms. We interpret this result as evidence that investors perceive the costs of tax transparency under the new standard to be greater than the benefits. Cross-sectional results suggest investors perceive that GRI 207 provides new information beyond existing country-by-country reporting requirements and that costs will be higher when tax is a material topic. Qualitative interviews supplement our empirical analyses and provide context for our results.

“Amazon under investor pressure over tax transparency [GRI 207]: Groups overseeing \$3.6tn in assets to seek shareholder resolution at annual meeting”

Financial Times, March 6, 2022 (Agyemang 2022a)

“SEC rules against Amazon in dispute with investors over tax transparency [GRI 207]: US regulator decides issue of disclosure can be put to shareholder vote after institutional pressure”

Financial Times, April 6, 2022 (Agyemang 2022b)

1 Introduction

Recently the issue of tax transparency has become mainstream (Müller, Spengel, and Vay 2020), with growing interest from investors (Agyemang 2022a; Agyemang 2022b; PRI 2018; KPMG 2022). Prior research has examined mandatory tax disclosure rules such as country-by-country reporting (CbCR) (Dutt, Ludwig, Nicolay, Vay, and Voget 2019; Müller, Spengel, and Weck 2021; Johannesen and Larsen 2016; Olbert and De Simone 2021; Joshi 2020; Joshi, Outslay, and Persson 2020; Overesch and Wolff 2021), United Kingdom tax strategy reporting (Bilicka, Casi-Eberhard, Seregini, and Stage 2021), and subsidiary disclosures required by the SEC (Dyreg, Hoopes, Langetieg, and Wilde 2020). We study tax transparency from a different angle and focus on voluntary tax disclosures in sustainability reporting. In 2019, the Global Reporting Initiative (GRI) introduced GRI 207: Tax, the first standard for tax-related sustainability reporting. According to KPMG, GRI is the dominant standard for sustainability reporting globally, used by three-quarters of the world’s 250 largest companies that follow sustainability reporting guidelines (KPMG 2020). GRI 207 calls for detailed information on firms’ tax strategy and its link to sustainable development, compliance management, management of stakeholder interests, and CbCR. These tax disclosures were previously largely inaccessible to the public. Firms voluntarily choose to report according to GRI. However, if they report, they have to disclose tax information if they consider tax as a material CSR topic. Recent calls by investors and groups representing interested stakeholders for Amazon to adopt GRI 207 (Agyemang 2022a; Agyemang 2022b) illustrate that stakeholders believe the information is useful.

Investors face trade-offs when it comes to increased tax transparency. On the one hand, voluntary disclosure of sustainability information produces the benefit of reduced information asymmetries (Dhaliwal, Li, Tsang, and Yang 2011; Dhaliwal, Radhakrishnan, Tsang, and Yang 2012). The existence and the information content of tax disclosures in sustainability reporting varies widely (Davis, Guenther, Krull, and Williams 2016; Hardeck and Kirn 2016; Hardeck, Inger, Moore, and Schneider 2021). This suggests that a framework for tax transparency would enhance comparability and credibility, leading to reduced information asymmetry and reduced costs of capital. On the other hand, tax transparency is also associated with costs. There are direct costs of compiling the information, proprietary costs of disclosing the information (including enabling tax enforcement and providing useful information to competitors), as well as reputational losses if disclosed information is misinterpreted or inconsistent with stakeholders' expectations (Dhaliwal, Goodman, Hoffman, and Schwab 2022; Lee, Shaphan, Shevlin, and Venkat 2021; Graham, Hanlon, Shevlin, and Shroff 2014; Dyreng, Hoopes, and Wilde 2016). Investors may also perceive public pressure for stricter enforcement and further reporting regulations. Anecdotal evidence supports the notion that voluntary disclosure standards are expected to pressure policy makers to introduce subsequent mandatory requirements.¹ Importantly, prior research also documents changes in firm tax behavior following increased tax transparency (Overesch and Wolff 2021; Joshi 2020; Eberhartinger, Speitmann, Sureth-Sloane, and Wu. 2020; Joshi, Outslay, and Persson 2020), which could be perceived negatively by investors who value tax reduction (Desai and Dharmapala 2008; Wilson 2009; Inger 2014).

Consistent with greater costs than benefits of increased tax transparency, on average, studies examining the introduction of new mandatory tax disclosures show negative (Johannesen and Larsen 2016; Müller et al. 2021) or insignificant (Dutt et al. 2019) investor reactions. In our setting, different from mandatory disclosure rules, firms can avoid disclosure according to GRI 207 by arguing that their tax payments represent an immaterial CSR issue or by selecting not to report according to GRI.

¹ For instance, in an interview, a Big4 tax director said: “one way or the other, the public tax transparency would, what is currently voluntary, move through to a mandatory environment”. Another representative of a large European firm referred to CbCR in Europe and mentioned: “many companies, including in the German economy, were very much opposed to it, and the discussion stopped at some point because GRI came along and it was clear that we had to publish anyway.” See Appendix A for more information.

Consequently, firms need to weigh the benefits against the costs of disclosure and nondisclosure.

Costs related to the latter include reputational losses, decreases in CSR ratings², and stakeholder suspicion of wrongdoing. Moreover, the CSR setting is challenging in so far as firms have to consider and align a wide range of stakeholder interests when they explain their tax positions.

We use an event study methodology to shed light on investor perceptions of GRI 207. Therefore, we examine 283 European GRI reporting firms that registered their CSR report at the GRI Website. This group of firms would be immediately affected by the new reporting standard and thus most likely to experience the benefits and costs of adopting (or not adopting) the standard. We calculate cumulative abnormal returns on three events surrounding the development of GRI 207: Tax, and we further investigate differences in the reaction based on firms' established tax reporting requirements, potential future requirements, and tax avoidance behaviour, among others. To enrich our findings, we follow a mixed method approach and additionally conduct qualitative interviews with 10 tax directors of large European firms and Big4 representatives about their expectations related to GRI 207. See Appendix A for details about the interviews and select quotes referred to in the manuscript.

We hypothesize and find negative cumulated abnormal returns among GRI reporting firms. On average, GRI reporting firms experience negative cumulated abnormal returns of 0.5%. Our results show that despite being part of a voluntary CSR reporting framework, GRI 207 is value-relevant for firms. Moreover, negative reactions suggest that investors expect that the costs of this new standard outweigh potential benefits. Our cross-sectional results reveal that both firms that were already subject to CbCR, and firms that were not, experience negative abnormal returns, suggesting investors believe GRI 207 contains additional information beyond what companies are already reporting to adhere to CbCR requirements. Additionally, firms that are more likely to face future mandatory public reporting requirements and for which tax is likely to be a material topic (i.e., those that pay relatively higher levels of tax) experience a more negative reaction. We also find that firms that already exhibit the highest level of transparency by adhering to the more exhaustive GRI Comprehensive reporting

² In this regard, in an interview, a head of tax of a large European firm said: "There is a sustainability index. (...) Taxes are not the decisive criterion, but taxes are a criterion and if you lose too many points, your ranking will deteriorate and you will have to think about how to prepare the information in order to be reasonably competitive." See Appendix A for more information.

regime appear to experience a less negative reaction relative to firms that adhere to the less exhaustive GRI Core reporting regime, suggesting existing sustainability transparency influences investors reaction to potential increases in tax transparency.

Our results contribute to the research on tax transparency by providing evidence about investor reactions to events leading to increased voluntary tax transparency, extending the work of studies examining investor reactions to mandatory increased tax transparency (Johannesen and Larsen 2016; Müller et al. 2021; Dutt et al. 2019). The quasi-voluntary nature of CSR reporting, given that a firm has already adopted a particular CSR framework, represents a unique environment relative to previous research on the market reaction to firms' decisions to voluntary disclosure. Our study contributes to the extant literature by examining the market reaction within this unique environment. The use of qualitative interviews offers interesting insights into tax transparency that provide context for our results.

Our cross-sectional tests show that investors expect that GRI 207 provides additional value-relevant information beyond that already provided by CbCR requirements. This analysis also answers the call by Müller et al. (2020) for research on the interaction effects of mandatory and voluntary disclosures, specifically by examining the differential investor reaction to a voluntary standard, dependent upon whether CbCR disclosures were already mandatory or whether firms are likely to face additional mandatory reporting requirements. Our cross-sectional results also reveal that investors consider firms' current level of sustainability transparency when evaluating the effect of additional transparency requirements.

Our study also adds to prior research on investor reactions to CSR reporting standards and obligations in general. Grewal, Riedl, and Serafaim (2019) assess investor reactions to mandatory nonfinancial disclosure obligations in the European Union and find negative effects. Apparently, similar to CSR disclosures in general, investors also expect higher net costs in the tax arena. While investors may expect costs, we look forward to future research examining the effect of increased tax transparency under GRI 207 on other stakeholder groups.

The paper is organized as follows: Section 2 explains the institutional background and Section 3 develops our hypothesis. Section 4 and 5 present the methodology and the results. Section 6 concludes.

2 Background: GRI 207 Tax Standard

2.1 Tax Disclosure Obligations at the Times of the Adoption of GRI 207

Since 2018 European firms have been required to publish CSR information following EU Directive 2014/95/EU on the disclosure of nonfinancial information. Although the Directive includes disclosure requirements on policies, risks, and outcomes regarding environmental, social and employee aspects, respect for human rights, anticorruption issues, and diversity in the board of directors, it does not explicitly mention tax. Consequently, European firms are required to provide CSR disclosures under the EU Directive, but do not face any obligation to include tax information in such reporting. Moreover, the Directive does not require firms to report according to a specific CSR reporting framework; firms can but do not have to choose GRI Standards.

