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# ADOPTION OF CSR AND SUSTAINABILITY REPORTING STANDARDS: ECONOMIC ANALYSIS AND REVIEW

Hans B. Christensen
Luzi Hail
Christian Leuz

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**ABSTRACT**

This study provides an economic analysis of the determinants and consequences of corporate social responsibility (CSR) and sustainability reporting. To frame our analysis, we consider a widespread mandatory adoption of CSR reporting standards in the United States. The study focuses on the economic effects of standards for disclosure and reporting, not on the effects of CSR activities and policies themselves. It draws on an extensive review of the relevant academic (CSR and non-CSR) literatures in accounting, economics, finance, and management. Based on a discussion of the fundamental economic forces at play and the key features and determinants of (voluntary) CSR reporting, we derive and evaluate possible economic consequences, including capital-market effects for select stakeholders as well as potential firm responses and real effects in firm behavior. We also highlight issues related to the implementation and enforcement of CSR reporting standards. Our analysis yields a number of insights that are relevant to the current debate on CSR and sustainability reporting and provides scholars with avenues for future research.

Hans B. Christensen
University of Chicago
Booth School of Business
5807 S. Woodlawn Ave
Chicago, IL 60637
hans.christensen@chicagobooth.edu

Luzi Hail
Wharton School
University of Pennsylvania
Locust Walk
Philadelphia, PA 19104
lhail@wharton.upenn.edu

Christian Leuz
Booth School of Business
University of Chicago
5807 S. Woodlawn Avenue
Chicago, IL 60637-1610
and NBER
cleuz@chicagobooth.edu

## 1. Introduction and Outline of Analysis

This study provides an economic analysis of the determinants and consequences of corporate social responsibility (CSR) and sustainability reporting. To frame our analysis, we consider a hypothetical mandatory adoption of CSR reporting standards in the United States. The analysis is informed by an extensive review of the relevant academic literatures in accounting, finance, management, and economics. We apply the insights that we gain from this evidence to discuss possible economic consequences, including capital-market effects, real effects and implementation issues, resulting from a widespread adoption of such disclosure and reporting standards by U.S. public companies.

We use the term "CSR" to denote corporate activities and policies that assess, manage and govern a firm's responsibilities for and its impacts on society and the environment.[1] CSR often has the goal of improving social welfare or making business activities more sustainable. CSR goes beyond compliance with legal, regulatory and contractual requirements (McWilliams and Siegel 2001) and, in this sense, CSR activities and policies are voluntary, although they can be strategic or induced by markets (Kitzmueller and Shimshack 2012). CSR could be in line with or go against the interests of shareholders. It encompasses a broad spectrum of environmental, social, and governance topics, activities and policies.

In line with this definition, we refer to CSR *reporting* as the measurement, disclosure, and communication of information about CSR-related topics, including CSR activities, risks and policies. The analysis focuses on the potential economic effects of a mandatory adoption of

[1] Related terms commonly used in the literature are "sustainability" or "environmental, social, and governance" (ESG) activities. The definitions of all these terms are close. See Section 2.1 for further discussion. According to Huang and Watson (2015), CSR is the predominant term in the literature, which is why we use it.

*standards for reporting* on CSR (or sustainability) by U.S. companies, not on the economic effects of CSR activities and policies themselves. Thus, our shorthand "CSR standards" refers to disclosure and reporting standards, not standards for CSR activities and policies. For much of the analysis, we consider a comprehensive set of CSR standards with a broad scope that is not limited to particular CSR topics or a particular group of stakeholders.

We organize the study and our economic analysis as follows. Section 2 defines the scope of the analysis and provides the conceptual underpinnings. We provide definitions for the key terms (Section 2.1) and delineate the primary scenario for our analysis, that is, a widespread adoption of CSR reporting standards for U.S. public firms via a mandate (Section 2.2). In what follows, we contrast this scenario to the status quo against which we consider the potential economic effects of CSR reporting standards. Next, we highlight the key conceptual features that distinguish CSR reporting from a traditional financial reporting system (Section 2.3). We conclude with a brief discussion of the theoretical underpinnings that we draw from extant academic literature in accounting, finance, and economics (Section 2.4). For instance, we stress the importance of firm-level incentives and institutional complementarities in shaping firms' reporting practices and regulatory outcomes. We later apply these general insights to CSR disclosures and reporting.

Section 3 outlines key determinants of firms' voluntary CSR reporting decisions. Many U.S. firms currently provide CSR information either on a voluntary basis or because they deem the information material to investors under existing securities law. As such, observed disclosure practices allow us insights into what or when firms are more likely to find CSR reporting beneficial. We first outline generic firm and manager characteristics associated with (voluntary) CSR reporting that prior literature has identified (Section 3.1). Next, we review the effects of business activities and external events in the firm's environment on CSR disclosure choices

(Section 3.2). Pressure from outside stakeholders and society in general also play a role in shaping CSR reporting practices (Section 3.3). We conclude with a discussion of the implications of these determinants and the current state of CSR reporting by U.S. firms for our base case (Section 3.4).

Section 4 discusses the potential effects of the mandatory adoption of CSR reporting standards on the various recipients of CSR disclosures. We begin by briefly reviewing the link between CSR activities and firm value or performance (Section 4.1). This link is central to the CSR literature and motivates the investor demand for information about CSR. We then outline potential capital market effects, focusing on equity investors (Section 4.2) and debtholders or lenders (Section 4.3). These two groups are typically viewed as main users of financial statements. We discuss potential effects of CSR reporting on firm value, stock returns and liquidity, firm risk and cost of capital as well as on investors' portfolio holdings. Next, we turn to financial intermediaries, like analysts and the business press who play a crucial role in the dissemination of CSR information (Section 4.4). Finally, we analyze potential effects of CSR reporting on other stakeholders without a direct financial claim on the firm, such as customers, management and employees, or the society at large (Section 4.5). We again conclude the section with a discussion of the implications of the various stakeholder effects for our base scenario (Section 4.6).

In Section 5, we consider potential firm responses and real effects from a mandatory adoption of CSR reporting standards. Such a mandate likely affects not only the recipients of CSR information, but could also induce firms to alter their behavior, often precisely because investors or other stakeholders (are expected to) respond to firm disclosures. We begin by briefly reviewing the general link between disclosure (mandates) and firms' real investment, financing, and operating activities (Section 5.1). We then derive potential firm-level consequences of a CSR mandate and review extant literature on the real effects of CSR reporting (Section 5.2). Next, we consider the possibility that firms abandon certain CSR activities or exit certain markets altogether (Section 5.3). New regulation likely affects the cost-benefit tradeoff that firms face when evaluating the decision to seek external financing or to remain present in a market. We conclude by highlighting the potential implications of a CSR reporting mandate for the aggregate CSR activity in the economy (Section 5.4).

In Section 6, we turn to a few key implementation issues for the mandatory adoption of CSR reporting standards. While these issues are common to accounting standard setting in general, we incorporate the distinctive features of CSR reporting into the analysis. Specifically, we discuss the process of establishing and maintaining CSR reporting standards (Section 6.1); the role of materiality for financial reporting and CSR reporting, including a review of the empirical evidence on the effects of material CSR disclosures (Section 6.2); the use of boilerplate language to avoid compliance with CSR standards or to mask poor CSR performance (Section 6.3); and challenges for the effective enforcement of CSR reporting standards as well as the role of assurance providers for the certification of CSR reports (Section 6.4).

Section 7 concludes with a summary and synthesis of the main insights from our analysis. In addition, we point to several areas that are currently under-researched in the literature. Thus, our discussion highlights numerous opportunities for future research in the area of CSR reporting.

Before we begin, we point out that our analysis does not evaluate the potential costs and benefits of CSR activities or policies themselves. The focus is on the effects of mandated CSR reporting (standards). We also do not consider the pros and cons of specific CSR standards, nor do we analyze individual standards for particular industries or activities. Our goal is to identify the main economic effects that can be reasonably expected under our base scenario and to highlight key economic tradeoffs, considering the findings of extant (CSR) literature. Because predicting economic consequences of CSR reporting standards, just as for any other policy change, is difficult and involves considerable uncertainty, we consider our analysis, in part, as speculative (see Section 2.2 for additional caveats and limitations).

## 2. Scope of Analysis and Conceptual Underpinnings

In this section, we define the scope of our study. We start with definitions for the key terms. We then frame the analysis by outlining our primary scenario, namely the widespread mandatory adoption of CSR reporting standards in the United States. In the analysis that follows, we contrast this scenario to the status quo against which we consider the potential economic effects of CSR reporting standards. Next, we highlight the key conceptual features that distinguish CSR reporting from a traditional financial reporting system. Despite these differences, the academic literature in accounting, finance and economics offers several insights that also apply to CSR disclosures and reporting. We conclude with a brief discussion of these conceptual underpinnings and general insights so that we later can apply them to CSR reporting.

### *2.1. Key Definitions of CSR Reporting*

We use the term "CSR" rather than "sustainability" throughout the study. Our review of common definitions for the two terms indicates that their meanings are close, and their use is similar. To illustrate, the Financial Times Lexicon states in its definition of CSR:[2] "CSR is a concept with many definitions and practices […] that addresses many and various topics such as human rights, corporate governance, health and safety, environmental effects, working conditions and contribution to economic development. Whatever the definition is, *the purpose of CSR is to*

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[2] As accessed on the Financial Times website on January 19, 2019 (https://www.ft.com). In the meantime, the Financial Times has discontinued its online Lexicon glossary tool.

*drive change towards sustainability* [emphasis added]." CSR tends to be defined slightly more broadly and normatively; sustainability, in turn, emphasizes the long-term horizon. While the use of the term sustainability is growing (e.g., by companies; KPMG 2013, p. 6), CSR is still the predominant term in the academic literature (Huang and Watson 2015).

We follow a large academic literature and use the term CSR to describe corporate activities and policies that assess, manage, and govern a firm's responsibilities for and its impacts on society and the environment. CSR often has the goal of improving social welfare or making corporate activities more sustainable. CSR could be fully in line with the interests of shareholders and even increase the value of the firm (e.g., by building trust and social capital; Lins, Servaes, and Tamayo 2017). However, we also note that maximizing shareholder welfare is not necessarily the same as maximizing firm value (Hart and Zingales 2017). Accepting CSR implies that a firm pursues a broader objective than maximizing its market value, trying to meet the needs and expectations of a wider set of stakeholders or society. In doing so, firms may sacrifice profits (e.g., Roberts 1992; Bénabou and Tirole 2010), although the absence of profit or shareholder value maximization is not a necessary feature of the CSR definition (e.g., Kitzmueller and Shimshack 2012).[3] CSR goes beyond compliance with legal, regulatory and contractual obligations, highlighting its voluntary nature (e.g., McWilliams and Siegel 2001; Liang and Renneboog 2017), and also beyond having

[3] For instance, Liang and Renneboog (2017, p. 854) define CSR as "firm activities that improve social welfare but not necessarily at the expense of profits (or shareholder value)." A positive relation between CSR and firm value is often referred to as 'doing well by doing good' (e.g., Dowell, Hart, and Yeung 2000; Orlitzky, Schmidt, and Rynes 2003; Deng, Kang, and Low 2013; Flammer 2015). But others point out that the relation may run the other way, that is, firms 'do good when they do well' (e.g., Hong, Kubik, and Scheinkman 2012; Lys, Naughton, and Wang 2015).

good corporate governance. CSR encompasses a wide range of environmental, social, and governance activities (or policies) without sharp boundaries.[4]

Based on the above definition, we refer to CSR *reporting* as the measurement, disclosure, and communication of information about CSR-related topics, including CSR activities, risks and policies. CSR *reporting standards*, in turn, govern how to report and disclose this information. The reporting medium can differ across firms. Firms can include CSR information in their annual report or provide a separate CSR report, sometimes referred to as sustainability, corporate accountability, or non-financial report.[5] CSR reports (or the relevant sections in the annual report) contain a broad range of qualitative and quantitative, but not necessarily monetized information about corporate activities, risks, and policies related to CSR. Firms may ask an auditor, consultant, or an alternative assurance provider to certify their CSR reports or disclosures (e.g., Sìmnett, Vanstraelen, and Chua 2009; Casey and Grenier 2015).

An important dimension of CSR reporting (and standards) is their scope, both in terms of the breadth of the reported information and the breadth of the intended audience. For instance, firms could confine CSR reporting to information that they deem relevant or material to *investors*. Information related to CSR topics can be useful to investors in estimating future cash flows or when assessing firms' risks (e.g., Dhaliwal, Li, Tsang, and Yang 2011; Dhaliwal, Radhakrishnan, Tsang, and Yang 2012; Grewal, Hauptmann, and Serafeim 2018) and is often closely related to firms' normal business activities. As such, firms may have to disclose certain CSR information under existing securities laws (see also, (e.g., Wallace 1993; Grayson and Boye-Williams 2011).

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4 For instance, the European Commission (2011, p. 6) defines CSR as "the responsibility of enterprises for their impacts on society," which implies that firms "integrate social, environmental, ethical, human rights and consumer concerns into their business operations and core strategy."

5 In case of a combined report, the term integrated reporting is sometimes used (e.g., Barth, Cahan, Chen, and Venter 2017).

For example, it is unlawful for registrants with the U.S. Securities and Exchange Commission (SEC) to omit material facts (Section 17(a)(2) of the Securities Act of 1933; Section 18(a) of the Securities and Exchange Act of 1934), whether or not this information pertains to CSR topics. Moreover, Item 303 of Regulation S-K requires firms, among other things, to "describe any known trends or uncertainties that have had or […] will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations," which includes CSR-related topics. Thus, one way to narrow the scope of CSR reporting is to confine it to CSR information that firms have to provide under existing securities laws. Alternatively, firms (and standard setters) could go beyond the focus on investors and expand the scope of CSR reporting and standards, targeting a wider audience and providing information that is relevant to various stakeholders. For instance, firms could provide CSR information to legitimize their actions towards consumers, employees, non-governmental organizations (NGOs), and politicians or to convey that they are acting in the broader interests of society (e.g., Deegan 2002; Cho and Patten 2007; Deegan 2007; Cho, Michelon, Patten, and Roberts, 2015).

For much of our analysis, we adopt the broader perspective and recognize that CSR reporting is not necessarily limited to information that is material to investors. This approach allows us to draw on much of the CSR literature, which often also does not limit the scope of CSR (reporting) to a particular audience. We come back to this issue of broad versus narrow standards and explicitly discuss how the insights from our analysis change when we adopt a narrower, investor-focused perspective to CSR reporting in Section 6.2.2.