The GRI Standards provide a framework for organizations to “understand and report on their impacts on the economy, environment and people in a comparable and credible way” (GRI 2022) and provide guidance on a wide range of sustainability topics. Prior to 2019, GRI Standards did not include a standard specific to tax. As part of GRI 201: Economic Performance, tax payments were considered to be part of firms’ economic contribution and required them to disclose their taxes paid, if material (GRI 2016c, disclosure 201-1). The GRI standard also directed firms to disclose any tax relief or subsidies received from governments (GRI 2016c, disclosure 201-4). Although these disclosure requirements were very limited in scope, research has shown that firms often did not include any tax disclosures in their CSR reports (Davis et al. 2016; Hardeck and Kirn 2016).

Besides CSR reporting requirements, European firms have had to comply with an increasing number of mandatory tax disclosure rules. First, CbCR is country-specific disclosures of tax-relevant information including income and tax payments by country. Firms in certain sectors are required to publicly disclose CbCR, specifically, financial institutions under Directive 2013/36/EU (Capital Requirements Directive, CRD IV) and large extractive and logging firms under Directive 2013/34/EU

(Accounting Directive).³ At the same time, many firms have been required to privately file a CbCR report to the tax authorities given the wide adoption by EU members of BEPS Action 13 requiring the distribution of CbCR information to the respective member states where the firm operates and generates profit.⁴ Consequently, for many firms required to report CbCR privately, the data is available, but not accessible to the public. Although European policy makers had been discussing a public CbCR for some time, the EU has finally reached an agreement on a respective Directive in late 2021, which has to be transposed into national legislation by June 22, 2023.⁵ Second, in the United Kingdom, firms have been facing qualitative information disclosure requirements and had to publish tax strategy reports (Bilicka et al. 2021).

2.2 Development of GRI 207

In this environment, the GRI initiated a consultation phase on whether to develop a GRI standard specific to tax at the end of the year 2018.⁶ The GRI justifies the work on a new tax standard with the relevance of tax payments. The initiative describes taxes as “important sources of government revenue and are central to the fiscal policy and macroeconomic stability of countries” (GRI 2019, disclosure 207, p. 4). Moreover, the GRI referred to the importance of taxes in achieving the Sustainable Development Goals as acknowledged by the United Nations. While firms are under scrutiny for their efforts to avoid tax payments, increasing tax transparency would promote “trust and credibility in the tax practices of organizations and in the tax systems” (GRI 2019, disclosure 207, p. 4). Finally, the GRI emphasizes the relevance of tax transparency for stakeholders to make informed judgments about firms’ tax positions and to enrich the public debate about tax policy.

After about nine months of consultations, the Global Sustainability Standards Board (GSSB) approved “GRI 207: Tax Standard” on September 24, 2019 (event #1) but decided to make some changes to the

³ “Large” extractive and logging firms are defined as those that meet at least two of the follow stipulations: 1) balance sheet total of 20 million euro; 2) net turnover of 40 million euro; and 3) employees>250.

⁴ In most countries, this requirement applies to multinationals with revenues greater than 750 million euro.

⁵ On September 28, 2021, the Council of the EU adopted the proposed directive, which was later approved by the EU Parliament on November 11, 2021. The final Directive (EU) 2021/2101 was published in the Official Journal of the European Union on December 1, 2021. Muller et al. (2021) notes this reporting requirement is less comprehensive than GRI 207. Under the directive the 750 million euro requirement is limited to Euro and black listed tax havens and grey list of non-compliers, whereas these limitations are not part of GRI 207.

⁶ See Appendix B for an overview of dates and events.

draft. We use the approval of the final standard as our first event as it officially established the existence of the tax standard and its “required” disclosures. The actual content of the final standard was then published on the GRI website on December 5, 2019 (event #2). Finally, on January 16, 2020, the standard was additionally presented to the public at the London Stock Exchange (event #3).

The new standard GRI 207 consists of four different disclosures as shown below:

Topic standard 207	Disclosure 207-1	Disclosure 207-2	Disclosure 207-3	Disclosure 207-4
Content	Approach to tax	Tax governance, control and risk management	Stakeholder engagement and management of concerns related to tax	CbCR
Examples	<ul style="list-style-type: none"> • Tax strategy, if available • Who reviews the strategy? • Approach to regulatory compliance • Link between taxes and sustainable development 	<ul style="list-style-type: none"> • Description of the tax governance and control framework • Who is responsible for the framework? • Assurance process for tax disclosures 	<ul style="list-style-type: none"> • Engagement with tax authorities • Public policy advocacy approach • Approach on how to consider stakeholder interests 	<ul style="list-style-type: none"> • Information on taxes, further financial numbers and activities on a country-by-country basis
Type of disclosure	Management approach disclosures			Topic-specific disclosure

According to Section 3 of GRI 101, firms can either claim to comply with the Core or Comprehensive option⁷. This distinction is operationalized through the use of categories of disclosures: „Management approach disclosures“ and „Topic-specific disclosures“. The Core option requires reporting of the Management approach disclosures for all material topic standards but only one Topic-specific disclosures⁸, whereas the Comprehensive options requires both for all material topic standards. Hence,

⁷ GRI 101 Section 3 describes the Core option as “a report contains the minimum information needed to understand the nature of the organization, its material topics and related impacts, and how these are managed“, whereas the Comprehensive option is described as „builds on the Core option by requiring additional disclosures on the organization’s strategy, ethics and integrity, and governance. In addition, the organization is required to report more extensively on its impacts by reporting all the topic-specific disclosures for each material topic covered by the GRI Standards“ (GRI 2016, disclosure 101, p. 21).

⁸ Specifically, the Core option requires firms to “comply with all reporting requirements for at least one topic-specific disclosure“ (GRI 2016, disclosure 101, p. 23).

firms for which taxes are material but claim to report under the Core option might only report the Disclosures 207-1 to 207-3, which are Management approach disclosures, and omit the Topic-specific disclosure of public CbCR according to Disclosure 207-4. In contrast, the Comprehensive option requires compliance with both types of disclosures so firms would have to report Disclosures 207-1 to 207-4 and would not be able to omit the public CbCR (GRI 2016a, disclosure 101 p. 23).

While GRI is a voluntary framework, firms that publish a GRI report and consider tax as material must disclose according to GRI 207 to be compliant.⁹ Accordingly, there is a de facto obligation for GRI reporters who cannot claim tax as immaterial to follow GRI 207. GRI 103 defines material topics as “those that reflect an organization’s significant economic, environmental and societal impacts; or that substantively influence the assessments and decisions of stakeholders” (GRI 2016b, standard 103, p. 6).¹⁰ In its most recent guidance on materiality assessments (GRI 2021, GRI 3 Material Topics), the GRI even exemplifies firms’ tax payments as positive impacts on sustainable development. Given the relevance of tax payments for firms’ host countries and sustainable development as well as the significance for stakeholders’ decisions, it should be challenging for firms to consider tax as immaterial in the long run.

In terms of the content of reporting, GRI 207 includes information that was previously not accessible to the public. However, there are some overlaps with existing mandatory tax reporting obligations. As outlined above, several firms in the EU already face CbCR requirements, which are similar to those according to Disclosure 207-4. While all firms with sales >750 mio. Euro face private CbCR requirements, Disclosure 207-4 is more extensive because it requires the use of consolidated numbers by country instead of aggregated figures and an explanation of the difference between accrued tax and the tax due if the statutory rate was applied for each country (KPMG 2022). While banks and extractives are required to publicly disclose CbCR, the primary intent to reduce corruption in the extractive industry and as part of a larger package of banking reforms intended to stabilize the

⁹ However, firms might, in exceptional cases, which are laid out in Section 3.2. of GRI 101: Foundation Standard (GRI 2016a), omit required disclosures if one of the reasons for omission listed in Section 3.2.2. applies. In this case, firms are obliged to provide an explanation for omission in the sustainability report.

¹⁰ Proposed GRI 103 removes “substantively influence the assessments and decisions of stakeholders”. Additionally, it mentions paying tax as a way a firm can contribute to sustainable development.

financial sector (Müller et al. 2020) differs from the purpose of GRI 207, resulting in differences in the information disclosed. For example, extractives are required to disclose their tax payments, but not further information required by GRI 207. Moreover, the three disclosures 207-1, 207-2, and 207-3, which provide qualitative information about how the organization manages its tax-related impacts, include some of the information that is required in Tax Strategy Reports in the United Kingdom. KPMG (2022) highlights that providing details of how tax is linked to sustainable development strategies and providing disclosures of how stakeholders' views and concerns regarding tax matters are collected and managed will require refinement beyond an already existing tax strategy. In summary, while, for certain firms, there is some overlap between the information already publicly available and the GRI 207 disclosures, the GRI 207 disclosures are expected to provide additional, useful information to stakeholders.

3 Theoretical Development and Hypothesis

Voluntary disclosure theories (Verrecchia 1983) suggest that firms weigh costs and benefits of disclosure and then reach an optimal disclosure decision. The market reaction to the events surrounding the adoption of GRI 207 will depend on investors' perceptions of how the disclosures will impact future cash flows. Prior research shows that CSR information can be useful to stakeholders (Margolis and Walsh 2001; Orlitzky, Schmidt, and Rynes 2003; Al-Tuwaijri, Christensen, and Hughes 2004), lowering the cost of capital (Dhaliwal et al. 2011) and increasing analyst forecast accuracy (Dhaliwal et al. 2012). Thus, voluntary CSR reporting appears to provide the benefit of reduced information asymmetry, which would be reflected in a lower cost of equity. However, there are also costs associated with voluntary disclosures, including compilation and proprietary costs of disclosure. Given GRI 207 is a voluntary disclosure and our focus on GRI reporting firms, the cost/benefit analysis also depends on whether a firm chooses to report under the new standard. We thus present our arguments organized as follows: 1) benefits of reporting, 2) costs of reporting, and 3) costs of electing not to report.

3.1 Benefits of Reporting

The GRI attention to tax disclosures is warranted given the public demands for tax transparency (Müller et al. 2020), as well as the previously documented value-relevance of tax-transparency (Müller et al. 2021; Bratten, Gleason, Larocque, and Mills 2017). Prior to the introduction of GRI 207, the GRI Guidelines recommended that firms provide information about their tax payments as part of their disclosure on direct economic value generated and distributed to stakeholders (GRI 2011, EC1).

Although this suggests the GRI and stakeholders believe tax disclosures were important, Davis et al. (2016) find that only 53% of examined CSR reports of U.S. firms include tax disclosures. There is cross-country variation in the EU, with 80% of a sample of U.K. firms reporting tax information in their 2012 sustainability reports, whereas only 53% of a sample of German firms include such information (Hardeck and Kirn 2016). Further, prior research has called into question the credibility and comparability of tax information disclosed in CSR reports. Hardeck et al. (2021) find a high variance in reporting and show that firms tended to primarily use symbolic tax disclosure to compensate for poor performance in other areas of CSR (i.e., greenwashing).

We expect enhanced disclosures under GRI 207 would provide useful information to investors for predicting future tax performance and expectations of tax risk, as well as comparability among adhering firms. Against this background, the detailed CSR reporting framework of GRI 207 has the potential to enhance comparability and credibility of tax information and contribute to more transparency, leading to reduced information asymmetry and an average positive reaction to the introduction of GRI 207 among GRI reporting firms.

3.2 Costs of Reporting

While investors may perceive benefits from reduced information asymmetry, they are also likely aware of costs associated with the enhanced disclosure. First, there are direct costs of preparing the enhanced disclosure (i.e., compliance costs). Firms need to assemble qualitative and quantitative information to create the disclosure. Some firms may have to develop and evaluate a plan of how tax fits into their overall CSR strategy if they do not have one already. Different from other areas of CSR,

there could be additional introduction costs because CSR departments would need to engage with the tax departments and may initiate a dialogue for the first time.¹¹

Another type of costs that investors will expect that is typical in a tax setting consists of the disclosure of proprietary information. Investors may perceive the information as useful to tax authorities to constrain tax avoidance or aid in audits (see Müller et al. 2020). While the tax authority already has CbCR for some firms due to mandatory disclosure requirements, the tax authorities of other countries that are not privy to the private CbCR reporting¹² could use the information to constrain tax avoidance, such as through unilateral transfer pricing adjustments (Evers, Meier, and Spengel 2017; Hanlon 2018). Dyreng et al. (2020) show that firms prefer not to publicly disclose foreign subsidiaries even though the information is already privately disclosed to the tax authority, suggesting public disclosures carry additional costs. Johannesen and Larsen (2016) document a negative market reaction to European legislation to CbCR for extractive firms, suggesting investors believe the disclosures are useful for enforcement.

Another proprietary cost of voluntary tax disclosures is the usefulness of information to competitors (Müller et al. 2020). For example, CbCR information could reveal sensitive information about profitability of the locations and activities (Evers, Meier, and Spengel 2017). Investors that fear the use of proprietary information by the tax authorities and competitors would negatively view the enhanced disclosures of GRI 207.

The introduction of GRI 207 will also likely increase interest in tax among other stakeholder groups in the EU. Disclosed information could be misinterpreted by stakeholders, fueling public mistrust (DeMatte, Hardeck, Inger, and Moore 2021). Investors would expect reputational costs if the disclosed information conflicts with stakeholders' perceptions of a firms actual or preferred tax performance

¹¹ Firms that are already publicly or privately reporting some of the information required by GRI 207, such as private CbCR reporting under BEPS Action 13, public tax strategy reports in the U.K. and required public CbCR in the extractive and financial sectors, would have lower implementation costs.

¹² Although the parent company is required to provide CbCR information to its home tax authority, subsidiaries notify their own authorities as to which tax authority to request the information from, resulting in some countries being unable to access the information due to the lack of mutual agreements or non-participation in information sharing (Forstater 2017).

(Dhaliwal et al. 2022; Lee et al. 2021; Graham et al. 2014; Austin and Wilson 2017; Dyreng et al. 2016)¹³.

Public disclosures can hold legislators accountable for detecting weaknesses and adjusting tax laws in ways that private information cannot (Devereux, Bennett, Freedman, Hearson, Lenon, Loutzenhiser, McNair, Morris, Parry, Shackleford, Symons, and Schatan 2011; Lagarden, Schreiber, Simons, and Sureth-Sloane 2020). Such disclosures could also result in public pressure for the tax authority to impose stricter enforcement. Anecdotal evidence suggests that accounting firms and businesses expected increasing mandatory tax transparency, with one Big 4 Director in Europe describing the increase in transparency requirements as a “transparency journey”. Another Big 4 Senior Manager in Europe described the changing tax transparency environment as a train that cannot be stopped.¹⁴ Thus, we predict that the introduction of GRI 207 will induce investors to expect the passage of new tax laws and mandatory disclosure rules (e.g., public CbCR), as well as public focus on additional tax enforcement, leading to a negative market reaction to GRI 207.

Prior literature finds that firms change their behavior as a result of increased tax transparency. Olbert and De Simone (2021) find that firms react to mandatory private CbCR by increasing investments in European countries with favorable tax landscapes, suggesting firms change real behaviors to support the validity of their tax avoidance practices. Consistently, Joshi (2020) finds an increase in effective tax rates and decrease in tax-motivated income shifting following the private CbCR mandate. There is also evidence that public disclosures are associated with changes in behavior. Eberhartinger et al. (2020) find that banks reduce their presence in tax havens in response to public banking-industry specific CbCR, consistent with findings of Joshi, Outslay, and Persson (2020) who observe a decline in income shifting. Overesch and Wolff (2021) find that banks that had not been publicly disclosing CbCR information prior to the public reporting mandate exhibit increased tax expense relative to banks that had been disclosing. These studies provide evidence that firms change their tax behavior as

¹³ Prior literature shows that firms engaging in socially responsible tax practices gain reputational benefits with consumers and investors (Hardeck and Hertl 2014; Hardeck et al. 2021; Davis et al. 2021). Thus, investors may believe that the disclosure of socially responsible tax practices in firms’ CSR reports may generate reputational benefits and thus react positively to the enhanced tax disclosures outlined in GRI 207. However, it is likely that firms would already be using such disclosures to generate reputational capital.

¹⁴ See Appendix A for details about these quotations.

a result of disclosure policies. In our setting, these results suggest that investors may expect firms to change their tax behavior as a result of the adoption of GRI 207. The change in behavior would likely include reduced tax avoidance, which would be negatively viewed by investors who on average positively value tax avoidance (Desai and Dharmapala 2008, Wilson 2009, Inger 2014).¹⁵

3.3 Costs of electing not to report

Investors may also expect potential effects if a GRI reporting firm excludes tax from its CSR reporting. Sustainability ratings that consider tax transparency (e.g., Dow Jones sustainability index) could suffer as a result of such an omission. Anecdotal evidence supports this prediction, with the Head of Tax for a large European company stating that the sustainability index rating would suffer unless taxes were included in the CSR report.¹⁶ Further, reputational costs from peer pressure and perceptions that the firm has something to hide could arise. Reputational costs would be especially high for firms that were reporting tax information under the prior GRI standard that choose not to adopt the new standard. Discontinuing GRI reporting in general is a more substantial step in which case the costs should be even worse since the effects would extend to the firm's CSR performance in general and not just to its tax performance.

Overall, there are greater arguments for costs associated with voluntary reporting under GRI 207. As such we put forth the following hypothesis.

H1: There is a negative stock price reaction to events leading up to the adoption of GRI 207.

4 Research Design

4.1 Data

Table 1 describes our sample selection process. We begin with the GRI list of reports and published materials available on the GRI website. This list consists of firms' self-registered reports through the GRI registration system.¹⁷ From this list, we identify the firms which had a sustainability report –

¹⁵ This change in behavior could materialize as the adoption of more sustainable tax practices (Müller et al. 2021), which, arguably, would be positively perceived by investors (Drake, Lusch, and Stekelberg 2019; Blaufus, Mohlmann, and Schwäbe 2019; Huesecken, Overesch, and Tassius 2018).

¹⁶ See Appendix A.