### *2.2. Framing the Scope of the Analysis: Mandatory Adoption of CSR Reporting Standards*

To frame our analysis, we consider a widespread mandatory adoption of CSR reporting standards by public U.S. companies as our primary scenario. By widespread we mean that the adoption of CSR standards would not be limited to certain industries or types of firms, but that the standards would generally apply to all corporations that file with the SEC. We consider a hypothetical mandate (or endorsement) for all U.S. public companies to use a comprehensive set of CSR disclosure and reporting standards. We focus on a mandate, rather than a path to widespread CSR reporting through voluntary adoption. For *voluntary* adoption, we would have to consider firms' adoption decisions, the effects on non-adopters as well as coordination problems across firms in terms of adoption timing and what standards to follow. Doing so would complicate the discussion, but often does not change the analysis. Much of our analysis still applies when firms voluntarily adopt a set of CSR standards, although widespread adoption would only occur if, for a majority of firms, the *private* benefits from adoption outweigh the costs.

In assessing the effects of CSR standards, we recognize existing disclosure requirements for SEC registrants (e.g., Regulation S-K or Section 1502 of the Dodd-Frank Act). Many firms already provide disclosures about certain CSR activities in their SEC filings (see, e.g., SASB 2016). By adoption of CSR standards, we mean the adoption of formal reporting standards that prescribe (i) what firms have to report about their CSR activities, CSR risks, and CSR policies, (ii) which CSR topics are relevant for certain industries and firms, (iii) which metrics are important and how they are computed, (iv) where and how the information is to be presented, etc. That is, CSR standards provide structure and guidance for firms' CSR reporting, including definitions of materiality thresholds, information content, and reporting formats.

CSR standards could be stand-alone standards, but also embedded in existing SEC requirements (see SEC Concept Release 2016). The standards could be set by a governmental entity like the SEC or an independent standard setting body, such as the Sustainability Accounting Standards Board (SASB) or the Global Reporting Initiative (GRI). Our analysis does not discuss these finer distinctions and it does not endorse a particular standard setter or consider a specific set of CSR standards. The baseline (and benchmark) for our analysis is the status quo of CSR reporting by U.S. firms, presuming no mandatory adoption of CSR reporting standards. In this baseline case, firms continue to provide CSR information, both within the existing SEC disclosure requirements as well as voluntarily.[6] For the purpose of our analysis, we consider CSR standards as ostensibly stipulating more (or higher quality) CSR reporting and/or more comparable CSR reporting, which in turn can also be more informative, all relative to the status quo.[7] We then analyze the economic effects of these stipulations and the extent to which CSR standards achieve better and more comparable CSR reporting.

The scope of our analysis is limited in several ways. First, we focus on the economic effects of *reporting* about firms' CSR activities, and not on the CSR activities themselves. Thus, we do not consider issues such as the reasons why firms engage in CSR activities in the first place (Ramirez 2013; Borghesi, Houston, and Naranjo 2014; Windolph, Harms, and Schaltegger 2014), whether CSR activities are positive or negative NPV projects (e.g., Flammer 2015; Khan, Serafeim, and Yoon 2016; Manchiraju and Rajgopal 2017) or provide non-monetary payoffs for at least some investors (e.g., Fama and French 2007; Friedman and Heinle 2016; Martin and Moser 2016), whether CSR activities require a long-term investment horizon and/or serve to mitigate managerial myopia (e.g., Stein 1989; Bénabou and Tirole 2010), what the optimal level of CSR activities is (e.g., McWilliams and Siegel 2001), or why CSR activities vary across firms, industries, and countries (e.g., Wickert, Scherer, and Spence 2016; Liang and Renneboog 2017).

[6] Even with mandatory adoption of CSR standards, firms can and likely will provide voluntary CSR disclosures beyond those required under extant securities laws or the adopted CSR standards. However, the CSR reporting mandate could improve or standardize such voluntary disclosures.

[7] An important question is to what extent CSR *standards* by themselves are likely to yield such changes in CSR reporting *practices*. We discuss this question at a conceptual level in Section 2.4 as it naturally comes before assessing the economic effects of an increase in the amount, quality or comparability of CSR reporting (practices).

Second, in our analysis, we discuss key economic effects of widespread adoption of CSR standards, including potential capital-market consequences and real effects on firm behavior. But we do not (and cannot) conduct a comprehensive cost-benefit analysis. We do not attempt to quantify or qualitatively evaluate the *net* benefits (or costs) of adopting CSR standards for individual firms or society as a whole. Our analysis highlights potential economic effects and tradeoffs and, in doing so, provides structure for researchers, standard setters and policymakers when evaluating the consequences of a CSR reporting mandate.

Third, while we draw extensively on extant academic research in accounting, economics, finance, and management, we do not provide a comprehensive survey of the CSR literature.[8] Yet, we discuss and incorporate relevant results from many CSR studies into the analysis. In addition, we provide an overview and briefly summarize extant CSR research in an online appendix supplementing this article (available for download at: http://ssrn.com/abstract=3313793). This appendix contains a summary of over 380 CSR studies which we identified in a systematic search of leading academic journals. For each study, we briefly delineate the research question and research design (including the variables of interest) and indicate the results in tabular form.

### *2.3. Key Features of CSR Reporting Relative to Financial Reporting*

CSR encompasses a wide range of environmental, social, and governance topics, which could be indirectly or only tangentially related to a firm's core operations. As a result, CSR reporting differs from traditional financial reporting, which focuses on firms' regular business activities and their financial implications. Understanding these differences is important when assessing the

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[8] For surveys of the CSR literature see, for instance, Renneboog, Ter Horst, and Zhang (2008); Kitzmueller and Shimshack (2012); Crane and Glozer (2016); Brooks and Oikonomou (2018).

potential economic consequences of mandated CSR standards. More specifically, the following key features are integral to CSR reporting:

1. *Diversity of users and uses:* The potential group of information users of CSR reporting is broader than for financial reporting. Even when CSR standards are developed with the needs of investors in mind, once the CSR information is disclosed, anyone can use it. The same is of course true for financial information but the users of CSR reporting may include groups that are relatively unsophisticated when it comes to reading financial reports (e.g., consumers). Moreover, these groups could use CSR information for a variety of purposes beyond the traditional uses of financial information. For instance, some stakeholders may use CSR reporting to evaluate a firm's broader contribution to society or whether the firm adheres to policies that are consistent with specific norms and ethical values.
2. *Diversity of topics*: As there exists no sharp definition of CSR, it encompasses a broad range of topics, activities and policies. The relevant topics differ substantially across firms, industries, and countries, and can change rapidly over time. As a result, CSR reporting is multidimensional in nature, which likely translates into a variety of disclosures and reporting formats and makes comparisons and standardization difficult (Kitzmueller and Shimshack 2012; Liang and Renneboog 2017; Amel-Zadeh and Serafeim 2018).
3. *Diversity of objective functions:* The motivations for reporting on CSR topics differ widely across firms and managers, as do the reasons for the underlying CSR activities and policies. CSR reporting responds to a wide range of interests and preferences from within and outside the firm. In addition, these interests and preferences can change quickly over time, for instance, when the firm becomes target of a social activist campaign (e.g., Baron

2001), or as result of an exogenous event like an accident or natural catastrophe (e.g., Blacconiere and Patten 1994; Bonetti, Cho, and Michelon 2015).

4. *Diversity in measurement:* Many CSR activities manifest in observable and measurable behaviors or (technical) outputs (e.g., $CO_2$ emissions, number of trees saved, use of naturally sourced ingredients), but they are not necessarily measurable in monetary terms (Kitzmueller and Shimshack 2012). When there is little uniformity, it is difficult to apply typical accounting conventions, such as double-entry bookkeeping, as well as basic accounting principles like materiality, matching or relevance to CSR reporting (e.g., Cohen and Simnett 2015; Moroney and Trotman 2016).
5. *Voluntary nature of CSR:* In most instances, CSR activities and policies are voluntary in nature and go beyond legal, regulatory, and contractual requirements.[9] As a result, CSR reporting is endogenous in two ways: (i) it depends on firms' voluntary CSR activities (or lack thereof) and (ii) firms' choices in reporting on these activities (e.g., in terms of whether and how much to disclose; Bouten, Everaert, and Roberts 2012). The latter is often voluntary, except for the materiality requirements of existing securities regulation.
6. *Long-term horizon:* CSR is often viewed as a "strategic" activity that foregoes short-term profits in return for long-term benefits to the firm (e.g., Bénabou and Tirole 2010). Thus, CSR reporting frequently has to deal with long-term prospects, which are intangible in nature and difficult to quantify (e.g., consumer goodwill or employee relations).
7. *Role of externalities:* CSR often accounts for the externalities caused by firms' business activities. In pursuing or accepting CSR, a firm may choose to privately provide a public good (Tirole 2001). Therefore, CSR reporting is closely linked to potential externalities

[9] An example of an exemption is the mandate for CSR investments is India, where firms that meet certain profitability and size thresholds must spend at least 2% of net income on CSR (Manchiraju and Rajgopal 2017).

of corporate activities. In addition, CSR reporting can extend to topics and activities outside of the traditional boundaries of the firm (e.g., along the firm's supply chain).

These key features of CSR reporting predict considerable heterogeneity in firms' reporting practices as well as significant challenges for measurement, comparability and standardization. They also present difficulties for researchers who empirically examine the effects of CSR reporting. At the same time, the potential for harmonization is substantial and the standardization of CSR reporting could have large payoffs, if successful. The above features imply that we have to be careful about (simply) extrapolating findings from the financial reporting literature. The very nature of CSR reporting, its large set of potential users, and the broad range of CSR issues imply that it is harder to predict the economic consequences of CSR standards compared to the effects of financial reporting standards.

### *2.4. Conceptual Underpinnings and General Insights from Extant Literature*

In this subsection, we discuss several key lessons from the accounting, finance, and economics literature that are relevant for our analysis. First, we highlight the main economic effects of corporate disclosure and reporting, mostly in capital markets, because we expect the effects of CSR reporting often to be quite similar. Next, we discuss the role of regulation in improving and harmonizing financial reporting and highlight the importance of firm-level incentives and institutional complementarities in shaping firms' reporting practices and regulatory outcomes. Here, we see many parallels to CSR reporting. Finally, we point to enforcement as a central element in the effective implementation of reporting regulation (of any kind).

*2.4.1 Economic Effects of Corporate Disclosure and Reporting*

Corporate disclosure and reporting can have many economic consequences and we cannot enumerate all of them. However, a primary benefit of corporate disclosure is to mitigate information asymmetries between the firm and its investors and among more and less informed investors.[10] These information asymmetries give rise to well-known adverse selection and moral hazard problems (e.g., Ross 1973; Jensen and Meckling 1976).[11] Corporate disclosure can play several roles in this setting. First, when investors are diversely informed, disclosure can mitigate the adverse selection problem and level the playing field among investors (Verrecchia 2001), which in turn should increase the liquidity of secondary securities markets (e.g., the ability of investors to quickly buy or sell shares with little price impact). This is probably the best-documented effect of disclosure (see survey by Leuz and Wysocki, 2016). Second, by increasing liquidity and reducing transaction costs, disclosure can lower the return that investors require for investing in firm stock (e.g., Constantinides 1986; Amihud and Mendelson 1989). In providing information about uncertain firm value, disclosure can also lower estimation risk, for instance, making it easier for investors to estimate future cash flows and the covariances of these cash flows (e.g., Easley and O'Hara 2004; Lambert, Leuz, and Verrecchia 2007, 2011). Each effect implies that disclosure has the potential to reduce firms' cost of capital. Third, disclosure can raise the awareness among investors for certain firms or increase investors' willingness to hold securities, both of which improves risk sharing in the economy and again should lower the cost of capital (Merton 1987; Diamond and Verrecchia 1991). Fourth, disclosure facilitates the monitoring of managers by corporate outsiders such as analysts or institutional investors, which may in turn

[10] There also exist situations in which disclosure can exacerbate information asymmetries, for instance, when only a select few investors that are sophisticated or better-informed know how to interpret the new information. See Kim and Verrecchia (1994, 1997).

[11] For overviews see, for instance, Eisenhardt (1989) and Prendergast (1999).

improve managerial decision making and lead, for instance, to more efficient corporate investments (e.g., Bushman and Smith 2001; Lambert et al. 2007). It can also reduce information asymmetries that otherwise give rise to frictions in raising external capital (e.g., Myers and Majluf 1984). Finally, disclosure by one firm provides useful information about other firms in the form of information transfers and spillovers (e.g., Foster 1980; Dye 1990; Admati and Pfleiderer 2000). Although the incremental contribution of each firm's disclosure is likely to be small, such externalities could be an important reason for mandating disclosure and reporting (e.g., Bushee and Leuz 2005).

The general takeaway from this large literature is that more and better disclosures can lead to tangible capital-market benefits in the form of improved liquidity, lower cost of capital, higher asset prices (or firm value), and potentially better corporate decisions.[12] There is also substantial empirical evidence consistent with these links and effects, though the strength of the evidence differs by economic construct or outcome (e.g., Healy and Palepu 2001; Leuz and Wysocki 2016). To the extent that CSR reporting improves the information available to investors, the same theories and many of the prior findings should apply when considering the economic effects.

Similar arguments apply on the cost side. Disclosures have direct and indirect costs, which could offset the aforementioned benefits. The direct costs include the preparation, certification, and dissemination of accounting reports. They can be substantial, especially when considering the opportunity costs of top management. These costs are likely to have fixed components, which can make disclosures particularly burdensome for smaller firms. There are also indirect costs to the firm because other parties (e.g., competitors, labor unions, regulators, tax authorities, etc.) can use

[12] We note that better disclosure (or reporting) is hard to define and a concept with multiple (possibly conflicting) dimensions. We use it here as a placeholder for desirable properties of corporate disclosure and reporting, in particular the usefulness of corporate information to outside investors for decision making and contracting.

the information provided to capital market participants (e.g., Verrecchia 1983; Feltham and Xie 1992; Berger and Hann 2007). Such proprietary costs are less relevant for high level or aggregated disclosures, but can arise for fairly specific or detailed disclosures, especially for smaller firms (e.g., Bens, Berger, and Monahan 2011; Leuz, Triantis, and Wang 2008).

These forces counteract the release of corporate information and are reasons why firms often are reluctant to voluntarily provide certain disclosures. Similarly, private information held by managers could motivate them to manage or manipulate firm disclosures and accounting numbers (e.g., Lambert 2001; Beyer, Cohen, Lys, and Walther 2010). In addition, litigation risk can affect firms' disclosure choices, but the link is intricate because it not only depends on the nature of the disclosures but also on insiders' trading behavior (e.g., Billings 2008; Billings and Cedergren 2015). While forward-looking disclosures, especially when too optimistic, could expose firms to higher litigation risk (e.g., Johnson, Kasznik, and Nelson 2001; Rogers, Buskirk, and Zechman 2011), more disclosure could also reduce the likelihood and costs of litigation, especially when firms voluntarily reveal bad news (e.g., Skinner 1994, 1997; Field, Lowry, and Shu 2005; Donelson, McInnis, Mergenthaler, and Yu 2012).

Finally, disclosures, especially when mandated, could be costly by having negative real effects, both from a firm's and a societal perspective (e.g., Dranove, Kessler, McClellan, and Satterthwaite 2003). The negative effects stem from attempts to manage the disclosures through real actions and arise especially when the disclosures do not measure (or poorly measure) the quality of the underlying actions (Dranove and Jin 2010). The above described disclosure effects and their costs and benefits to firms and managers are not specific to financial reporting but apply broadly to the disclosure and reporting of all kinds of information, including CSR information.

*2.4.2 Regulation to Improve and Harmonize Financial Reporting*

The proponents of mandatory disclosure regulation typically point to transparency and comparability benefits of standardized reporting.[13] However, the existence of such benefits is not enough to justify a mandate; in the presence of net private benefits, firms have incentives to reveal information voluntarily.[14] Precisely when firms' benefits from disclosure exceed their costs, we do not need regulation or a mandate. An economic rationale for regulation therefore requires the existence of externalities (or spillovers), market-wide cost savings from regulation, or dead-weight economic losses that mandated disclosure could mitigate.[15]

Disclosure externalities arise when the public value of the disclosed information differs from the private value, which can lead to an overproduction or underproduction of information. It is quite plausible that disclosures by one firm can also provide information about other firms (e.g., Foster 1980), resulting in positive externalities. Similarly, standardizing firms' reporting practices could make comparisons across firms easier and less costly. However, firms may not consider these positive externalities from their reporting choices in the aggregate, which can lead to an economy-wide underinvestment and provides a rationale for creating reporting standards and mandating their use.

Regulation could also provide market-wide cost savings when it reduces duplication in the production and acquisition of information. Generic disclosures that are relevant to all firms and many users are especially likely to generate such savings, which is why most firms would be willing to provide them voluntarily (e.g., Ross 1979). Standards can lower the costs of information

[13] These were two of the main arguments put forward by regulators, standard setters, and politicians for the mandatory adoption of International Financial Reporting Standards (IFRS) in many countries around the world (for overviews see, e.g., Barth 2006; Hail, Leuz, and Wysocki 2010a; De George, Li, and Shivakumar 2016).
[14] See Ross (1979); Grossman and Hart (1980), or Milgrom (1981).
[15] See Leuz and Wysocki (2008) and Hermalin and Weisbach (2012) for more detailed discussions and references.

processing for users. A related argument is that privately producing a credible commitment to disclosure can be expensive if not impossible. In this case, a mandate serves as commitment device (e.g., Mahoney 1995; Rock 2002) that forces firms to provide information regardless of the underlying news content (i.e., good or bad news). A mandate can be beneficial if, for instance, it grants access to criminal and other penalties that are not available to private contracting or if it provides commitment at lower costs.

Finally, disclosure regulation could mitigate dead-weight losses to the economy as well as externalities in firm behavior. For instance, agency problems and private control benefits to corporate insiders often induce suboptimal investment behavior (Shleifer and Vishny 1997; Shleifer and Wolfenzon 2002). If private contracting or competition are unable to overcome this inefficiency, the investments would be lost to the economy. In this situation, disclosure regulation could facilitate capital raising by new entrants (e.g., offering commitment) so that they could increase competition, exploit the opportunities left by incumbents, and reduce social losses.[16] A similar argument can be made when firm behavior creates negative externalities (e.g., pollution). A disclosure mandate exposing firms' pollution levels could impose costs on firms, incentivizing them to reduce their pollution. In this case, disclosure regulation serves to support or create a price mechanism (Hart 2009), which makes firms internalize the negative externalities.

The general takeaway from the literature is that, in the presence of net private benefits, we can rely on firms to voluntarily disclose information, including CSR information. Thus, arguments for mandatory CSR reporting need to articulate how a mandate leads to positive (or reduces negative) externalities, creates economy-wide cost savings, or reduces existing dead-weight losses. The heterogeneity in CSR activities and the measurement difficulties discussed in Section 2.3 make

[16] Incumbent parties currently benefitting are likely to oppose such regulatory changes (Rajan and Zingales 2003).

information spillovers of CSR *disclosures* or cost savings *to firms* less convincing arguments when it comes to supporting a mandate. The stronger (theoretical) arguments are likely cost savings and standardization benefits *to the users* of CSR information as well as the potential to mitigate negative externalities from firms' business activities (such as pollution).[17]

However, it is important to recognize that mandatory disclosure regimes are costly to design, implement, and maintain, in particular when it comes to enforcement. It is also not clear that a regulatory solution would in fact achieve better outcomes or be cheaper than a market solution. For instance, regulators and standard setters can be captured by the regulated (e.g., Stigler 1971; Mahoney 2001). Regulatory and standard setting processes are far from perfect and face many problems, including the governance of the regulator or standard setter (e.g., Peltzman, Levine, and Noll 1989). Moreover, firms are likely better informed about their cost-benefit tradeoffs with respect to corporate disclosure than regulators, suggesting that regulators face substantial information problems (e.g., Hail, Tahoun, and Wang 2018).

From an empirical researcher's perspective, several issues arise and have led to decidedly mixed evidence on the effects of reporting regulation. First, as Leuz and Wysocki (2016) note, evidence on the causal effects of regulation is scarce, inter alia because it is very difficult to disentangle the effects of regulatory reform from other (unrelated) changes in the economic and institutional environment and because we often do not have suitable control groups. Second, we lack evidence on factors that serve as an economic justification for regulation (e.g., on the existence and magnitude of externalities, information transfers and spillovers). We rarely have enough

[17] These points hold even more as the contemplated mandatory adoption of CSR standards would be the first major effort at standardizing CSR reporting for a large group of U.S. listed firms. A comparable action in the context of financial reporting would be requiring firms to adopt formal reporting standards for the very first time, which, for instance, is clearly different from countries deciding to harmonize accounting standards by mandating IFRS.

information to quantify the cost-benefit tradeoff for a specific regulatory proposal or act. Third, the adoption of regulation does not occur in a vacuum. New regulation interacts with other features of the existing institutional environment, which often affect its effectiveness and can render the outcomes context-specific. These caveats and challenges also apply to a potential mandate for CSR reporting and are important to keep in mind.

### *2.4.3 Standards, Incentives, and Complementarities to Shape Reporting Practice*

Despite the above economic arguments for regulation and reporting standards, it is still important to ask whether and how disclosure and reporting standards change and improve corporate reporting practice. It is not a foregone conclusion that reporting standards necessarily "produce" better or more comparable reporting practices.[18] Accounting and disclosure standards provide a framework, rules, and guidance for firms' reporting practices. However, for good reasons, reporting standards contain substantial discretion and the application of the standards requires considerable judgement.[19] This argument is likely even more relevant for CSR reporting. Reporting discretion implies that other factors and not just the standards determine reporting practices and outcomes, including managerial incentives and other institutional arrangements.

First, managerial reporting incentives are shaped by many factors, such as a firm's capital needs and its future growth prospects, managers' compensation schemes, competition in product markets, pressures from institutional investors, the media, or financial analysts, just to name a few. These incentives shape reporting behavior and influence the properties of reported accounting numbers and disclosures (e.g., Ball, Kothari, and Robin 2000; Leuz, Nanda, and Wysocki 2003;

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[18] In this section, we draw on a related discussion in Hail et al. (2010a) and Hail, Leuz, and Wysocki (2010b) on the potential adoption of IFRS in the United States.

[19] The reason reporting standards allow for discretion is to let managers convey their private information about firm performance to corporate outsiders (e.g., Watts and Zimmerman 1986). At the same time, managers could use the discretion to obfuscate economic performance and achieve personal goals.

Burgstahler, Hail, and Leuz 2006), including the extent to which firms manage earnings (e.g., Watts and Zimmerman 1990; Healy and Wahlen 1999; Dechow and Skinner 2000; Dechow, Ge, and Schrand 2010). Thus, firm-level incentives are a source of substantial and predictable variation in reporting outcomes, which likely extends to CSR reporting. Reporting standards and their proper enforcement can only partially mitigate the variation in observed reporting practices. Said another way, standards alone do not produce harmonized or comparable reporting. Convergence in practices requires that the underlying incentives are similar as well, which rarely is the case (e.g., Bradshaw and Miller 2008; Leuz 2010). Prior evidence supports these arguments and shows that differences in reporting outcomes persist even when firms use the same standards (e.g., Ball, Robin, and Wu 2003; Lang, Smith Raedy, and Wilson 2006; Daske, Hail, Leuz, and Verdi 2013).

Second, other institutional arrangements impose constraints on what standards can achieve. There exist intricate complementarities among the many institutional arrangements in a market or country, that is, elements are chosen or designed so that they have institutional fit. Such complementarities imply that changes to one element (e.g., reporting standards) cannot be considered in isolation from other elements of the institutional infrastructure (e.g., enforcement mechanisms). With complementarities, changing one element may make the system (or economy) worse off, even when the element itself leads to improvements along a particular quality dimension. Thus, institutional fit should be part of the consideration, when contemplating mandatory adoption of CSR standards. Moreover, given the heterogeneity in CSR activities, it is not clear that one set of standards is universally effective across industries and countries.

*2.4.4 Importance of Enforcement for Effective Reporting Regulation*

An enforcement mechanism is typically an integral part of any new regulation.[20] The strength of enforcement is often defined as the product of the likelihood that non-compliance is detected and the magnitude of the imposed penalties for non-compliance (e.g., Becker 1968; Polinsky and Shavell 1979). A socially desirable level of enforcement can be achieved using various strategies, involving market discipline, private litigation, public enforcement, or state ownership (e.g., Shleifer 2005). Based on the premise that all these strategies are imperfect, Djankov, Glaeser, La Porta, Lopez-de-Silanes, and Shleifer (2003) formulate an enforcement theory of regulation that stipulates a mix among the various imperfect alternatives that minimizes social losses. Each strategy offers different pros and cons. From the viewpoint of this theory, regulation is particularly suited for situations in which the 'inequality of weapons' between parties is large (e.g., when firms can hire expensive lawyers but investors or consumers might not). Shleifer (2005) argues that this situation arises in the case of securities or disclosure regulation. Regulation is likely also more beneficial, when the odds of public abuse of power are low as they are in jurisdictions with strong checks and balances on government and regulatory agencies.

The general insights from the broader literature for our analysis is that the desirability and effectiveness of mandatory adoption of CSR reporting standards depends, among other things, on the enforcement mechanism. This insight is not new and evidence consistent with it has been shown in settings such as the mandatory adoption of IFRS (e.g., Byard, Li, and Yu 2011; Landsman, Maydew, and Thornock 2012; Christensen et al. 2013), the enactment of new insider-

[20] For instance, EC Regulation No. 1606/2002, which introduced mandatory IFRS reporting for most firms traded on regulated markets in the European Union (EU) in 2005, required each EU member state to take appropriate measures to ensure compliance. However, because the timing and degree of enforcement differed substantially by EU country, the ensuing capital-market outcomes differed as well (Christensen, Hail, and Leuz 2013).

trading laws (Bhattacharya and Daouk 2002), or the introduction of new securities regulation in the EU (Christensen, Hail, and Leuz 2016). Which enforcement strategy works best for CSR reporting likely depends on the existing institutional infrastructure, including other already existing enforcement mechanisms, which again highlights the role of institutional complementarities. We come back to the issue of enforcement of CSR reporting in Section 6.4.

## 3. Key Determinants of Voluntary CSR Reporting

In this section, we review key determinants of firms' CSR reporting decisions. There currently is no requirement in the U.S. to comply with a comprehensive CSR disclosure framework or a set of CSR standards. That said, many firms provide CSR information either on a voluntary basis or because they deem the information material to investors under existing securities laws. As such, observed disclosure practices provide insights into what or when firms are more likely to find CSR reporting beneficial or, at least, less costly. However, to the extent that voluntary disclosure choices reflect firms' private cost-benefit tradeoffs, this evidence does not directly speak to the need for a CSR reporting mandate (see Section 2.4.2). An important caveat for the analysis is that CSR reporting often has tight links to firms' voluntary CSR activities and policies (see Section 2.3). The evidence discussed in this section typically cannot separate the two. We first outline the key determinants of (voluntary) CSR reporting that prior literature has identified, regardless of whether the CSR information is disclosed in stand-alone reports, regulatory filings, annual reports, or together with other firm disclosures. We then discuss the implications of these determinants and the current state of CSR reporting in regulatory filings for a potential mandatory adoption of CSR reporting standards.

### *3.1. Generic Firm and Manager Characteristics*

Academic studies have identified many firm attributes that are associated with the decision to disclose CSR information (see Table A1 in the online appendix for a comprehensive overview). One of the most common findings is a significantly positive association between firm size and the quantity or quality of CSR disclosures (e.g., Hahn and Kühnen 2013). This positive relation could be explained with greater public scrutiny of large firms and with the argument that this scrutiny incentivizes firms to engage in CSR activities and reporting (e.g., Cormier and Magnan 2003; Thorne, Mahoney, and Manetti 2014). Another explanation stipulates that CSR communication is relatively less costly for larger firms while the actual implementation of CSR activities is not (Wickert et al. 2016).

Ownership structure is another factor frequently associated with firms' CSR disclosures. For instance, Höllerer (2013) finds a positive association between dispersed private-sector ownership and the decision to disclose stand-alone CSR reports. Similarly, Cormier and Magnan (1999) and Cormier, Magnan, and Van Velthoven (2005) find that concentrated ownership is associated with less environmental disclosures. Teoh and Thong (1984) find that foreign ownership, particularly from the U.S. and U.K., is positively related to CSR reporting among a sample of Malaysian firms. Both findings suggest that CSR reporting is more prevalent when information asymmetry is high or when firms need to communicate with a larger set of shareholders with potentially a broad range of preferences.