¹⁷ The list of GRI Standards reports and published materials with their self-declared claims can be accessed using the following link: <https://www.globalreporting.org/reportregistration/verifiedreports>

either on a stand-alone basis or in the form of an integrated report – for 2018 or 2019 registered in the list with a publication date prior the GSSB’s agreement on GRI 207. We next identify the firms which are listed on a global stock exchange by matching the list of firms that had registered a sustainability report for 2018 or 2019 in the GRI database with a global list of publicly traded firms that we retrieved from the Worldscope database on Refinitiv Eikon. This match relied on ISINs which we obtained using a fuzzy matching procedure augmented by manual inspection. We eliminate firms for which we could not obtain daily end of day stock prices from Refinitiv Eikon. We limit our sample to firms headquartered in Europe because European firms are subject to mandatory CSR reporting requirements under EU Directive 2014/95/EU, heightening investors’ expectation that GRI 207 will be relevant. We drop firms for which we could not obtain daily stock prices from Refinitiv Eikon for the three event windows and which did not have at least 100 return observations during the estimation window (Rusina 2020). Next, we eliminate firms for which we were unable to obtain financial information from Compustat. This leads to a baseline sample of 283 firms to estimate capital market reactions. Sample sizes vary for our cross-sectional tests depending on data availability.

Table 2 provides descriptive statistics and the industry composition of our sample. Our financial data are based on the company’s fiscal year occurring most recently before our first event and are reported in U.S. dollars. Not surprisingly, our sample consists of relatively large firms with average total assets of \$55 billion and average revenue of \$14 million. We discuss the other summary statistics in the sections that follow as we describe our cross-sectional analyses. In terms of industry, the largest group in our sample represents financial firms, followed by manufacturing.

4.2 Methodology

To analyse the capital market reaction to the introduction of the GRI 207 standard, we employ the event study methodology that considers the cumulative abnormal returns (CAR) in the event windows surrounding our three events of interest.

CARs are defined as the sum of the abnormal returns over the event window for a firm. Abnormal returns are calculated as the difference between the actually realised return and a hypothetical expected return:

$$AR_{i,t} = R_{i,t} - ER_{i,t}$$

$R_{i,t}$ represents the realised daily (t) return of firm i . $ER_{i,t}$ represents the estimated return of firm i on day t . We follow Rusina (2020) and measure returns as log returns:

$$R_{i,t} = \ln\left(\frac{Price_{i,t}}{Price_{i,t-1}}\right)$$

We follow Bauckloh, Hardeck, Inger, Wittenstein, and Zwergel (2021) and estimate the expected return using the market model:

$$R_{i,t} = \alpha_i + \beta_i R_{mt} + \varepsilon_{i,t}$$

R_{mt} represents the daily return of the market portfolio, which we proxy using the daily returns of the STOXX600 index. We follow Rusina (2020) and estimate the market model over a period of one calendar year, ending 3 days before the first draft of the GRI 207 standard was released and the public consultation period began to ensure that no pricing information related to the standard affects the predictive factors (MacKinlay 1997). We first estimate the market model for each sample firm individually over the estimation period and then use the computed regression estimates to predict the estimated returns over the event windows. Next, we subtract the estimated returns from the realised returns for the event windows. Finally, we compute the sum of the abnormal returns over the event window to arrive at the CAR of firm i for the event window (Rusina 2020):

$$CAR_i(T_1, T_2) = \sum_{t=T_1}^{T_2} AR_{i,t}$$

For each of the three events, we employ two different event window lengths: a three day event window centered on the event day ($CAR[-1;1]$) and a five day event window starting one day before the event and ending three days after ($CAR[-1;3]$). We test for significance of the mean CAR (cumulative average abnormal return, CAAR) per event using cross-sectional t-tests. For robustness, we also calculate non-parametric tests of the medians using the Wilcoxon sign test as well as the Wilcoxon signed-rank test.

5 Results

Table 3 presents results using the full sample. On average, GRI reporters experience statistically significant negative cumulative abnormal returns of 50 (55) basis points during the three-day (five-day) event window surrounding the first event, the approval of GRI 207. Our median tests and Wilcoxon signed rank tests confirm this result in the 3-day window, but only the Wilcoxon signed rank test is significant for the 5-day window. Overall, these results provide evidence that investors perceived greater costs from the new standard than benefits for European GRI reporters

The publication of the final standard (event #2), however, yields only mean CARs which are small in size (-0.005% for the short and 0.08% for the longer event window) and not significant at standard levels of confidence. We infer that the publication of the final standard did not provide investors incremental information.

The last event, the presentation of GRI 207 to investors at the London Stock Exchange, raised awareness about the new standard and its content, clearly illustrating the potential benefits and costs of publicly disclosing the relevant tax information. In particular, Elise J Bean, former United States Senate tax investigator, provided an in-depth discussion of tax avoidance strategies used by multinationals and highlighted how the information disclosed under GRI 207 can help policy makers close loopholes for tax avoidance in the current tax law.¹⁸ For the 3-day window, the sign test and Wilcoxon signed rank test indicate statistically significant median cumulative abnormal returns, which provides some initial support that investors of GRI-adhering firms reacted negatively to the investor presentation regarding possible implications of the new standard.

Overall, our baseline results support our hypothesis that investors reacted negatively to events associated with the adoption of GRI 207 as they perceive the potential costs of additional voluntary tax disclosure under the GRI stipulations to outweigh potential benefits. This finding is consistent with prior literature on investor reactions to the introduction of mandatory tax transparency regimes (Johannesen and Larsen, 2016; Hoopes et al., 2018).

¹⁸ C.f., Appendix B for a link to the recording of the event.

Next, we perform five sample splits to investigate different cost arguments which might drive our main results. First, we analyse whether already existing obligations of public CbCR influence the cost-benefit assessment of GRI 207. Given that public CbCR is a central part of GRI 207, we expect that firms which already prepare and publish this information incur lower compliance and reputation costs as well as lower costs of disclosing proprietary information than firms which do not fall under such a regime to date. To test this assumption, we identify financial institutions¹⁹ and large extractive and logging firms²⁰ which are required to publicly disclose CbCR under Directive 2013/36/EU (Capital Requirements Directive, CRD IV) and Directive 2013/34/EU (Accounting Directive), respectively, and compare them to the remaining sample firms. Seventeen percent of our sample are subject to these industry-specific public CbCR rules (Table 2).

The results are shown in table 4. Across the three events, we do not find any statistically significant differences between market reactions of the two groups except in the 5-day window for event #3, the presentation to investors. However, for this event, the mean CAR for the firms not subject to mandatory public CbCR is negative in the 3-day window and positive in the 5-day window, so we refrain from making any strong conclusion regarding this difference. Overall, results from this comparison provide limited evidence that investors view the anticipated costs from this standard as similarly impacting both groups of firms. One explanation for this outcome might be that the information to be disclosed under GRI 207 goes beyond the current public CbCR requirements, as described in detail in section 2.2. so that firms already reporting under these regimes will nevertheless need to disclose additional, previously private information. This notion is supported by one interview partner pointing out the discrepancies in the reportable data between the OECD's private CbCR, the EU recently agreed future public CbCR, and the GRI 207 CbCR, which potentially causes substantial compliance costs and bears the risk of reputational costs due to misinterpretations by (external) stakeholders.²¹

¹⁹ We identify financial institutions using SIC codes 6011-6289 and 6712-6799.

²⁰ We identify large extractive and logging firms using SIC codes 0111-0291, 0811-0971, 1011-1499, and 2411.

²¹ C.f., Appendix A.

Given that several interview partners indicated that GRI 207 was a significant “pressure point”, facilitating the passing of the new, generally applicable public CbCR in the EU, we perform another sample split based on investors’ perceptions of how likely it is a firm will be subject to future tax transparency reporting. We proxy for this expectation by splitting the sample on whether firms are subject to the future public CbCR or not, assuming the pressure for transparency is more intense for firms that are already required to file a private CbCR following BEPS 13 and thus have the necessary data available. Thereby, we compare firms headquartered in the EU with revenue > 750 million (future public CbCR reporters) with firms below this threshold. Fifty-seven percent of our sample would be subject to the new EU mandatory CbCR reporting based on their revenues reported for our sample period (for most firms this time period is the calendar year 2018).

Results are presented in Table 5. For our first event, we find that the future public CbCR reporters in our sample exhibit statistically significant negative average CARs of -0.77% (-0.966%) for the 3-day (5-day) event window, while future non-reporters exhibit positive, statistically insignificant mean CARs in both event windows. The difference in mean between these groups is statistically significant for the 3-day and 5-day event window. We interpret this result to suggest that investors perceived the GSSB’s approval of GRI 207 to be indicative of future costs linked to additional reporting requirements yet to come. Consequently, our results are consistent with one interview partner’s hypothesis that “what is currently voluntary, would move through to a mandatory environment”.²²

For event #2 and #3, we do not find statistically significant mean CARs. However, we note that we find a significant difference between the two samples (positive mean CARs for future public CbCR reporters) in the 3-day event window of event #2 and for the 5-day window of event #3 with future public CbCR reporters. Given the inconsistent nature of these results combined with the insignificant CARs within each subsample, we cannot draw any specific conclusions regarding differences in investor reactions to these latter two events.

Our next sample split concerns reputational costs linked to increased tax transparency. Based on prior literature (e.g., Bauckloh et al., 2021; Hanlon & Slemrod, 2009), we expect stakeholder groups to be

²² C.f., Appendix A.

particularly interested in firms that engage in more tax avoidance behaviors, i.e., which have particularly low effective tax rates (ETRs), leading to more negative CARs for firms with low ETRs. Tax authorities and other stakeholders such as NGOs and the media are more likely to scrutinize these firms. Therefore, we predict high tax avoiding firms potentially bear greater costs if they comply with this standard due to 1) increased pressure on taxing authorities to investigate their tax activities, 2) decreased tax avoidance to avoid such scrutiny and the related reputational costs, 3) increased proprietary costs if the firm reveals its tax avoidance activities more clearly through its compliance with the standard, and/ or 4) reputational costs from electing not to report according to GRI in order to avoid the new disclosures.