Another stream of literature examines the association of CSR disclosures with corporate governance structures and managerial characteristics. For example, Dalla Via and Perego (2018) find that various measures for the strength of firms' corporate governance systems (e.g., long-term oriented managerial incentive schemes, number of board meetings, etc.) are positively associated with CSR disclosures. Similarly, Mallin, Michelon, and Raggi (2013) find that firms with a greater stakeholder orientation in their corporate governance policies disclose more (and higher quality) information on social and environmental issues. Regarding managerial characteristics, studies find associations between CSR reporting and managers' educational levels and training (Lewis, Walls, and Dowell 2014), personal views (e.g., Adams and McNicholas 2007; Parker 2014), ethnicity (Haniffa and Cooke 2005), (over-)confidence (McCarthy, Oliver, and Song 2017), and prior expertise of CSR issues (Peters and Romi 2015).

The finding that firm size, ownership, corporate governance, and management characteristics are associated with voluntary disclosure quality is not unique to CSR disclosures. The same or similar attributes are also related with financial disclosures (Healy and Palepu 2001; Leuz and Wysocki 2008). These common observed associations suggest that, although CSR information has unique features, there is significant overlap in the economic drivers of CSR reporting and of more traditional, non-CSR voluntary disclosures.

### *3.2. Firms' Business Activities and External Events*

Research shows associations between the economic activities that firms engage in and their CSR reporting. Besides the obvious connection between CSR issues inherent in firms' business activities and CSR reporting (e.g., firms in "polluting" industries tend to have higher levels of environmental disclosures; Gamerschlag, Möller, and Verbeeten 2011), studies suggest a link between how controversial an industry is and CSR reporting in that industry. For instance, Byrd, Hickman, Baker, and Cohanier (2016) find that firms in industries such as alcohol, tobacco, and firearms disclose more on social and community actions than peer firms in non-controversial industries such as grocery or department stores. The authors argue that these disclosures help firms legitimize their operations and convey to the public that the firms take actions offsetting the perceived social problems inherent in their business model. Similarly, Grougiou, Dedoulis, and Leventis (2016) find that firms in so-called "sin" industries are more likely to provide CSR reports. They also find evidence suggesting that CSR reports lessen litigation risk stemming from firms' controversial activities. Overall, the evidence is broadly consistent with the idea that CSR reporting is used to shape public opinion of firms' impact on society.

Related to the economic activities of firms, several studies examine the association between the underlying performance on CSR activities and CSR reporting practices. Conceptually, there are arguments for both a positive and negative relation (Hummel and Schlick 2016). Disclosure theory suggests that better performers have an incentive to report their good performance to stakeholders (and worse performers to hide their poor CSR outcomes). Socio-political theories suggest that poor CSR performers have an incentive to provide positive CSR disclosures to address the threats to their legitimacy from the underlying poor CSR performance ("greenwashing"). Consistent with these conflicting predictions, the empirical evidence on the link between CSR reporting and performance is decisively mixed (see also Section 4.1). For instance, examining the link between environmental performance and the respective disclosures in CSR reports, Cho and Patten (2007) find a negative association, whereas Clarkson, Li, Richardson, and Vasvari (2008) find a positive association. Methodological explanations for the mixed empirical evidence include confounding or omitted factors, sample selection issues, and measurement problems related to the underlying CSR performance (e.g., Patten 2002).

Another strand of literature focuses on the timing when firms change their CSR reporting. For instance, studies attempt to explain at what point in time firms initiate CSR reporting (e.g., Bebbington, Higgins, and Frame 2009; Belal and Owen 2015) or why some firms adopt a CSR reporting strategy early whereas others wait until later (e.g., Kolk 2010; Höllerer 2013; Stubbs and

Higgins 2014; Luo, Wang, and Zhang 2017). These studies provide evidence that following external events such as environmental accidents or natural catastrophes, firms increase their CSR disclosures. For instance, Patten (1992) finds that after the Exxon Valdez oil spill in 1989, there is a significant increase in CSR disclosures by petroleum firms other than Exxon. A similar effect is documented around the BP oil spill in 2010 (Heflin and Wallace 2017) or the Fukushima nuclear disaster in 2011 (Bonetti et al. 2015). A nice feature of these event-type studies is that they allow for a proper difference-in-differences specification because the treatment is arguably independent of the disclosing firms underlying incentives. However, the variety of settings illustrates that the timing and content of CSR disclosures are often quite idiosyncratic, likely making it difficult for standard setters to foresee future events, for which CSR disclosures could be relevant.

### *3.3. External Stakeholder and Societal Pressure*

There is also evidence that external pressure from various stakeholders affects CSR reporting (Huang and Watson 2015). Shareholders are a likely source of this pressure and, hence, can be important in shaping CSR reporting (e.g., Gamerschlag et al. 2011). For instance, Reid and Toffel (2009) find that shareholder resolutions filed by social activists can increase the propensity to disclose CSR information both for the firm the resolution is filed against and for other firms in the industry. Institutional investors constitute a particularly powerful group because of the amount of capital they control and the level of specialization and sophistication they have compared with retail investors. Several papers suggest that institutional investors play a role in pressuring firms to initiate CSR reporting (e.g., Dhaliwal et al. 2011; Solomon, Solomon, Norton, and Joseph 2011).

Governments and policymakers represent another important stakeholder group. Aside from their direct influence on CSR reporting through mandates or regulation, they can have indirect effects. Political considerations and the scrutiny by public authorities often motivate voluntary

CSR activities (e.g., Doonan, Lanoie, and Laplante 2005; Delmas and Toffel 2008; Innes and Sam 2008) and lead to CSR reporting along the lines of "do good and talk about it." For instance, Reid and Toffel (2009) provide evidence that the threat of future government regulation can motivate firms to initiate or extend CSR reporting. Similarly, Marquis and Qian (2014) provide evidence that government dependence such as state ownership, political ties, or government subsidies can induce firms to issue CSR reports, if the reports and the activities receive political attention. They also suggest that increased likelihood of government monitoring leads firms to produce reports with greater substantive content. In this literature, CSR activities are sometimes considered a form of political contribution (Liston-Heyes and Ceton 2007) and a means to legitimize corporate behavior towards regulators and the public eye. Along those lines, Aerts and Cormier (2009) find that firms' environmental disclosures and press releases shape media coverage of firms' environmental issues. But their findings also suggest a reverse effect in that negative media coverage can induce firms to issue environmental press releases. Overall, this literature suggests that CSR reporting is used for a wider set of purposes than financial disclosures.

### *3.4. Implications for Mandatory Adoption of CSR Standards*

The findings in this section have a number of implications for our base case scenario, that is, the mandated adoption of CSR standards. First, descriptive evidence in academic papers proposes a large set of determinants of voluntary CSR reporting. Many of the determinants are similar to those documented for financial reporting. The observed associations suggest that there is significant commonality in the economic forces that drive the perceived benefits of voluntary CSR reporting and the economic drivers of voluntary disclosures in general. It is, in part, this commonality that makes it difficult for researchers to separately estimate the effect of CSR disclosures on capital market outcomes, because the latter likely also reflect the other (disclosure) choices firms make. However, there are also determinants that are specific to CSR reporting. The evidence suggests that the set of stakeholders relying on CSR information as well as the range of uses of CSR information is broader than for financial reporting purposes.

Second, there exists considerable heterogeneity in what and how firms report about their CSR activities. An analysis of observed CSR reporting practices in regulatory filings shows that the vast majority of U.S. public firms discloses at least some CSR information.[21] However, the disclosures are often repetitive (within the same report) and only about half of the SEC registrants disclose information that is not boilerplate and tailored to the reporting firm. Firms that disclose quantitative CSR metrics are still in the minority. The disclosure levels also vary greatly across sectors and firms of different sizes. Large firms and those operating in industries, in which the government and regulators play a prominent role, tend to cover more SASB topics. These firms are also more likely to disclose company-tailored narratives and quantitative metrics. Disclosure variation across industries as well as within industries is high. The low level of consistency in reported CSR topics likely makes it difficult for users to compare disclosures and to benchmark firms' underlying CSR performance. We emphasize that the observed lack of harmonization is not necessarily problematic. High reporting variation could, in part, be explained by heterogeneity in firms' business activities, in the materiality of these activities for firms (and for their investors) and in firms' perceived costs and benefits of CSR disclosures.

Third, the presence of substantial heterogeneity in CSR reporting practices suggests that widespread adoption of CSR standards has the potential to increase the level and specificity of

[21] We draw these insights on the CSR reporting practices of U.S. firms from a SASB (2016) report titled "The State of Disclosure 2016 - An analysis of the effectiveness of sustainability disclosures in SEC filings" as well as our own (independent) analysis of a proprietary dataset that the SASB gathered from regulatory filings and provided to us. See Christensen, Hail, and Leuz (2018), Section 3.2.

CSR disclosures. To the extent that compliance with such CSR standards is well enforced, the increase in disclosures relative to what firms currently report is likely greater for small-cap firms and in less regulated sectors or those with little government interference (i.e., in areas with low levels and more variation in CSR reporting practices). However, if low observed disclosure levels reflect revealed preferences (e.g., higher costs or lower benefits for small firms), past reporting practice predicts that compliance issues are likely more severe for such firms and industries (in line with the reporting incentives argument in Section 2.4.3). As such, evidence on voluntary CSR disclosures (or lack thereof) can shed light on potential compliance issues.

Fourth, similar arguments apply not just to the level of CSR disclosures but also to the level of harmonization. The heterogeneous CSR reporting practice suggests that the mandated adoption of CSR standards could potentially increase the level of reporting harmonization, primarily within industries. Such harmonization, in turn, can increase users' ability to compare CSR information across firms within the same industry, leading to capital-market consequences and real-effects (as we discuss in general terms in Section 2.4.1 and in more detail in Sections 4 and 5). These comparability benefits would not only accrue to firms with currently low levels of CSR disclosure, but also affect best-practice firms that already disclose information on most of the relevant topics. The magnitude of the stipulated benefits critically hinges on firms' reporting incentives, their ability to avoid disclosures through boilerplate language or by claiming the information is not material as well as the enforcement mechanisms. We come back to these issues in Section 6.

Finally, we acknowledge that current CSR disclosure practices and a mandatory adoption of CSR standards have to be evaluated in the context of a long-running trend towards more and more standardized CSR disclosures. Empirically, we observe a steady increase in the number of voluntary CSR adopters over the last 25 years (e.g., Serafeim and Grewal 2016; Stolowy and

Paugam 2018). What began as voluntary CSR disclosures by firms thrown into the public spotlight after high-profile disasters or scandals (e.g., the Exxon Valdez oil spill) evolved into industry best practices or guidelines and, in some countries, culminated in CSR disclosure mandates (e.g., exchange-level disclosure requirements in South Africa, China, or Malaysia). Thus, the evolution of CSR reporting indicates surging market demand for CSR information and an increasingly positive cost-benefit tradeoff for firms over time. These trends presumably continue in the years to come and drive further CSR reporting even in the absence of a mandate.

## 4. Potential Stakeholder Effects of Mandatory CSR Reporting Standards

In this section, we discuss the potential effects of our primary scenario, the mandatory adoption of CSR reporting standards, from the viewpoint of the various recipients of CSR disclosures. We begin by briefly reviewing the link between CSR activities and firm value or performance. This link is central to the CSR literature and is an important motivation for investors (and other stakeholders) to gather information about CSR. We then review potential capital market effects, focusing on equity investors and debtholders (or lenders) because they are typically viewed as the key users of financial statements. Next, we turn to the potential effects of CSR reporting on financial intermediaries, like analysts and the business press, who play a role in the dissemination of CSR information. Finally, we analyze potential effects on other stakeholders without a direct financial claim on the firm, such as customers, employees, or the society at large, but who still take interest in the firm's CSR activities. We conclude with a discussion of the implications of the various stakeholder effects for a potential mandatory adoption of CSR reporting standards.

## *4.1. Link between CSR Activities and Firm Value and Performance*

At the heart of the CSR debate is the question of what relation there is between CSR activities and firm value or firm performance (e.g., Mackey, Mackey, and Barney 2007; Kitzmueller and Shimshack 2012). Given its central role, much of the CSR literature focuses on this link, which we briefly discuss here. We emphasize that, ultimately, we are interested in CSR reporting effects, not the effects of CSR activities per se.

The traditional starting point of an economic analysis of CSR is that managers should engage only in activities that increase or maximize shareholder value (Friedman 1962).[22] A number of CSR activities are compatible with this objective (e.g., investments in eco-friendly technologies that are positive net present value, NPV, because they avoid future fines or are able to differentiate the firm in the market place). Such CSR activities are not much different from "regular" corporate investments with positive NPV. Yet, even if CSR activities were negative NPV projects, it could make sense for firms to pursue them, for instance, when (some) shareholders put a non-monetary value on CSR or have specific CSR preferences (e.g., Fama and French 2007; Friedman and Heinle 2016; Hart and Zingales 2017). Firms may also engage in CSR because it is in the interest of other stakeholders even when doing so is at the expense of shareholders (e.g., sponsoring of community or cultural events, engagement in corporate philanthropy, etc.). In some cases, managers may use CSR to pursue their personal goals, essentially giving rise to an agency problem (e.g., Masulis and Reza 2015).[23] The agency motive highlights that CSR activities that are not in the interests of shareholders likely pose special challenges for CSR reporting because we would expect managers to be reluctant to provide information about them.

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[22] See Kitzmueller and Shimshack (2012) for an extensive discussion on why this perspective is too narrow.

[23] We recognize that CSR could also reduce agency costs by matching certain principals and agents as well as play a role for providing intrinsic incentives (Besley and Ghatak 2005). See also Section 4.5.3.