To proxy for tax avoidance, we compute current ETR as well as the TAXAVOID measure from Atwood et al. (2012) and compare the firms in the lowest quartile with firms in the highest quartile for the two measures. We calculate current ETR as the sum of current tax expense for the current year and two previous years divided by the pre-tax income for the same time period, winsorized at 0 and 1. TAXAVOID is the three-year sum of the firm's pre-tax income times the statutory rate of the country of incorporation less the three year sum of current tax expense, divided by the three year sum of pre-tax income.²³ TAXAVOID is increasing in tax avoidance, while ETRs are decreasing in tax avoidance. Results are shown in Tables 6 (ETR) and 7 (TAXAVOID). Surprisingly, for event #1, we find that low tax avoiders experience more negative investor reaction than high tax avoiders (in both the 3-day and 5-day windows (Table 6). We find similar results for event #1 using the TAXAVOID measure (Table 7) but only in the 5-day window. The results contradict our expectation about greater costs for high tax avoiders. However, we infer that our results might indicate that tax is more likely to be considered as a material topic among firms that experience a very high tax burden. Consequently, these firms should be less able to escape GRI 207 and thus are more likely to incur compliance costs or attract the attention of external stakeholders through higher levels of information disclosure.

²³ For both tax measures, pre-tax income is calculated by subtracting special items. Special items are set to zero when missing. Current tax expense is set to total tax expense less deferred taxes when missing. Both tax variables are set to missing when three-year pre-tax income is negative.

With respect to event #2, we find mixed results using ETR as our tax avoidance proxy. Specifically, in the 3-day window, we do not find any statistically significant difference in the market reaction of high and low tax avoiders, but in the 5-day window, we again find that low tax avoiders experience a more negative reaction (Table 6). We do not find any evidence of a differential investor response to the presentation of the standard to investors (event #3) using the Atwood measure (Table 7), or to the publication of the final standard using either tax avoidance proxy.

Our last test examines the investor reaction depending on whether a firm indicates in its report registration that it adheres to GRI using the Core model or the Comprehensive model, with the latter covering reports that offer a higher degree of transparency. Eighty-five percent of our sample follow GRI Core requirements (Table 2). As shown in Table 8, we find a more negative market reaction to event 1 for GRI Core firms than for those using the Comprehensive requirements, but only in the 5-day window. This could indicate that firms which already have a high level of transparency due to Comprehensive GRI reporting are perceived to incur lower future costs of reporting under GRI 207 than less transparent firms reporting under the Core option. However, this result does not replicate in the 3-day window so we refrain from a definitive conclusion. Our results do not point to any difference in investor reactions across these two groups to events #2 and #3.

6 Conclusion

Tax transparency is on the rise. Following increasing pressure from stakeholders, the GRI published the first standard for tax-related sustainability reporting, GRI 207: Tax. Firms that decide to report CSR information according to GRI and consider tax as material have to disclose tax information accordingly. This paper examines investor reactions to three events that led to the adoption of the new standard. We find that, on average, investors reacted negatively to GRI 207, suggesting that (1) voluntary tax-related CSR reporting is value-relevant and that (2) the costs of the standard exceed the corresponding benefits. Our cross-sectional results reveal that investors perceive that GRI 207 contains additional information beyond that available from mandatory public CbCR reporting. Further, we document that investor reaction is stronger for firms most likely to be subject to additional reporting requirements or for which tax is likely to be a material topic. To enrich our findings, we

conducted qualitative interviews with 10 heads of tax from large European firms and representatives of Big4 firms. In line with our empirical results, these interviews show that businesses perceive GRI 207 as important and costly. Firms' expectation of the voluntary standard GRI 207 being another milestone on the way to more mandatory tax disclosure rules was confirmed shortly after the introduction when the EU decided to introduce public CbCR in 2021.

Our paper is subject to some limitations. We focus on firms that reported according to GRI and registered their report at the GRI website. These firms are highly visible as GRI reporters, however, they do not cover their entire universe of GRI reporting firms. For the following draft, we will refine our empirical analyses and extend our sample to further GRI reporting firms, implement a matching approach to additionally compare GRI reporting firms to non-reporting firms and enrich our cross-sectional results with multivariate regression analyses. Moreover, we aim to distinguish between firms that already disclose tax information on a voluntary basis in their CSR report and those that do not. Overall, our paper provides initial evidence that the new voluntary standard for tax-related CSR reporting, GRI 207, is perceived as negative from an investor perspective.

References

- Agyemang, E. (2022a). SEC Rules against Amazon in dispute with investors over tax transparency. *The Financial Times* April 6, 2022.
- Agyemang, E. (2022b). Amazon under investor pressure over tax transparency. *The Financial Times* March 6, 2022.
- Al-Tuwaijri, S. A., Christensen, T. E., and K. E. Hughes. 2004. The relations among environmental disclosure, environmental performance, and economic performance: A simultaneous equations approach. *Accounting, Organizations and Society*, 29(5-6): 447–471. [https://doi.org/10.1016/S0361-3682\(03\)00032-1](https://doi.org/10.1016/S0361-3682(03)00032-1).
- Austin, C. R., and R. J. Wilson. 2017. An examination of reputational costs and tax avoidance: Evidence from firms with valuable consumer brands. *The Journal of the American Taxation Association* 39 (1): 67–93. <https://doi.org/10.2308/atax-51634>.
- Atwood, T. J., Drake, M. S., Myers, J. N., & Myers, L. A. (2012). Home country tax system characteristics and corporate tax avoidance: International evidence. *The Accounting Review*, 87(6), 1831-1860.
- Bauckloh, T., Hardeck, I., Inger, K. K., Wittenstein, P., & Zwergel, B. (2021). Spillover effects of tax avoidance on peers' firm value. *The Accounting Review*, 96(4), 51-79.
- Bilicka, K.A., Casi-Eberhard, E., Seregini, C., and B. Stage. 2021. Qualitative information disclosure: Is mandating additional tax information disclosure always useful? *TRR 266 Accounting for Transparency Working Paper Series No. 40*.
- Blaufus, K., Möhlmann, A., and A. N. Schwäbe. 2019: Stock price reactions to news about corporate tax avoidance and evasion, *Journal of Economic Psychology*, 72: 278–292. <https://doi.org/10.1016/j.joep.2019.04.00>.
- Bratten, B., Gleason, C. A., Larocque, S., and Mills, L. F. 2017. Forecasting taxes: New evidence from analysts. *The Accounting Review*, 92(3): 1–29. <https://doi.org/10.2308/accr-51557>.
- Davis, A. B., R. D. Moore, and T. Rupert. 2021. Corporate social responsibility and tax management: The moderating effect of beliefs about corporate tax duty. Working Paper.
- Davis, A.K., Guenther, D. A., Krull, L. K., and B. M. Williams. 2016. Do socially responsible firms pay more taxes? *The Accounting Review*, 91(1): 47–68. [10.2308/accr-51224](https://doi.org/10.2308/accr-51224).
- DeMatte, K., Hardeck, I., Inger, K., and Moore, R. D. 2021. Do corporations have a social responsibility regarding taxes? In: *Tax Notes International*, 102(1): 63–71.
- Desai, M.A., and D. Dharmapala. 2008. Tax and corporate governance: An economic approach. In: Schön, W. (eds) *Tax and corporate governance. MPI studies on intellectual property, competition and tax law*, volume 3. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-540-77276-7_3.
- Devereux, M., Bennett, M., Freedman, J., Hearson, M., Lenon, C., Loutzenhiser, G., McNair, D., Morris, W., Parry, R., Shackelford, D., Symons, S., & Schatan, R. (2011). *Transparency in reporting financial data by multinational corporations (Report of a group chaired by Michael Devereux, July 2011)*. Oxford University Centre for Business Taxation. Retrieved from https://wayback.archive-it.org/org-467/20200808010201/http://eureka.sbs.ox.ac.uk/7341/1/Transparency_reporting_multinationals_july2011.pdf. Accessed April 8, 2022.
- Dhaliwal, D. S., Li, O.Z., Tsang, A., and Y.G. Yang. 2011. Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *The Accounting Review*, 86(1): 59–100. <https://doi.org/10.2308/accr.00000005>.
- Dhaliwal, D. S., Radhakrishnan S., Tsang, A., and Y.G. Yang. 2012. Nonfinancial Disclosure and Analyst Forecast Accuracy: International Evidence on Corporate Social Responsibility Disclosure. *The Accounting Review*.87(3): 723–759. <https://doi.org/10.2308/accr-10218>.

- Dhaliwal, D. S., Goodman, T. H., Hoffman, P. J., and C. M. Schwab. 2022. The incidence, valuation and management of tax-related reputational costs: Evidence from a period of protest. *The Journal of the American Taxation Association*, 44(1): 49–73. <https://doi.org/10.2308/JATA-18-065>.
- Drake, K. D., Lusch, S. J., and Stekelberg, J. 2017. Does tax risk affect investor valuation of tax avoidance? *Journal of Accounting, Auditing and Finance*, 34(1): 151–176. <https://doi.org/10.1177/0148558X17692674>.
- Dutt, V.K., Ludwig, C.A., Nicolay, K., Vay, H., and J. Voget. 2019. Increasing tax transparency: investor reactions to the country-by-country reporting requirement for EU financial institutions. *International Tax and Public Finance*, 26: 1259–1290. <https://doi.org/10.1007/s10797-019-09575-4>.
- Dyreng, S. D., Hoopes, J. L., and Wilde, J. H. (2016). Public pressure and corporate tax behavior. *Journal of Accounting Research*, 54(1): 147–186. <https://doi.org/10.1111/1475-679X.12101>.
- Dyreng, S.D., Hoopes, J.L., Langetieg, P., and J.H. Wilde. 2020. Strategic Subsidiary Disclosure. *Journal of Accounting Research*, 58(3): 643–692. <https://doi.org/10.1111/1475-679X.12308>.
- Eberhartinger, E., Speitmann, R., Sureth-Sloane, C., and Y. Wu. 2020. How does trust affect concessionary behavior in tax bargaining? Working Paper. 10.2139/ssrn.3723499.
- Evers, M. T., Meier, I., and C. Spengel. 2017. Country-by-country reporting: Tension between transparency and tax planning. *ZEW-Centre for European Economic Research Discussion Paper*, 17-008.
- Forstater, M. 2017. Beneficial openness? Weighing the costs and benefits of financial transparency (CMI Working Paper No. 3, March 2017). Retrieved from <https://www.cmi.no/publications/file/6201-beneficial-openness.pdf> Accessed April 8, 2022.
- Glau, M. (2020). Financial reporting in non-listed family firms: Insights from interviews with CFOs. *Schmalenbach Business Review*, 72(2), 225-270.
- Graham, J. R., Hanlon, M., Shevlin, T., and N. Shroff. 2014. Incentives for Tax Planning and Avoidance: Evidence from the Field. *The Accounting Review*, 89(3): 991–1023. <https://doi.org/10.2308/accr-50678>.
- Grewal, J., Riedl, E. J., and G. Serafeim. 2019. Market reaction to mandatory nonfinancial disclosure. *Management Science*, 65(7), 3061–3084. <https://doi.org/10.1287/mnsc.2018.3099>.
- GRI. 2022. *The Global Standards for sustainability reporting*. <https://www.globalreporting.org/standards/> Accessed April 8, 2022.
- GRI. 2021. *GRI 3: Material Topics*. Retrieved from <https://globalreporting.org/pdf.aspx?id=12453&page=18#:~:text=Material%20topics%20are%20topics%20that,impacts%20on%20their%20human%20rights>.
- GRI. 2019. *GRI 207: Tax 2019*. Retrieved from <https://www.globalreporting.org/standards/media/2482/gri-207-tax-2019.pdf>.
- GRI 2016a. *GRI 101: Foundations 2016*. Retrieved from <https://www.globalreporting.org/standards/media/1036/gri-101-foundation-2016.pdf>.
- GRI 2016b. *GRI 103: Management Approach 2016*. Retrieved from <https://www.globalreporting.org/standards/media/1038/gri-103-management-approach-2016.pdf>.
- GRI. 2016c. *GRI 201: Economic Performance 2016*. Retrieved from <https://www.globalreporting.org/standards/media/1039/gri-201-economic-performance-2016.pdf>.
- Hanlon, M., & Slemrod, J. (2009). What does tax aggressiveness signal? Evidence from stock price reactions to news about tax shelter involvement. *Journal of Public Economics*, 93(1-2), 126-141.
- Hardeck, I., and R. Hertl. 2014. Consumer reactions to corporate tax strategies: Effects on corporate reputation and purchasing behavior. *Journal of Business Ethics*, 123(2): 309–326. <https://doi.org/10.1007/s10551-013-1843-7>.

- Hardeck, I., and T. Kirn. 2016. Taboo or technical issue? An empirical assessment of taxation in sustainability reports. *Journal of Cleaner Productions*. 133: 1337–1351. <http://dx.doi.org/10.1016/j.jclepro.2016.06.028>.
- Hardeck, I., Inger, K., Moore, R., and J. Schneider. 2021. The impact of tax avoidance and environmental performance on tax disclosure in CSR reports, Working Paper.
- Hoopes, J. L., Robinson, L., & Slemrod, J. (2018). Public tax-return disclosure. *Journal of Accounting and Economics*, 66(1), 142-162.
- Huesecken, B., Overesch, M., and A. Tassius. 2018. Effects of disclosing tax avoidance: Capital market reactions to LuxLeaks. Working Paper.
- Inger, K. K. 2014. Relative valuation of alternative methods of tax avoidance. *The Journal of the American Taxation Association* 36 (1): 27–55. 10.2308/atax-50606.
- Johannesen, N., and D.T. Larsen. 2016. The power of financial transparency: An event study of country-by-country reporting standards. *Economics Letters*, 145(C): 120–122. <https://doi.org/10.1016/j.econlet.2016.05.029>.
- Joshi, P. 2020. Does private country-by-country reporting deter tax avoidance and income shifting? Evidence from BEPS action item 13. *Journal of Accounting Research*, 58(2): 333–381. <https://doi.org/10.1111/1475-679X.12304>.
- Joshi, P., Outslay, E., and A. Persson. 2020. Does public country-by-country reporting deter tax avoidance and income shifting? Evidence from the European banking industry. *Contemporary Accounting Research*, 37(4): 2357–2397. <https://doi.org/10.1111/1911-3846.12601>.
- KPMG. 2022. *ESG and tax: tax transparency and GRI 207, ESG and tax are viewed as being intrinsically linked*. <https://home.kpmg/xx/en/home/insights/2021/12/esg-and-tax-gri-207-and-kpmg-tax-impact-reporting.html>. Accessed April 8, 2022.
- KPMG. 2020. *The time has come. The KPMG survey of sustainability reporting 2020*. https://assets.kpmg/content/dam/kpmg/be/pdf/2020/12/The_Time_Has_Come_KPMG_Survey_of_Sustainability_Reporting_2020.pdf. Accessed April 8, 2022.
- Lagarden, M., Schreiber, U., Simons, D., and C. Sureth-Sloane. 2020. Country-by-country reporting goes public – cui bono? *International Transfer Pricing Journal*, 27(2): 91–97.
- Lee, Y., Shaphan, N., Shevlin T., and A. Venkat. 2021. The effects of tax avoidance news on employee perceptions of managers and firms: Evidence from Glassdoor.com ratings. *The Accounting Review*, 96(3): 343–372. <http://dx.doi.org/10.2139/ssrn.3671004>.
- MacKinlay, A. C. 1997. Event Studies in Economics and Finance. *Journal of Economic Literature*, 35(1): 13–39.
- Malsch, B., and Salterio, S. E. (2016). “Doing good field research”: Assessing the quality of audit field research. *Auditing: A Journal of Practice & Theory*, 35(1), 1-22.
- Margolis, J. D., and J. Walsh. 2001. *People and Profits? The Search for a Link between a Firm’s Social and Financial Performance*. Mahwah, NJ: Lawrence Erlbaum Publishers.
- Müller, R., Spengel, C., and H. Vay. 2020. On the determinants and effects of corporate tax transparency: Review of an emerging literature. *ZEW-Centre for European Economic Research Discussion Paper*. 20-063.
- Müller, R., Spengel, C., and S. Weck. 2021. How do investors value the publication of tax information? Evidence from the European public country-by-country reporting. *Evidence From the European Public Country-By-Country Reporting*. 21-077.
- Olbert, M., and L. De Simone. 2021. Real effects of private country-by-country disclosure. *The Accounting Review*, forthcoming. <https://doi.org/10.2308/TAR-2020-0714>.
- Orlitzky, M., F. Schmidt, and S. Rynes. 2003. Corporate social and financial performance: A meta-analysis. *Organization Studies* 24: 403–441. <https://doi.org/10.1177/0170840603024003910>.

- Overesch, M., and H. Wolff. 2021. Financial transparency to the rescue: Effects of public country-by-country reporting in the European union banking sector on tax avoidance. *Contemporary Accounting Research*, 38(3): 1616–1642. 10.1111/1911-3846.12669.
- Principles on Responsible Engagement (PRI). 2018. *Evaluating and engaging on corporate tax transparency: An investor guide*.
- Rusina, A. 2020. Name and shame? Evidence from the European Union tax haven blacklist. *International Tax and Public Finance*, 27(6): 1364–1424. <https://doi.org/10.1007/s10797-020-09594-6>.
- Verrecchia, R. E. (1983). Discretionary disclosure. *Journal of Accounting and Economics*, 5: 179–194. [https://doi.org/10.1016/0165-4101\(83\)90011-3](https://doi.org/10.1016/0165-4101(83)90011-3).
- Wilson, R. J. 2009. An examination of corporate tax shelter participants. *The Accounting Review* 84 (3): 969–999. 10.2308/accr.2009.84.3.969.