Given the broad range of motives for CSR, it is perhaps not surprising that empirical studies examining the relation between CSR and firm value find mixed results (see also Table A3, Panel A, in the online appendix). Many of these studies face major selection problems because of the voluntary nature of CSR.[24] Selection makes it difficult to isolate the effects of CSR activities on firm value (or performance). Consistent with selection, several papers document a positive association between *voluntary* CSR activities and firm value, whereas Manchiraju and Rajgopal (2017) find that forcing firms in India to spend 2% of income on CSR has negative valuation effects. The literature suggests a number of mediating factors that can turn an otherwise inexistent or negative relation between CSR and firm value into a positive one. Examples are customer satisfaction through better product quality and the ability to innovate (Luo and Bhattacharya 2006), customer awareness of CSR (Servaes and Tamayo 2013), support from external stakeholders (Henisz, Dorobantu, and Nartey 2014), investor affect for specific CSR issues (Elliott, Jackson, Peecher, and White 2014), or positive media coverage (Cahan, Chen, Chen, and Nguyen 2015).

An alternative way to examine the value-enhancing effects of CSR is to study the relation between CSR activities and corporate financial performance—often measured in accounting terms, such as return on assets, operating margin, or sales growth. In a way, firm performance is a channel through which CSR could manifest in higher market values. The empirical evidence is decidedly mixed (see Table A5 in the online appendix). Several studies show a positive association between CSR and firm performance (e.g., Herremans, Akathaporn, and McInnes 1993; Simpson and Kohers 2002; Flammer 2015; Cornett, Erhemjamts, and Tehranian 2016), which sometimes is U-shaped (e.g., Brammer and Millington 2008). Yet, Kitzmueller and Shimshack (2012) conclude in their review piece that extant studies do not provide strong support for CSR having a positive

[24] Measurement problems related to CSR is another research design issue that most studies in this area face.

effect on profitability. Margolis, Elfenbein, and Walsh (2009) perform a meta-analysis of 251 studies and find a significantly positive correlation between CSR performance and financial performance. But they note that the economic magnitude of the effect is small. Orlitzky et al. (2003) draw similar conclusions in their meta-analysis of 52 empirical studies.

Several studies suggest that the relation between CSR and financial performance depends on various mediating factors, namely, firm-level innovation and industry-level differentiation (Hull and Rothenberg 2008), a firm's intangible resources (Surroca, Tribó, and Waddock 2010), reputation and competitive advantage (Saeidi, Sofian, Saeidi, Saeidi, and Saaeidi 2015), or how a firm implements its CSR strategy (Tang, Hull, and Rothenberg 2012). But again, much of the evidence is not necessarily causal and the relation could run the other way, from financial performance to CSR, for instance, if firms that do well are more likely to engage in CSR (e.g., Waddock and Graves 1997; Margolis et al. 2009). We emphasize that a positive link between CSR and firm value or performance would not imply that CSR reporting should be mandated (see also Section 2.4.2). However, in the presence of such a link, policymakers who aim to increase CSR activities might look to reporting mandates as a tool to induce more CSR.

### *4.2. Equity Investors as Recipients of CSR Reporting*

Given the potential link between CSR activities and firm value or performance, it is clear that equity investors should care about CSR information. Without reporting, it is difficult for them to assess the value (or risk) implications of CSR. From this perspective, mandatory CSR reporting could provide useful information to investors and enable them to perform a more comprehensive analysis of firm fundamentals (e.g., PRI 2013). CSR reporting could lead investors to adjust their asset allocation and portfolio holdings which, in turn, conveys investors' CSR preferences to the firm. Standardized CSR reporting should make it easier and less costly for investors to acquire and interpret CSR information as well as facilitate across firm and across industry benchmarking. With these general arguments in mind, we review the CSR-specific literature on equity-market effects in this subsection (see also Table A3 in the online appendix).

*4.2.1 Effects of CSR Reporting on Firm Value*

There is only scant evidence on the direct effects of CSR *reporting* on firm value and firm performance. Plumlee, Brown, Hayes, and Marshall (2015) find that the quality of voluntary CSR disclosures and firm value are positively associated, both through the cash flow and discount rate components. Yet, Cho et al. (2015b) find no such relation in their valuation tests. Gao and Zhang (2015) argue that CSR activities could affect the value relevance of earnings. The idea is that socially responsible firms are less likely to manipulate earnings in the short run, and when these firms smooth earnings, they are less likely to deviate from long-term, permanent earnings. As a result, according to the authors, earnings should be more value relevant. Consistent with this idea, Gao and Zhang (2015) find a positive interaction between CSR scores and earnings smoothness with respect to firm value (using Tobin's q and earnings-return regressions).

A key concern about these findings is that whatever causes firms to voluntarily engage in CSR and then to report on those activities also increases financial performance and/or firm value. Thus, the association with CSR reporting could be spurious. For instance, both the decision to engage in CSR activities and to report about them could be driven by future growth opportunities (e.g., Lys et al. 2015). Since growth opportunities are often unobservable, it is difficult for researchers to isolate their effects on firm value.[25] Stakeholder preferences and firms' motivations for

[25] One way of mitigating the concern about unobserved growth opportunities is to study performance effects around growth shocks that are likely unanticipated by managers. For instance, Lins et al. (2017) find that firms engaging in CSR fared better through the (arguably unanticipated) financial crisis. But the study does not disentangle CSR activities from the reporting about them.

voluntary CSR reporting could matter as well (e.g., whether firms act as good corporate citizens, want to be transparent about their ESG activities, or focus on CSR issues closely tied to their business; see Boesso, Kumar, and Michelon 2013). Moreover, firms with CSR reporting could differ in their fundamentals from firms without such reports (see Section 3). Put differently, CSR reporting is often endogenous in two ways: (i) it depends on firms' voluntary CSR activities and (ii) firms' choices in reporting about these activities. This dual endogeneity presents significant difficulties in examining the effects of CSR reporting.

One way to mitigate selection is to study the effects of CSR disclosure mandates. But such evidence is scarce. We discuss two studies here. Ioannou and Serafeim (2017) compare firms from four countries with CSR disclosure mandates before 2011 (i.e., China, Denmark, Malaysia, and South Africa) to propensity-matched benchmark firms in a difference-in-differences design. They find that, following the regime change, treated firms significantly increase the volume and quality of CSR disclosures and are more likely to (voluntarily) seek assurance for these disclosures or to adopt reporting guidelines. The increases in CSR disclosures occur even though the mandates contain "comply or explain" clauses, which would allow firms to opt out of the additional disclosures at relatively low cost. The authors interpret the results as a "race to the top" due to the mandate. They also show that CSR disclosure increases are associated with higher firm values (Tobin's q), suggesting that CSR reporting is value enhancing.[26] However, it is difficult to disentangle the reporting effects from the effects of potential changes in the underlying CSR (or any other firm) activities around the reporting mandate. For this reason, Ioannou and Serafeim (2017) estimate the valuation effects using the CSR disclosure mandate as an instrument for the

[26] See also Barth et al. (2017) who study—among other things—how firm value is associated with the quality of firms' integrated reporting after the mandate was introduced in South Africa.

observed disclosure changes. Such an instrumental-variable design requires that the CSR disclosure mandate affects firm value only through this channel, but not in other ways. This exclusion condition is difficult to satisfy and would be violated, for instance, if the economic circumstances that gave rise to the mandate also affect the firm outcomes directly.

Chen, Hung, and Wang (2017) exploit the mandate of two Chinese exchanges that some, mostly larger, firms have to provide a CSR report along with their annual report. The firms subject to the mandate were required to report on a broad set of topics, including consumer protection, environmental issues, and the provision of social welfare services. Chen et al. (2017) find that firms subject to the CSR disclosure requirements experienced a reduction in future profitability (but an improvement in environmental output levels). The drop in performance after the mandate again illustrates that selection issues in voluntary CSR disclosure settings, which often show positive valuation or performance effects, could be quite severe.

### *4.2.2 Effects of CSR Reporting on Stock Returns and Market Liquidity*

Event studies using short-window stock returns are a simple way to examine whether CSR disclosures are informative to shareholders. In such event studies, it is easier to attribute market reactions to the CSR disclosures, that is, to ascertain that shareholders actually respond to the release of the disclosures. In contrast, long-window return or value relevance studies tell us that CSR disclosures and stock returns reflect common information, but do not imply that shareholders learned this information from the CSR disclosures (or responded to them).[27] The difficulty of short-window event studies is to separate the news content of the disclosures (and, hence, the value implications of CSR activities) from the valuation effects of CSR reporting per se. For the latter,

[27] See also the discussion on the usefulness of value-relevance studies for regulatory purposes in Holthausen and Watts (2001).

it is better to conduct long-window studies around exogenous changes in CSR reporting (which are rare, and often limited in scope). With these caveats in mind, we review the literature.

There are numerous studies showing that stock markets respond to the release of negative or positive CSR news, often in the same direction of the news (e.g., Flammer 2013). However, for a non-trivial number of cases, market reactions and CSR news go in opposite directions, suggesting that shareholders and other stakeholders interpret the same event quite differently (e.g., an event with positive impact on the environment is accompanied by a negative market reaction; Groening and Kanuri 2013).[28] Krüger (2015) finds that investors respond strongly negatively to bad news and weakly negatively to good news. He also shows that the price reaction depends on whether investors perceive an event to be indicative of agency conflicts with management. Several studies suggest that the market reactions to CSR news are asymmetric, with shareholders putting more weight on negative news (e.g., Flammer 2013; Crifo, Forget, and Teyssier 2015). Christensen, Floyd, Liu, and Maffett (2017) examine whether market reactions are stronger when CSR events are reported in 8-K filings with the SEC and not only when posted on a government website. Specifically, the authors find that the market reacts stronger when certain mine-safety citations are included in both disclosure outlets, suggesting that regulatory filings aid information dissemination and improve price formation.

A recurring theme in the literature is that CSR activities and reporting offer a form of "insurance" in case something goes wrong. The insurance effect of a firm's CSR reputation has

[28] Other return-based tests of CSR suggest: (i) the performance of CSR investments is generally negative or zero (e.g., Galema, Plantinga, and Scholtens 2008; Renneboog et al. 2008; Di Giuli and Kostovetsky 2014), unless CSR activities are considered material to investors (Khan et al. 2016). (ii) A firm's inclusion in a CSR index is accompanied by no or slightly positive excess returns while the removal from the index coincides with substantial negative returns pointing to the certification role of the index provider (e.g., Doh, Howton, Howton, and Siegel 2010; Becchetti, Ciciretti, Hasan, and Kobeissi 2012; Ramchander, Schwebach, and Staking 2012). (iii) Acquiring firms with a strong CSR focus realize higher merger announcement returns (Deng et al. 2013).

been shown for CSR activities that create goodwill with outside stakeholders or the society at large (Godfrey, Merrill, and Hansen 2009), around corporate scandals and high-profile misconduct (Janney and Gove 2011; Christensen 2016), following negative press coverage (Shiu and Yang 2017), and during adverse macroeconomic shocks such as the 2008 financial crisis (Lins et al. 2017) or the 2010 BP oil spill in the Gulf of Mexico (Heflin and Wallace 2017). However, the same studies also suggest that the effects can backfire or be more negative, for instance, in case of repeated occurrences, if the disclosure about the negative event is delayed, or if the event occurs in a CSR area that was previously highlighted as being important to the firm (e.g., a company emphasizes personal data protection but subsequently announces an online security breach).

The studies above, for the most part, speak to how the market reacts to the underlying CSR activities and they are not specific about CSR reporting. More related to the reporting dimension, Grewal et al. (2018) find a negative association between a disclosure score of material CSR information and stock price synchronicity. They interpret the results as consistent with only select CSR disclosures being relevant to investors and increasing the amount of firm-specific information incorporated into price. Becchetti, Ciciretti, and Hasan (2015) provide evidence that CSR scores and idiosyncratic volatility (a proxy for firm-specific information) are positively related. They argue that CSR reduces the ability of firms to respond to negative productive shocks, essentially putting a constraint on firm behavior. However, the two papers again illustrate how difficult it is to separate the effects of CSR disclosures from the underlying CSR activities.

One of the few studies to analyze a CSR reporting mandate is Grewal, Riedl, and Serafeim (2019). It examines the (short-window) returns to events leading up to the passage of an EU Directive mandating the disclosure of nonfinancial (CSR) information by firms. The authors find, on average, a negative market reaction but less so or even positive returns for firms with more predirective CSR disclosures and stronger CSR performance. The results suggest that investors view the CSR reporting mandate as costly, particularly for firms that provide few voluntary CSR disclosures and would be forced to disclose additional CSR information.[29] The study also shows that the negative reaction is related to proprietary and political costs. Hombach and Sellhorn (2018) find similar results around the passage of an SEC rule mandating project-level disclosures of payments made to governments by extractive issuers. The market reactions are more negative for firms subject to greater public scrutiny, consistent with investors expecting costly changes to firms' business activities. This result highlights one of the significant challenges of regulatory event studies. The market reaction not only reflects the capital-market effects of CSR reporting but also potential real effects that follow from the reporting mandate. Other empirical challenges include the difficulty to cleanly identify the dates on which investor expectations change and how anticipation of future regulation plays into the results (e.g., Binder 1985; Leuz 2007) as well as the fact that the typical regulatory event study is not "diversified" in event time and, hence, prone to concerns about confounding events and concurrent industry- or economy-wide shocks.

There is only limited evidence on the liquidity consequences of CSR reporting. For instance, Barth et al. (2017) show that following the 2010 mandate to provide integrated reporting for firms listed on the Johannesburg Stock Exchange, firms with higher quality integrated reports and with larger yearly changes in reporting quality have lower bid-ask spreads (and higher firm value).[30] Cho, Lee, and Pfeiffer (2013) find a negative association between CSR performance scores and

[29] For firms that wait with the adoption of CSR standards until the mandate, by revealed preference, the cost-benefit tradeoff is likely negative (see Daske et al. 2013; Christensen, Lee, Walker, and Zeng 2015, for similar arguments regarding voluntary IFRS adoption). Such net costs can be the result of high implementation effort (e.g., necessary infrastructure to gather the CSR data), high operating cost (e.g., proprietary cost of CSR disclosures) or low perceived benefits.

[30] Integrated reporting requires firm disclosures on intellectual, human, social, and natural capital—all topics that can broadly be described as CSR.

information asymmetry. This relation holds for both positive and negative CSR performance. Using a set of Canadian firms, Cormier and Magnan (1999) show that trading volume is positively associated with a voluntary CSR disclosure score. Grewal et al. (2018) find a negative relation between material CSR disclosures and bid-ask spreads or zero return days. The relatively low number of liquidity studies is surprising considering that market liquidity has been shown to be very responsive to corporate disclosures and is probably one of the capital-market outcomes that we understand the best (see also Leuz and Wysocki 2016).