Appendix

Appendix A: Select quotes from interviews with Professionals concerning voluntary tax transparency

To complement our empirical findings, we conducted 10 semi-structured interviews with heads of tax of large European publicly listed and family-owned firms, and Big 4 consultants. Our sample firms are from a variety of industries, such as the insurance, manufacturing, automotive, energy technology, health care, multimedia, and consumer goods industry. Following a purposeful sampling approach (e.g., Glaum 2020, p. 235), we selected Big 4 consultants focusing on tax transparency and firms with varying levels of voluntary tax transparency. Thus, our sample of firms interviewed consists of both current voluntary tax, and in particular GRI 207, reporters and non-reporters. Additionally, we applied a snowball approach (e.g., Glaum 2020; Malsch and Salterio 2016) by asking each interviewee to suggest other experts within the field.

We asked our interviewees about their understanding of voluntary tax transparency, perceived costs and benefits, and in particular about their assessment of GRI 207. Prior to the interviews, we prepared an interview guide consisting of open-ended questions, but nevertheless allowed the interviews to deviate from the structure of the guide, allowing interviewees to also discuss any additional relevant issues and provide further context to their answers. All interviews were conducted by the same co-author via video calls. All interviews were conducted in German except for one, which we did in English. Relevant quotes from the interviews in German were subsequently translated to English. The interviews were between approximately 30 min to one hour in length. With permission of our interviewees, all interviews were recorded and transcribed verbatim.

The following table includes direct quotes from our interviews arranged by topic.

<u>Stakeholder Interest in GRI 207 and Tax Transparency</u>	
“companies are also interested in knowing what it actually says and what it means and how I can apply GRI standards and what GRI actually is”	European Big 4 Senior Manager
“it’s also the sustainability reporting standards become sustainability pressure points, we have the GRI, we have the Dow Jones sustainability index. I mean, the pressure is imminent.”	European Big 4 Director

<p>“There is a sustainability index. ... Taxes are not the decisive criterion, but taxes are a criterion and if you lose too many points, your ranking will deteriorate and you will have to think about how to prepare the information in order to be reasonably competitive.”</p>	<p>Head of Tax for large European company</p>
<p>Increasing Mandatory Tax Transparency</p>	
<p>In regards to GRI Disclosure 207-4: “...now country-by-country reporting is to come through the back door as part of sustainability reporting. How can a non-governmental organization actually feel called upon to implement something that the regulator has not managed to agree on in many years? Many people reacted to this, but I think it is clear that we can't stop this train...”</p>	<p>European Big 4 Senior Manager</p>
<p>“one way or the other, the public tax transparency, what is currently voluntary, would move through to a mandatory environment”.</p>	<p>European Big 4 Director</p>
<p>“they start, from the individuals, the FATCA, CRS-side, then it moved to the multinational companies with the CbCR, then moved to other political decision that implemented whether its DAC 6, whether its exchange of rulings, etc. And then, this slowly has moved to more like public tax transparency. And then now, of course, the pressure is much higher than before.”</p>	<p>European Big 4 Director</p>
<p>“from a political perspective, the CbCR came into force, or actually the BEPS was 2014/15, then first exchange was 17/18, but you know, it was a matter of continuation that this is going to come into the public area”</p>	<p>European Big 4 Director</p>
<p>“I think what I have observed is the overall tax transparency journey, as we call it, has as I said started back in 2008/09 with the financial crisis, then the governments appreciated and acknowledged the importance of additional information.”</p>	<p>European Big 4 Director</p>
<p>“And then we have of course the WEF, the international business council paper which refers to the core extent of metrics in taxes, which are broader than just CbCR. So yes, there are very many pressure points.”</p>	<p>European Big 4 Director</p>
<p>In regards to CbCR in Europe: “many companies, including in the German economy, were very much opposed to it, and the discussion stopped at some point because GRI came along and it was clear that we had to publish anyway.”</p>	<p>Head of Tax of European large family business</p>
<p>“Now we will certainly go down one or the other wrong path in the next few years, because there are currently many players out there, countries that want to disclose OECD CbCR, then there is the EU's CbCR, then there is a CbCR that could come via the GRI 207 standard, which many companies follow. This would mean that three different CbCR reports would be disclosed, which are different in detail. There will be bickering, because the numbers are then not immediately transferable among the reports, which an external reader cannot understand at all.”</p>	<p>Head of Tax of large European firm</p>
<p>Increasing Pressure for Tax Transparency</p>	
<p>Another area that we have seen is called the domino effect. We kind of sensed some of the UK insurance companies, they were active a bit early. ... And by the time they [a large German financial services company] went public with tax transparency, within six months, others [other large financial services companies] went public with tax transparency reporting as well. So, these were like a domino effect. And I am pretty much sure and confident, that we will see domino effects in other industries as well, in the next years if not months.”</p>	<p>European Big 4 Director</p>

Appendix B: Timeline of GRI 207

Date	Event	Source
Development of the Standard		
May 2017	<u>Approval of project proposal</u> GSSB approves project proposal for disclosures on tax & payments to government. Multi-stakeholder technical committee was formed.	GSSB, Basis for Conclusions for GRI 207: Tax 2019, dated 12.05.2019, p. 3
06.28.2018	<u>Recommendation of technical committee</u> Technical committee on tax and payments to government recommended the inclusion of a new dedicated topic-specific standard at the GSSB meeting	GSSB, Basis for Conclusions for GRI 207: Tax 2019, dated 12.05.2019, p. 3 Meeting summary Recording of livestream
09.25.2018	<u>GSSB discusses first rough draft</u> Field test consultation with selected stakeholders took place, leading to a revision of the draft.	GSSB, Exposure Draft – Tax & Payments to Governments Standard, dated 03.27.2019, p. 4 Meeting summary Recording #1 of livestream Recording #2 of livestream
11.29.2018	<u>Approval for public exposure</u> GSSB approves the revised draft for public exposure	GSSB, Exposure Draft – Tax & Payments to Governments Standard, dated 03.27.2019, p. 4 GSSB, Basis for Conclusion for GRI 207: Tax 2019, dated 12.05.2018, p. 4 Meeting summary Recording of livestream
12.13.2018	<u>Publication of exposure draft</u> The publication of the exposure draft marks the beginning of a consultation phase ending on 27 March 2019 resulting in 83 submissions from 109 individuals and organizations.	GSSB, Basis for Conclusions for GRI 207: Tax 2019, dated 12.05.2018
Events for Event Study		
09.24.2019	<u>Event #1</u> GSSB approves GRI 207 standard	Meeting summary Recording #1 of livestream Recording #2 of livestream
12.05.2019	<u>Event #2</u> Publication of final GRI 207 standard	GSSB, GRI 207: Tax 2019, dated 12.05.2019
01.16.2020	<u>Event #3</u> Presentation of the GRI 207 standard at the London Stock Exchange	Recording of livestream

Table 1: Sample Selection Process

All firms registered in GRI database with a CSR report for 2018 or 2019	2,139
Less: firms missing ISIN after fuzzy matching and manual search	(1,068)
Less: firms missing basic information from Worldscope	(54)
Less: firms with headquarters outside of Europe	(651)
Less: firms with less than 100 return observations in the estimation window	(11)
Less: firms without return observations during all three event windows	(51)
Less: firms without financial information from Compustat	(5)
Less: firms that only reference GRI but do not adhere to the framework	(16)
	<hr/>
	283

Table 2: Descriptive Statistics and Industry Composition

<u>Panel A: Descriptive Statistics</u>					
Variable	Obs	Mean	Std. Dev.	Min	Max
Assets (<i>millions</i>)	283	55,114.52	155,413.80	93.29	1,027,622.00
Revenue (<i>millions</i>)	283	13,984.95	36,861.17	39.11	388,379.00
Public CbCR	283	0.17	0.37	0	1
Future CbCR	283	0.57	0.50	0	1
Current ETR	271	0.23	0.16	0	1
TAXAVOID	271	-0.07	0.97	-14.81	1.01
GRI Core	283	0.85	0.36	0	1

<u>Panel B: Industry Distribution</u>		
<i>Fama-French 12 Industries</i>	Number	Percent of Sample
Consumer NonDurables	17	6.01%
Consumer Durables	8	2.83%
Manufacturing	48	16.96%
Oil, Gas, and Coal Extraction and Products	13	4.59%
Chemicals and Allied Products	18	6.36%
Business Equipment	14	4.95%
Telephone and Television Transmission	16	5.65%
Utilities	16	5.65%
Wholesale, Retail, and Some Services	13	4.59%
Healthcare, Medical Equipment and Drugs	10	3.53%
Finance	65	22.97%
Other	<u>45</u>	<u>15.90%</u>
	283	100

This table presents sample descriptive statistics (panel A) and the industry composition (panel B) of the sample. Financial variables are reported in USD and are based on the most recent fiscal year ending before Event 1. For most firms this was 12/31/2018. Public CbCR equals 1 for extractive industry and financial services firms already subject to mandatory public CbCR, and 0 otherwise. Future CbCR equals 1 for firms that would ultimately be subject to mandatory public CbCR in the EU starting after 2021 based on having total revenues greater than 750 million euro, and 0 otherwise. Current ETR is a three year effective tax rate measure calculated as the sum of current tax expense for the current year and two previous years divided by the pre-tax income for the same time period, winsorized at 0 and 1. TAXAVOID is based on the measure of the same name from Atwood et al. (2012) and calculated as the three year sum of the firm's pre-tax income times the statutory rate of the country of incorporation less the three year sum of current tax expense, divided by the three year sum of pre-tax income. Statutory tax rates were obtained from the KPMG corporate tax rates statistic. For both tax measures, pre-tax income is calculated by subtracting special items. Special items are set to zero when missing. Current tax expense is set to total tax expense less deferred taxes when missing. Both tax variables are set to missing when three-year pre-tax income is negative. GRI Core equals 1 for firms indicating GRI Core adherence and 0 for firms indicating GRI Comprehensive adherence.

**Table 3: Cumulative Abnormal Returns Around Event Dates
(n=283 Firms)**

	Event Window: (-1,1)	Event Window: (-1,3)
Event 1: Approval		
% Negative CARs	56.18%	53.00%
Mean CAR % (t-stat)	-0.499*** (-2.618)	-0.546** (-2.27)
Median CAR %	-0.358**	-0.184
Wilcoxon Signed Rank Z stat	-2.606***	-2.108**
Event 2: Publication		
% Negative CARs	51.59%	53.36%
Mean CAR % (t-stat)	-0.005 (-0.031)	0.080 (0.418)
Median CAR %	-0.023	-0.090
Wilcoxon Signed Rank Z stat	-0.390	-0.032
Event 3: Presentation		
% Negative CARs	58.30%	53.00%
Mean CAR % (t-stat)	-0.249 (-1.476)	-0.161 (-0.729)
Median CAR %	-0.463***	-0.153
Wilcoxon Signed Rank Z stat	-2.819***	-1.253

This table presents average cumulative abnormal returns around the three event dates and tests for differences from zero using t-tests of means, the sign test for medians, and the Wilcoxon signed rank test. *, **, *** indicate statistical significance at the .1, .05, and .01 levels, respectively. All p-values are based on two-tailed tests.

Table 4: Comparison of Firms Subject to Public CbCR vs. Other Firms (n=283)

	Event Window: (-1,1)			Event Window: (-1,3)		
	Firms Subject to Public CbCR (n=47)	Other Firms (n=236)	Difference	Firms Subject to Public CbCR (n=47)	Other Firms (n=236)	Difference
Event 1: Approval						
% Negative CARs	65.96%	54.24%		55.32%	52.54%	
Mean CAR % (t-stat)	-0.838** (-2.169)	-0.431** (-2.004)	-0.407 (0.794)	-0.703 (-1.287)	-0.515 (-1.924)	-0.188 (0.29)
Event 2: Publication						
% Negative CARs	42.55%	53.34%		40.43%	55.93%	
Mean CAR % (t-stat)	0.333 (0.707)	-0.072 (-0.474)	0.405 (-1.014)	0.454 (0.74)	0.006 (0.029)	0.448 (-0.872)
Event 3: Presentation						
% Negative CARs	57.45%	58.47%		51.06%	53.39%	
Mean CAR % (t-stat)	-0.720* (-1.855)	-0.156 (-0.833)	-0.564 (1.242)	-0.991 (-1.499)	0.004 (0.016)	-0.995* (1.676)

This table compares differences in CARs around the three event dates between firms already subject to public CbCR due to participation in the extractive or financial industries and all other firms in the sample. *, **, *** indicate statistical significance at the .1, .05, and .01 levels, respectively. All p-values are based on two-tailed tests.

Table 5: Comparison of Firms Subject to Future Mandatory Public CbCR vs. Other Firms (n=236)

	Event Window: (-1,1)			Event Window: (-1,3)		
	Firms Subject to Future Public CbCR (n=137)	Other Firms (n=99)	Difference	Firms Subject to Future Public CbCR (n=137)	Other Firms (n=99)	Difference
Event 1: Approval						
% Negative CARs	55.47%	52.53%		56.93%	46.46%	
Mean CAR %	-0.770**	0.037	-0.807*	-0.966***	0.109	-1.075**
(t-stat)	(-2.411)	(0.144)	(1.858)	(-2.627)	(0.287)	(1.993)
Event 2: Publication						
% Negative CARs	53.28%	53.54%		54.01%	58.59%	
Mean CAR %	0.148	-0.376	0.523*	0.226	-0.299	0.524
(t-stat)	(0.743)	(-1.615)	(-1.71)	(1.026)	(-0.856)	(-1.333)
Event 3: Presentation						
% Negative CARs	64.23%	50.51%		61.31%	42.42%	
Mean CAR %	-0.282	0.018	-0.300	-0.407	0.572	-0.979**
(t-stat)	(-1.09)	(0.069)	(0.791)	(-1.353)	(1.633)	(2.117)

This table compares differences in CARs around the three event dates between firms that likely would be subject to future mandatory public CbCR in the EU (which was ultimately promulgated in 2021 - after our sample events) and firms that would not be subject to it. Firms already subject to mandatory public CbCR due industry affiliation in extractives or financial services (n=47) are excluded from the analysis in this table. *, **, *** indicate statistical significance at the .1, .05, and .01 levels, respectively. All p-values are based on two-tailed tests.

Table 6: Comparison of High and Low Tax Avoiders Based on Current ETR

	Event Window: (-1,1)			Event Window: (-1,3)		
	High Tax Avoiders (lowest quartile of current ETR) (n=68)	Low Tax Avoiders (highest quartile of current ETR) (n=64)	Difference	High Tax Avoiders (lowest quartile of current ETR) (n=68)	Low Tax Avoiders (highest quartile of current ETR) (n=64)	Difference
Event 1: Approval						
% Negative CARs	47.06%	68.75%		42.65%	65.63%	
Mean CAR % (t-stat)	-0.084 (-0.301)	-0.996** (-2.586)	0.912* (-1.936)	0.050 (0.139)	-1.521*** (-3.14)	1.571*** (-2.621)
Event 2: Publication						
% Negative CARs	63.24%	60.94%		52.94%	65.63%	
Mean CAR % (t-stat)	-0.180 (-0.669)	-0.647* (-1.959)	0.467 (-1.103)	0.198 (0.692)	-0.752* (-1.965)	0.950** (-2.004)
Event 3: Presentation						
% Negative CARs	64.71%	54.69%		52.94%	51.56%	
Mean CAR % (t-stat)	-0.703*** (-2.847)	-0.062 (-0.156)	-0.641 (1.391)	-0.309 (-0.731)	-0.229 (-0.477)	-0.080 (0.125)

This table compares differences in CARs around the three event dates between firms in the lowest quartile of current ETRs and those in the highest quartile. *, **, *** indicate statistical significance at the .1, .05, and .01 levels, respectively. All p-values are based on two-tailed tests.

Table 7: Comparison of High and Low Tax Avoiders Based on TAXAVOID Measure

	Event Window: (-1,1)			Event Window: (-1,3)		
	High Tax Avoiders (highest quartile of TAXAVOID) (n=68)	Low Tax Avoiders (lowest quartile of TAXAVOID) (n=66)	Difference	High Tax Avoiders (highest quartile of TAXAVOID) (n=68)	Low Tax Avoiders (lowest quartile of TAXAVOID) (n=66)	Difference
Event 1: Approval						
% Negative CARs	44.12%	65.15%		42.65%	59.09%	
Mean CAR %	-0.055	-0.668*	0.614	0.128	-0.922**	1.050*
(t-stat)	(-0.198)	(-1.904)	(-1.379)	(0.35)	(-2.086)	(-1.838)
Event 2: Publication						
% Negative CARs	55.88%	48.48%		52.94%	60.61%	
Mean CAR %	-0.122	-0.236	0.114	0.237	-0.277	0.513
(t-stat)	(-0.387)	(-0.782)	(-0.26)	(0.715)	(-0.725)	(-1.018)
Event 3: Presentation						
% Negative CARs	63.24%	56.06%		55.88%	53.03%	
Mean CAR %	-0.570**	-0.302	-0.269	-0.529	-0.479	-0.050
(t-stat)	(-2.149)	(-1.008)	(0.673)	(-1.271)	(-1.195)	(0.087)

This table compares differences in CARs around the three event dates between firms in the lowest quartile of TAXAVOID and those in the highest quartile. *, **, *** indicate statistical significance at the .1, .05, and .01 levels, respectively. All p-values are based on two-tailed tests.

Table 8: Comparison of Firms Indicating GRI Core vs GRI Comprehensive Adherence

	Event Window: (-1,1)			Event Window: (-1,3)		
	Firms Using GRI Core (n=240)	Firms Using GRI Comprehensive (n=43)	Difference	Firms Using GRI Core (n=240)	Firms Using GRI Comprehensive (n=43)	Difference
Event 1: Approval						
% Negative CARs	56.25%	55.81%		55.42%	39.53%	
Mean CAR % (t-stat)	-0.607*** (-2.829)	0.104 (0.286)	-0.711 (1.341)	-0.737*** (-2.706)	0.518 (1.254)	-1.255* (1.881)
Event 2: Publication						
% Negative CARs	52.50%	46.51%		53.75%	51.16%	
Mean CAR % (t-stat)	0.063 (0.382)	-0.382 (-1.143)	0.444 (-1.074)	0.163 (0.759)	-0.385 (-1.036)	0.548 (-1.029)
Event 3: Presentation						
% Negative CARs	57.08%	65.12%		51.25%	62.79%	
Mean CAR % (t-stat)	-0.181 (-0.957)	-0.632* (-1.8)	0.451 (-0.957)	-0.040 (-0.162)	-0.839* (-1.829)	0.799 (-1.297)

This table compares differences in CARs around the three event dates between firms that adhere to GRI standards using the "GRI Core" vs those that adhere under "GRI Comprehensive". *, **, *** indicate statistical significance at the .1, .05, and .01 levels, respectively. All p-values are based on two-tailed tests.