### *4.2.3 Effects of CSR Reporting on Firm Risk and Cost of Equity Capital*

CSR has the potential to affect firm risk, which can manifest in firm value if the cost of capital changes. The argument for a link to risk is that CSR generates "moral capital," for instance, through customer trust, employee loyalty, lower price elasticities, or goodwill with regulators (e.g., Luo and Bhattacharya 2009). Such moral capital affords insurance-like protection against negative future events and the reactions of stakeholders to such events. As a result, the volatility of future cash flows goes down. Consistent with this idea, studies find that CSR activities are negatively associated with idiosyncratic risk (Luo and Bhattacharya 2009; Becchetti et al. 2015),[31] with crash risk measured as the negative skewness of stock returns (Kim, Li, and Li 2014), with the risk of future stakeholder conflicts (Becchetti et al. 2015), and with systematic risk using beta estimates (Albuquerque, Koskinen, and Zhang 2018). Yet, CSR could also have investor clientele effects. Investor-specific preferences could reduce investors' ability to diversify idiosyncratic risk and lead to an increase in cost of capital (e.g., Friedman and Heinle 2016).

[31] See also Mishra and Modi (2016). They find a negative relation of CSR effort with idiosyncratic risk only in the presence of marketing capability, that is, the ability to convert marketing effort into future sales. Humphrey, Lee, and Shen (2012) find no such relation in their sample.

But again, it is important to differentiate between CSR activities and CSR reporting. Studies focusing on the reporting aspect provide evidence of a negative relation between voluntary CSR disclosures and firms' (implied) cost of capital (e.g., El Ghoul, Guedhami, Kwok, and Mishra 2011; Plumlee et al. 2015; Matsumura, Prakash, and Vera-Muñoz 2017). The documented relation often depends on a number of mediating factors such as firms' actual CSR performance (Dhaliwal et al. 2011), the type of CSR disclosures (e.g., environmental and governance topics; Ng and Rezaee 2015), whether the CSR disclosures are material to investors (Matsumura et al. 2017), or whether a third-party provides assurance of the CSR reports (Casey and Grenier 2015). There are also studies that find no relation between CSR disclosures and cost of capital (Clarkson, Fang, Li, and Richardson 2013) or even a positive relation (Richardson and Welker 2001).

The aforementioned studies face the issue that firms with voluntary CSR disclosures could differ systematically in their CSR activities and, hence, firm risk. Thus, it is not clear whether CSR reporting and not CSR (or some underlying factor) drives the differences in cost of capital. To disentangle the two, Bonetti et al. (2015) analyze the cost of capital effects of firms' environmental disclosures around an arguably exogenous shock (i.e., the Fukushima nuclear disaster in 2011). They find evidence that Japanese firms with stand-alone environmental reports incur a less severe cost-of-capital increase after the disaster than firms without such a report. There is a smaller response for firms with more credible CSR disclosures. In additional tests, the authors find that firms increase their voluntary CSR disclosures in the aftermath of the disaster.

#### *4.2.4 Investor Preferences and Effects of CSR Reporting on Portfolio Holdings*

One reason to analyze potential effects on investor portfolio holdings is that investors can have different tastes for CSR activities (e.g., Fama and French 2007; Friedman and Heinle 2016). These tastes give rise to investor clientele and base effects, which can affect firms' cost of capital, but also feed back into firms' (CSR) activities.[32] Examples of feedback effects are shareholder proposals on CSR issues by activist investors that subsequently lead to better CSR performance (Grewal, Serafeim, and Yoon, 2017). Dimson, Karakaş, and Li (2015) find that successful CSR campaigns by active owners are associated with positive stock returns and improvements in accounting performance. These findings suggest that investor preferences and actions by institutional investors could be an important mechanism for real effects from CSR reporting. We attend to this issue in Section 5.

Experimental research by Martin and Moser (2016) finds that investors respond favorably to CSR disclosures highlighting societal benefits, even when the underlying activities are net costly. Investors seem to value such disclosures and the underlying CSR activities. Similarly, El Ghoul and Karoui (2017) find that investors in CSR mutual funds appear to derive utility from non-performance attributes. Hartzmark and Sussman (2017) exploit the introduction of CSR ratings by Morningstar and show that perceptions about sustainability drive mutual fund flows and that investors place a positive value on CSR ratings. More nuanced findings are that professional investors focus primarily on CSR information that they consider financially material (Amel-Zadeh and Serafeim 2018), that individual investors perceive CSR disclosures as more important (and increasing their willingness to invest) if CSR activities are relevant to the firm's strategy (Cheng, Green, and Ko 2015), and that CSR disclosures affect investor judgments more when presented in stand-alone reports (Bucaro, Jackson, and Lill 2017). Finally, there is evidence that investors with long-term horizons are more likely to invest in firms with strong CSR performance or behave more patiently towards these firms by selling less after negative earnings surprises and poor returns (e.g.,

[32] For instance, Hart and Zingales (2017) show that (prosocial) shareholder preferences affect optimal production decisions when the externalities of these decisions are not perfectly separable. They drive a wedge between the maximization of a firm's market value and shareholder welfare, which also accounts for shareholder preferences.

Gibson and Krüger 2017; Starks, Venkat, and Zhu 2017). These findings suggest a link between investment horizon and CSR preferences.

### *4.3. Lenders and Debtholders as Recipients of CSR Reporting*

Similar to equity investors, lenders can have a taste for CSR (e.g., Barigozzi and Tedeschi 2015). For instance, closer matching of interests between firms and their lenders could reduce inherent agency conflicts, compensating for the higher costs of CSR activities.[33] Such borrower-lender matching can have credit market effects. In line with this argument, firms headquartered in communities with higher social capital exhibit lower loan spreads (Hasan, Hoi, Wu, and Zhang 2017) and banks with strong CSR performance provide more favorable loan spreads to firms with equally strong CSR performance (Hauptmann 2017). Several studies find that CSR or stronger CSR performance is associated with lower loan spreads and, hence, a lower cost of debt (Goss and Roberts 2011; Chava 2014; Cheng, Ioannou, and Serafeim 2014; Kim, Surroca, and Tribó 2014; Kleimeier and Viehs 2016; Cheng, Wang, Zhang, and Zhao 2017).[34] However, Goss and Roberts (2011) and Hauptmann (2017) not only find that the spread relation depends on borrower strength and lender preferences, respectively, but also likely reflects higher penalties for firms with CSR-related business risks, rather than rewards for good CSR performance.

Similar to the insurance-like effects in equity markets, the negative association between CSR and loan spreads is more pronounced in periods of low trust and crisis, such as during the 2008-2009 financial crisis (Amiraslani, Lins, Servaes, and Tamayo 2017). CSR bonds appear to outperform conventional bonds particularly during down markets (Henke 2016). Evidence that

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[33] Similar arguments can be made for the matching of managers and shareholders (see Besley and Ghatak 2005).

[34] In contrast, Stellner, Klein, and Zwergel (2015) do not find beneficial effects of superior CSR performance using credit default swaps.

CSR disclosures can limit the impact of negative events and of negative revelations about a firm should be particularly relevant for debtholders, as they naturally take great interest in downside risk. Conversely, credit markets react negatively when a firm displays or the press uncovers irresponsible CSR behavior and the firm is involved in CSR scandals (Kölbel, Busch, and Jancso 2017). Finally, CSR performance is negatively related to capital constraints with CSR disclosures playing a moderating role in this association (Cheng et al. 2014).

Overall, the literature on debt-market effects is primarily focused on firms' CSR activities (see also Panel A of Table A4 in the online appendix). There is not much evidence on the effects of CSR *reporting*. A mandated adoption of CSR standards would be relevant primarily for public debt offerings and publicly traded debt, and less so for private placements or bank debt. In private lending agreements, firms can provide additional information as part of the negotiation and lenders are less reliant on public information. These private communication channels could give lenders an opportunity to probe the extent to which a firm is "greenwashing." As in the equity markets, mandatory adoption of CSR reporting standards likely reduces the search and information processing costs for bond investors. It should make it easier to compare firms, particularly if investors have preferences for certain CSR dimensions when making investments.

### *4.4. Analysts and the Media as Recipients of CSR Reporting*

Financial intermediaries like analysts and the media also take an interest in firms' CSR. The issuance of a stand-alone CSR report and certain disclosures indicating CSR strengths (e.g., CSR activities to mitigate stakeholder risk) are negatively associated with analyst forecast errors (e.g., Dhaliwal et al. 2012; Becchetti, Ciciretti, and Giovannelli 2013). In contrast, CSR weaknesses (e.g., overinvestment in CSR) exhibit a positive association. Analysts appear to put more weight on CSR reports when an external accounting firm provides assurance (Pflugrath, Roebuck, and

Simnett 2011). Hope, Hu, and Lu (2016) find that the more specific a firm's disclosures (including CSR disclosures), the better analysts are able to assess fundamental firm risk. However, it seems that these relations need time to develop. Ioannou and Serafeim (2015) show that analysts' stock recommendations initially suggest a negative view of firms' CSR investments, consistent with these activities being costly or a reflection of agency problems. As a firm's CSR reputation grows, stock recommendations become more favorable.

The media naturally plays a dissemination role for firms' CSR messages and disclosures. However, there is also evidence that CSR can shape media coverage. Firms with a stronger CSR reputation tend to receive more favorable media coverage, which provides managers with incentives to use CSR as a tool to manage the public image of the firm (Cahan et al. 2015). For instance, in so-called "sin" industries (alcohol, gambling, and tobacco) firms attempt to actively portray a positive CSR image and reputation. On the other hand, the media reinforces the negative repercussions from poor CSR behavior (Kölbel et al. 2017). Firms that exhibit irresponsible CSR behavior tend to receive a lot of (negative) press attention which, in turn, increases stakeholder pressure. Thus, the media are likely an important channel through which disclosures about firms' CSR activities could have real effects.

Mandatory adoption of CSR standards should affect financial analysts and the media in a similar way as equity investors. If CSR information is more widely available and presented in a standardized format, search and information processing costs for analysts and journalists are likely lower. If corporate disclosures and financial analysts act as substitutes, standardized disclosures could reduce analysts' incentives to gather private information about firms' CSR (e.g., Barron, Byard, and Kim 2002). On the other hand, if CSR disclosures serve as a complement to analyst coverage, then they enable analysts to better integrate CSR information into their fundamental analysis and valuation models. Analysts may give more room to CSR issues in their research reports (e.g., PRI 2013). Given that such research reports generally focus on financial performance and valuation, analysts likely have the greatest interest in CSR disclosures that are informative about the future expected cash flows of the firm.

Journalists and the media likely have an even broader interest in CSR than analysts do. Mandatory CSR standards could make the dissemination role easier and allow the media to better compare and rank firms' CSR strategies. It could also reduce the initial information gathering costs for CSR-related news stories. Consistent with this argument, Christensen et al. (2017) provide descriptive evidence that the inclusion of mine-safety information in regulatory fillings increases the use of this information by both analysts and journalists. Specifically, they find that financial institutions such as brokerage houses and investment banks account for approximately 50% of mine-safety related 8-K downloads, and the news media account for approximately 26%. In additional tests, the authors find a substantial increase in media coverage of certain mine-safety citations and a (modest) increase in the frequency with which safety is discussed during earnings conference calls after the inclusion of the information in regulatory filings.

### *4.5. Customers, Employees, and Other Stakeholders as Recipients of CSR Reporting*

A common justification for CSR activities is that they enhance firm reputation and loyalty with certain stakeholder groups which, in turn, can affect a firm's financial performance. For instance, customers who develop loyalty towards a firm or its brand because of the CSR activities could increase the demand for the firm's products and services as well as allow the firm to charge higher prices (Navarro 1988). Similarly, CSR could increase employee loyalty, which could lead to lower wage expenditures, either because employees are willing to work at lower rates or by increasing employee retention and intrinsic motivation (Greening and Turban 2000). Another relevant stakeholder group are policymakers and regulators. In this context, CSR activities can be viewed as political contributions that reduce the risk of harming regulatory actions (Hillman and Keim 2001). In this subsection, we discuss several of these other stakeholder groups as recipients of CSR reporting (see also Panels C to E of Table A4 in the online appendix).[35]

*4.5.1 Society in General*

From a societal perspective, CSR and sustainability are about externalities and the distribution of rights and assets across generations (e.g., Howarth and Norgaard 1992). A firm that assumes CSR internalizes external costs and accepts responsibility for current and future generations. Society can exert pressure onto firms to pursue specific CSR goals and adopt certain CSR behaviors, which often are costly and have no obvious payoffs to shareholders. Interest groups and other stakeholders may pressure firms to pursue CSR activities on their behalf, essentially as delegated philanthropists (e.g., Bénabou and Tirole 2010). In this context, CSR reporting can be used to proactively prevent or abate societal pressure (e.g., Reid and Toffel 2009), to promote corporate goodwill on the part of key stakeholders, to explain the long-term benefits and sustainability of firm strategies, to convey credible signals to stakeholders, and to pander to special interest groups (e.g., employees, activists, customers).

Again, much of the research in this area focuses on the effects of CSR activities rather than reporting. Murray and Vogel (1997) find that CSR has a positive, but often intangible impact on the perceptions of (potential) stakeholders, both at the individual and group level. Stakeholders'

[35] For completeness, we also mention competitors as recipients of CSR reporting. As noted before, a concern is that standardized CSR reporting requires firms to disclose proprietary information they otherwise would have kept secret, resulting in proprietary costs (e.g., Verrecchia 1983; Wagenhofer 1990). The issue of proprietary costs could be more pronounced for CSR disclosures because they go beyond aggregate financial measures, are often directly related to a firm's core operations (e.g., employee relations, manufacturing inputs or outputs), and the CSR standards might be very targeted and (industry) specific. In the extreme, a CSR disclosure mandate could incentivize a firm to alter its behavior (see Section 5).

preconceived attitudes toward (or taste for) particular CSR issues are likely to mediate this relation (e.g., Shafer and Simmons 2008). Firms may use CSR strategically to establish a bond with society or to improve relationships with specific interest groups in return for reputational goodwill and monetary benefits. For instance, Lin, Tan, Zhao, and Karim (2015) find that Chinese firms expand their spending for politically sensitive CSR topics to curry favor with local politicians and reap benefits in the form of higher government subsidies.

From a societal perspective, a widespread adoption of CSR standards could have a number of effects. For CSR to be impactful, the various stakeholders need to be aware of it. Voluntary CSR disclosures are one way how firms can convey their CSR activities to the public. However, as noted before, voluntary disclosures are not always credible, preventing firms from reaping the full benefits from CSR. A CSR reporting mandate could provide credible commitment, especially if the standards are well enforced. The type of interaction between the firm and its stakeholders could also affect the demand for CSR disclosures. If the interaction is more arms' length or passive in nature (i.e., stakeholders vote with "their feet" or engage in screening for positive/negative CSR performance), CSR standards are likely more useful. If the interaction is more relational, involving a dialogue between the firm and its stakeholders (e.g., activist investors, NGOs, policymakers), then CSR information can be customized and privately exchanged. In this case, standardized CSR reporting likely plays less of a role.

Firms can adopt CSR standards in a more "symbolic" way to legitimize corporate actions, to selectively disclose positive CSR activities, or without intention to materially adjust the underlying real activities (e.g., O'Sullivan and O'Dwyer 2009; Marquis, Toffel, and Zhou 2016; Diouf and

Boiral 2017).[36] Doing so, firms can exploit the discretion in standards, for instance, by using boilerplate language or other linguistic properties of corporate communication to conceal "true" CSR actions (Crilly, Hansen, and Zollo 2016) and by presenting the information in a way to strategically influence user perceptions (e.g., Cho, Phillips, Hageman, and Patten 2009). This deceptive communication or "greenwashing" aims at hiding actions that are negative from a CSR view through positive, but merely symbolic activities and reporting.[37]

*4.5.2 Customers and Consumers*

Customers represent an important stakeholder group. They exhibit a variety of preferences and views with respect to CSR, which may or may not map into firms' CSR activities. If there is fit (e.g., common interest in "green" construction), firms' CSR engagement likely positively affects consumer perceptions, which could increase customer loyalty, future sales, or the willingness to pay for products and services (e.g., Eichholtz, Kok, and Quigley 2013; Grimmer and Bingham 2013; Park, Lee, and Kim 2014; Habel, Schons, Alavi, and Wieseke 2016).[38] The type of CSR activities (e.g., focused on business processes or philanthropic actions), consumers' personal values (e.g., fairness, respect, and honesty), and a firm's ability to innovate and ensure product quality act as mediating factors for these associations (e.g., Luo and Bhattacharya 2006; Homburg, Stierl, and Bornemann 2013; Öberseder, Schlegelmilch, and Murphy 2013).

[36] A related phenomenon in financial accounting was the "label adoption" of IFRS in which firms (voluntarily or mandatorily) adopted IFRS without materially changing the underling reporting practices. See Daske et al. (2013).

[37] In the extreme, greenwashing in the external communication can induce internal changes in the organization that are diametrically opposed to the promoted CSR ideals. For instance, Siano, Vollero, Conte, and Amabile (2017) examine the 2015 Volkswagen emissions scandal or "Dieselgate" from such a perspective.

[38] Habel et al. (2016) show that how the costs of CSR activities are passed on to customers affects their overall view of a firm's CSR engagement. By increasing transparency regarding these mark-ups, CSR standards could mitigate these effects.

Trust by customers can also turn into skepticism. In response to unsubstantiated CSR claims, revealed CSR incidents, or corporate hypocrisy, customers can become critical about a firm's CSR activities and change their initially positive view (e.g., Wagner, Lutz, and Weitz 2009; Skarmeas and Leonidou 2013; Skarmeas, Leonidou, and Saridakis 2014). CSR standards might serve as a starting point for customers or less informed and less sophisticated consumers when assessing a firm's CSR. Standardized disclosures should help them with peer comparisons. At the same time, one-size-fits-all CSR standards can create a disconnect between what firms must report and what customers deem important for specific firms (e.g., Bradford, Earp, Showalter, and Williams 2017).

### *4.5.3 Employees and Management*

CSR has the potential to affect employee motivation and become part of a firm's culture of doing business. In this regard, CSR reporting can play a role in communicating and dispersing the message across the firm. Ways to incentivize employees include explicitly tying CSR goals to management compensation (Mio, Venturelli, and Leopizzi 2015) or integrating CSR goals into the existing management control system (e.g., Collison, Cobb, Power, and Stevenson 2009; Arjaliès and Mundy 2013). CSR reporting could also serve as a disciplining tool to shape and coordinate relationships along the supply chain (e.g., Spence and Rinaldi 2014; Dai, Liang, and Ng 2018). On the benefits side, Gao, Lisic, and Zhang (2014) find that managers from CSR-conscious firms engage less in self-serving insider trading and, if they do, reap lower benefits from these trades. This result is consistent with CSR making insider trading more costly to managers. Alternatively, it could reflect a selection or matching effect. CSR-conscious firms hire managers that are more ethical and less likely to engage in opportunistic trades.

Windolph et al. (2014) find that the response to CSR incentives and the extent to which employees pursue or strive for CSR goals varies substantially across functional areas within the firm such as marketing, sales, and finance. Employees and managers might also be influenced by their own perceptions and understanding of their roles within the organization when dealing with CSR issues. For instance, Armstrong (1977) finds that exposing managers to CSR information or asking them to explicitly represent external stakeholders' interests, improves their socially responsible behavior. Aggregate and multifaceted CSR goals may be difficult to communicate and break down into measurable performance indicators for goal setting (e.g., Virtanen, Tuomaala, and Pentti 2013). For instance, Mäkelä and Näsi (2010) find that management and employees interpret the same CSR messages in different ways. O'Dwyer (2003) suggests that managers feel constrained by the financial performance goals of the organization when pursuing CSR objectives. On a more practical level, the main obstacles encountered when implementing CSR reporting for internal purposes are issues like data availability, additivity of measurement units, reliability and suitability of estimates, as well as the resistance by managers and employees (e.g., Herbohn 2005; Virtanen et al. 2013). In this context, CSR standards could prescribe CSR disclosures and metrics that are not part of the internal management control system thereby requiring the expenditure of additional resources and management effort for their implementation.

### *4.6. Implications for Mandatory Adoption of CSR Standards*

From the above discussion, it is clear that capital-market participants have a demand for CSR information, for example, given the potential performance, risk or valuation implications. Other stakeholders and society care about CSR information in light of the potential externalities of corporate activities and firms' broader impact in ESG areas. Thus, CSR disclosures clearly play a role in informing investors, debtholders, consumers, employees, policymakers, etc. Voluntary disclosures are one way for firms to convey this information. However, voluntary disclosures are not always credible or effective. Stakeholders might worry that such disclosures are provided only when the information is favorable. Standardization could be beneficial to the various users of CSR information. But there are also reasons to be skeptical about the ability of standards to force out information that firms do not want to disclose (see our discussion in Section 2.4.3). Thus, the key question is ultimately an empirical one.

Empirical evidence on the effects of CSR *reporting* is limited and still developing. While there are many CSR studies relying on reported CSR information, only relatively few focus on the reporting effects per se, and those that do face the challenge of disentangling the effects of CSR reporting from the underlying CSR or business activities. Moreover, as CSR reporting mandates are still rare, most studies rely on firms' voluntary CSR disclosures.

Voluntary disclosure studies face a dual selection problem (see Section 2.3), and it is often unclear whether the documented results reflect firms' voluntary CSR activities or reporting effects. Even when studies are able to identify (causal) disclosure effects, we typically cannot use results based on voluntary firm choices to justify a mandate, as the observed effects are likely not representative for the population of firms (e.g., Leuz and Wysocki 2016). Consistent with the presence of selection effects, studies based on voluntary CSR disclosures often provide evidence of beneficial outcomes, whereas studies on mandatory CSR reporting find fewer or no capital-market benefits. One potential reason for this discrepancy could be that CSR mandates are often not designed for investors (but with other stakeholders in mind) and, hence, the effects could be more favorable if they were. To answer this question, we need more research on whether mandated CSR disclosures mitigate information asymmetries, force out more informative (non-boilerplate) disclosures, have externalities, and the extent to which CSR standards provide market-wide cost savings or comparability benefits.

With these caveats in mind, we derive the following potential implications of a CSR reporting mandate for the various stakeholder groups. First, to the extent that CSR disclosures provide new or better information, they should have tangible capital-market benefits in the form of improved liquidity, lower cost of capital, and higher asset prices (see Section 2.4.1), especially when this information is relevant or material to investors. At the same time, CSR reporting is costly and could provide insights into firms' operations and convey potentially proprietary information to outsiders. The heightened transparency and scrutiny about firms' CSR could increase the threat of regulatory actions and/or litigation by shareholders and other parties.[39] Thus, the net effects for firms in capital markets are difficult to predict and not a priori obvious.

Second, the extent to which a CSR reporting mandate induces firms to provide new and better information critically hinges on firms' reporting incentives. Evidence from voluntary CSR disclosures suggests that reporting incentives differ substantially across industries and firms (Section 3). It is therefore not obvious that mandatory CSR standards would lead to a substantial improvement in CSR reporting, pointing to the need for institutional reform. The institutional reform would need to provide tools to all stakeholders (not just investors) to allow them to hold firms accountable for their CSR (Cooper and Owen 2007). Much will depend on the specificity, proper implementation and enforcement of the standards (including assurance; see Section 6.4). Imposing CSR standards will have little effect if firms' underlying reporting incentives do not change *and* firms have the ability to avoid disclosure by using boilerplate language or claiming the information is immaterial. Given the heterogenous nature of firms' CSR, substantial discretion

[39] Conversely, an increase in the reliability of CSR reports could strengthen the insurance-like benefits from CSR and lead to a reduction in third-party litigation and ease the resolution of such proceedings (e.g., Godfrey et al. 2009).

in CSR standards is likely necessary for them to be informative. But such discretion exacerbates the aforementioned compliance issues and makes it difficult to assess materiality.

Third, it is important to consider existing U.S. securities regulation and SEC rules. These requirements prohibit SEC-registered firms from omitting material information from regulatory filings (see also Section 6.2.1), and they apply to CSR information. Thus, the magnitude of the capital-market effects from a CSR reporting mandate depends, among other things, on the extent to which firms currently withhold material CSR information. If firms are largely in compliance with current securities regulation, that is, do not omit information that under existing rules is considered material, then CSR standards should not produce much new information for investors. In that case, the primary benefits of CSR standards to investors must come from standardization, which can include stronger reporting incentives to provide CSR information when other firms do so in a similar fashion. But it is difficult to assess how much material CSR information firms currently withhold. Using monetary sanctions by the U.S. Environmental Protection Agency, which have to be disclosed under Item 103 of Regulation S-K, Peters and Romi (2013) show a 72% non-compliance rate with SEC filing requirements. Relatedly, using ESG disclosure data in Bloomberg, Grewal et al. (2018) find that, on average, firms provide only about 18% (median: 13%) of the prescribed SASB disclosure items (which serve as benchmark for material CSR disclosures that firms should provide). These statistics point to substantial non-compliance or underreporting of material CSR information. If such a reporting gap indeed exists, mandated CSR standards could impose specificity (e.g., provide close ties to firms' business activities) so that non-compliance can be detected, and the rules enforced. If successful, then the mandate should force out new material CSR information and capital markets should respond as theory predicts.

Fourth, the dispersed gathering and disclosure of CSR information is a public good. Thus, standardization of CSR reporting in substance, format and presentation should make it easier for stakeholders to find, process, and compare CSR disclosures. The latter implies cost savings for investors but also for other stakeholders and the society at large. Of course, it is not necessarily the case that firms report what the various stakeholders would otherwise be collecting or be interested in. Standardization could also make it easier for investors to pursue investment strategies that reflect their CSR preferences.[40] Similarly, customers would find it easier to make CSR-based consumption decisions.

Fifth, CSR standards could make it easier to benchmark firms' CSR performance over time and across firms. The incentive effects of such over-time and peer-to-peer comparisons are not trivial. Ranking firms produces winners and losers, as not all firms can be at the top of the ranking. Firms are unlikely to be in full control of their CSR performance as part of it is exogenous and defined by outside factors (e.g., natural catastrophes and accidents). Moreover, the measurement system for CSR performance is likely incomplete (e.g., injuries are an imperfect proxy of worker safety). Mandatory CSR reporting could expose firms to reputation risk and increase the likelihood of bad publicity, even when firms are not at fault or despite good systems and CSR policies. Such risk could cause firms to engage in costly (real) activities (see Section 5).

Sixth, the wide-ranging nature of CSR topics and the ensuing features of CSR reporting (see Section 2.3) likely limit comparability benefits, particularly across industries. CSR standards with a strong industry focus facilitate within-industry comparisons but could hamper cross-industry comparability. Thus, despite the arguably large potential for standardization in the CSR area, it is

[40] Without CSR standards, costly information gathering and less precise information could make investors with a taste for CSR avoid certain industries altogether as opposed to picking the best-CSR firms within the industry. This effect could potentially make the diversification problem worse and increase the cost of capital.

unlikely that CSR standards can achieve comparability across all firms. The same features of CSR and CSR reporting also make it difficult for stakeholders to aggregate the various dimensions when assessing a firm's overall CSR performance.[41] Firms can do well along some dimensions and poorly along others. Industry-specific CSR standards and the development of synthetic CSR indices by rating agencies are attempts to tackle the aggregation problem. Yet, there is a tradeoff. Including (financially) immaterial CSR information in the standards or scores could reduce their usefulness to investors (e.g., Guay, Samuels, and Taylor 2016; Dyer, Lang, and Stice-Lawrence 2017). Establishing aggregate CSR scores and indices might pressure firms to focus on particular outputs, which could be counterproductive if the weights used do not reflect the relative costs and benefits of the underlying activities to the firms (e.g., Porter and Kramer 2006). In the extreme, firms could engage in hypocrisy and greenwashing, creating a discrepancy between CSR reporting and CSR activities (e.g., Cho, Laine, Roberts, and Rodrigue, 2015).

Finally, better information on CSR activities should allow for better monitoring of managers. Mandatory CSR standards could make it easier for investors to hold managers accountable, especially when it comes to negative NPV projects. It is not clear that managers have incentives to disclose such value-decreasing CSR activities voluntarily, which is why a mandate to disclose unfavorable CSR activities and outcomes (and to have the resulting disclosures audited by a third party) could lead to a reduction of the agency problems. CSR standards could also improve the monitoring by stakeholders other than investors, considering that CSR is often about negative externalities from a firm's operations. The ensuing or anticipated reactions by other stakeholders and society could lead firms to internalize such externalities. However, it is not obvious whether

[41] Not all stakeholders might be interested in a firm's overall CSR performance, but rather focus on certain aspects of CSR activities. For instance, survey evidence by Amel-Zadeh and Serafeim (2018) suggests that professional investors are primarily interested in CSR information that is financially material to investment performance.

CSR reporting is the right tool or even an efficient tool to exert such societal pressure on companies to change their investment behavior (e.g., White 2013).

## 5. Potential Firm Responses and Real Effects from Mandatory CSR Reporting Standards

For the discussion in Section 4, we assumed that the firm's underlying business and CSR activities do not change as a result of CSR reporting. There were no real effects. However, a CSR reporting mandate likely not only affects the recipients of CSR information, but could also induce firms to alter their behavior, often precisely because investors or other stakeholders (are expected to) respond to firms' disclosures. In this section, we consider such real effects and discuss potential firm responses to our base scenario, the mandatory adoption of CSR reporting standards.[42] We begin by briefly reviewing the general link between disclosure (mandates) and firms' real investment, financing, and operating activities. We then derive potential firm-level consequences of a CSR mandate and review extant literature on the real effects of CSR reporting. Next, we consider the possibility that firms abandon certain activities or exit markets altogether. New regulation likely affects the cost-benefit tradeoff that firms face when evaluating the decision to seek external financing or to remain present in a market. We conclude by highlighting the potential implications of a CSR reporting mandate for the aggregate CSR activity in the economy.

### *5.1. General Link between Disclosure and Firms' Real Activities*

Extant research in accounting suggests that new financial or non-financial disclosures can change a firm's investment behavior (for overviews see Leuz and Wysocki 2016; Roychowdhury, Shroff, and Verdi 2019). A key insight from this work is that the reporting regime, aside from mapping economic activity into financial information, also influences how firms behave and

[42] See also Hombach and Sellhorn (2019) for a similar analysis of the real effects of targeted transparency regulation.

allocate their resources (e.g., Kanodia and Sapra 2016). Empirical studies provide examples as well as potential explanations for why corporate disclosures and reporting mandates can have real effects, including: (i) disclosures reduce information asymmetry and agency costs leading to enhanced investment efficiency (e.g., Biddle and Hilary 2006; McNichols and Stubben 2008; Shroff, Verdi, and Yu 2014); (ii) accounting treatments (e.g., recognition of employee stock option expense in the income statement) have contractual implications for managerial compensation or debt agreements that induce changes in firms' investment and spending behavior (e.g., Dukes, Dyckman, and Elliott 1980; Holthausen and Leftwich 1983; Choudhary, Rajgopal, and Venkatachalam 2009; Hayes, Lemmon, and Qiu 2012); and (iii) managers learn new information from their peers' reporting choices and consequently adjust their investment decisions (e.g., Beatty, Liao, and Yu 2013; Chen, Young, and Zhuang 2013; Shroff 2017).

One channel through which a CSR mandate can induce firm responses is by altering a firm's cost of capital, which serves as the hurdle rate for new investments. A lower cost of debt or equity capital increases the NPV of the existing investment opportunity set. An increase in the cost of capital creates the opposite effect. As a result, corporate investments should respond to changes in cost of capital. As discussed in Sections 4.2.3 and 4.3, several studies point to a negative association between voluntary CSR reporting and the cost of capital (e.g., El Ghoul et al. 2011; Plumlee et al. 2015; Matsumura et al. 2017). But there is also evidence that the relation goes the other way (e.g., Richardson and Welker 2001). If indeed a CSR mandate reduces the costs of debt and equity financing, firms are expected to increase their investments across the board, not just those related to CSR. The opposite is true if a CSR mandate leads to clientele effects in equity markets which, in turn, increase the cost of capital due to limited diversification.

To the extent that a CSR reporting mandate increases the quantity and quality of corporate disclosures, it can have real effects on firms' investments in the same way as any other disclosure. The ensuing reduction in information asymmetry can affect future investment, financing, and operating decisions. For instance, the disclosure literature suggests that more transparency increases firms' investment efficiency (i.e., reduces overinvestment and underinvestment; e.g., Biddle and Hilary 2006; Biddle, Hilary, and Verdi 2009). However, as discussed in Section 4.6, it is unclear how much new information a CSR reporting mandate will generate, which makes it difficult to predict how large the (non-CSR) investment responses and efficiency effects are. Another way how CSR standards could affect firms' non-CSR activities is by making CSR more or less attractive. Firms could scale back operating investments in favor of investments in CSR. Put differently, a CSR mandate could shift the mix between CSR and non-CSR activities.

### *5.2. Effects of CSR Reporting on Firm Investment, Financing, and Operating Activities*

CSR reporting differs from financial reporting in that the potential group of users and the uses of CSR information are much broader. For instance, political activists, special interest groups, consumers, and the general public could be interested in CSR information, even when they are not the primary target audience of the disclosures. These stakeholders may use CSR information for purposes other than to predict future cash flows, for example, to evaluate a firm's broader contribution to society or whether a firm adheres to policies in line with certain values and ethical standards. As a result, the real effects of CSR disclosures are difficult to predict, and we cannot necessarily extrapolate findings from the financial reporting literature. It is even conceivable that, in some instances, CSR standards could have greater implications for firm behavior than new accounting standards. With these caveats in mind, we derive potential firm-level implications of a CSR reporting mandate and review extant literature on potential real effects of CSR reporting in this subsection (see also Table A6 in the online appendix).

### *5.2.1 CSR-specific Real Effects for Individual Firms*

The most likely real effect of a CSR reporting mandate is directly on firms' CSR activities. In essence, firms are expected to alter their CSR activities whenever (investor and/or non-investor) stakeholders use the newly disclosed CSR information to exert meaningful pressure on firms (e.g., withdraw their business, divest their holdings, or instigate activist campaigns). The stakeholder reactions to firm disclosures create a feedback loop, in which firms respond to anticipated or actual stakeholder responses. Specifically, the main channels by which standardized CSR disclosures could affect individual firms' CSR are: (i) improved monitoring and governance of managers' CSR activities; (ii) a stronger link between CSR and economic performance; (iii) strengthened market and societal pressure on firms due to the availability of CSR information; and (iv) learning about other firms' CSR practices (i.e., peer effects). We comment on these effects below.

Firms may adjust their CSR activities because as more information about these activities becomes available, debt and equity investors are better able to monitor managers' CSR decisions. The governance channel matters the most if not all the current CSR activities are in the interests of investors but are the result of agency conflicts. Here, managers pursue their own personal goals with CSR rather than those of outside investors. If a CSR mandate forces more transparency and allows investors to better assess managerial behavior, they can exert discipline by (the threat of) selling shares or, more directly, through shareholder votes and activism. The result could be a better alignment between the interests of debt and equity investors and the firm's CSR activities, leading to a reduction in agency costs and positive effects on firm value.

Firms could also adjust their CSR if they see CSR reporting as having an effect on financial performance. Many studies stipulate a positive association between voluntary CSR disclosures and performance (see Section 4.1). The common justification is that CSR activities can build loyalty and trust for the firm and its brands (e.g., because activists have a taste for certain CSR policies or consumers perceive the firm's products and services as of higher quality) that ultimately can translate into higher future revenues and lower future costs (e.g., Cao and Rees 2018). Of course, for CSR to have such an effect, the various stakeholders must be aware it. Voluntary disclosures are one way how firms can convey this information, but they may suffer from credibility issues. A CSR mandate, particularly if enforced well, could make CSR information more accurate, credible and easier to process, which could strengthen the stipulated link between consumer awareness and positive performance. If so, we would expect firms to respond by increasing CSR (Guo, Xiao, and Zhang 2017).

Higher transparency regarding CSR and the ability of stakeholders other than investors to benchmark firms against each other at lower costs may increase the societal pressure on poor CSR firms. In the same way as CSR can build loyalty, poor CSR performance can damage a firm's reputation and create negative publicity. Stakeholders such as social activists, policymakers or consumers can exert pressure through reputational effects like public shaming (Dyck, Volchkova, and Zingales 2008), boycotts of the firm, or imposing sustainability restrictions along the supply chain (e.g., Dai et al. 2018). In response to this (anticipated) behavior, firms face incentives to adjust their CSR if the costs of goal misalignment with certain stakeholders are perceived as too high. For instance, Dyreng, Hoopes, and Wilde (2016) find evidence that pressure from outside activists reduces transaction structuring to avoid corporate taxes among large U.K. firms. In the broader economic literature, evidence consistent with firm responses has been shown both when the information directly affects consumers purchasing a product or service (such as restaurant hygiene scorecards; Jin and Leslie 2003) as well as when there is less of a direct effect on the consumers purchasing a product or service (such as through carbon emission disclosures; Tomar 2017).

Finally, increased transparency about CSR topics could reduce firms' costs of learning about other firms' CSR practices and policies. Such cost savings could be substantial, particularly within the same industry and if the CSR standards focus not just on CSR output metrics but also cover CSR procedures. If so, we expect that a disclosure mandate would accelerate the evolution and adoption of industry best practices, ultimately benefitting the aggregate efficiency of CSR activities in the economy.

### *5.2.2 Evidence on CSR-specific Real Effects*

Empirical evidence on the real effects of CSR reporting is still relatively scarce. Regulators in China, the EU, the United States, South Africa and other countries have recently initiated policies that require select firms in their jurisdictions to disclose information on CSR topics.[43] Academics have used these settings to provide evidence on how firms respond to mandatory CSR disclosures. Moreover, these settings allow researchers to address some of the selection concerns inherent to voluntary CSR disclosure studies (see Section 4.1). In 2008, two Chinese stock exchanges mandated that a subset of larger firms issue a CSR report together with their annual report. The firms were required to report on a broad set of topics including consumer protection, environmental issues, and the provision of social welfare services. Chen et al. (2017) use this

[43] In some jurisdictions, the requirements focus on real CSR activities instead of CSR reporting. For instance, Manchiraju and Rajgopal (2017) find that a law requiring minimum expenditures on CSR issues in India had a negative effect on firm value, consistent with sub-optimal CSR investment behavior by the regulated firms.

setting to examine how a CSR disclosure mandate affects pollution levels. They find decreases in overall industrial wastewater and $SO_2$ emissions in cities with more regulated firms. Consistent with CSR being costly, they also find that firms subject to the disclosure requirements experienced a reduction in profitability.[44]

The United States also offers examples of select mandatory CSR disclosures. The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 includes two: one that requires mine owners to disclose mine-safety information and another that requires disclosures related to purchases of minerals from the Democratic Republic of Congo. Christensen et al. (2017) examine the effect of the mine-safety disclosure provision on mine safety and the productivity of coal mines. The rule requires SEC-registered firms to include information regarding mine-safety performance in regulatory filings. The study finds that safety improves following the disclosure requirement. At the same time, productivity declines. Thus, the takeaway is very similar to what Chen et al. (2017) find for China. One major difference is that, in the U.S. mine-safety setting, all the CSR information reported in the regulatory filings was already publicly available on the Mine Safety and Health Administration's website. The results in Christensen et al. (2017) indicate that merely including CSR information in regulatory filings can have real effects.

The EU has implemented several policies that mandate increased disclosures on what broadly can be described as CSR. The EU Corporate Social Responsibility Directive (2014/95) is one such example. The directive requires large firms to include non-financial information in their annual reports beginning from fiscal year 2017 onward. The directive covers topics like environmental

[44] In a similar vein, Barth et al. (2017) find positive relations between CSR disclosure quality and future realized operating cash flows and investment efficiency for firms that are subject to an integrated reporting mandate on the Johannesburg Stock Exchange in South Africa. They argue that these potential real effects (and not the capital-market effects like improved liquidity) are the main drivers of the observed increases in value. However, because the analysis is limited to post-adoption data, the authors cannot attribute the results to the mandate, but rather show variation in *voluntary* CSR reporting after integrated reporting has become a requirement.

matters, social and employee aspects, respect for human rights, anti-corruption issues, and diversity in the board of directors. Fiechter, Hitz, and Lehmann (2017) exploit this setting to examine the (anticipatory) effects leading up to the release of the first mandatory disclosures under the new rules in 2018. The study finds that regulated firms respond by increasing their CSR expenditures, and even more so when starting from a low level of CSR expenditures. The evidence suggests that expanding CSR disclosures positively affects firms' CSR and that benchmarking and peer pressure from the looming mandate can (at least partly) explain why poor CSR performers increase their CSR activities the most.

Another EU regulatory initiative is the mandatory disclosure of extraction payments for European oil, gas, and mining firms. These payments represent what EU firms pay to foreign host governments for the right to extract resources (e.g., for mining licenses in Africa). Some argue that such payments from Western extraction companies fuel corruption in developing countries. One of the stipulated goals of the EU mandate is to impose transparency to curb this behavior. Rauter (2017) examines the effects of the disclosure mandate on the level of extraction payments, firms' capital expenditures, and various proxies for corruption. He finds that disclosing firms pay higher prices for extraction rights and reduce their foreign investments after the EU reporting mandate. However, he finds no evidence of lower corruption in the host countries.[45]

In sum, most academic studies find that firms subject to CSR disclosure requirements tend to expand and adjust their CSR activities. One potential mechanism is benchmarking; firms want to avoid the public backlash and negative publicity associated with looking worse than their peers. However, the improvements in CSR often come at a cost (i.e., in the form of lower productivity

[45] Hombach and Sellhorn (2018) find negative stock price reactions upon the announcement of similar regulation in the United States, consistent with mandatory extraction payment disclosures being perceived as costly to firms.

and financial profitability). An important limitation of these studies is that their settings are rather narrow and focus on a single industry, small set of firms, or specific disclosure item. Moreover, extant disclosure mandates were often implemented with the specific objective of changing corporate behavior as opposed to informing capital markets. For instance, the mandate for environmental disclosures in China came about in response to broad concerns about air pollution and was intended to address the environmental problem, rather than to inform investors. Similarly, EU policymakers mandated extraction payment disclosures to address what they perceived as broad societal problems, rather than information frictions in financial markets. The narrow settings limit the generalizability of the results (see also Glaeser and Guay 2017). We need to keep the specific intent of these mandates in mind when interpreting the results and using them to draw inferences about a widespread adoption of CSR standards in the U.S.

### *5.3. Effects of CSR Reporting on Firms' Entry and Exit Decisions*

In this subsection, we consider the possibility that firms abandon certain activities or exit certain markets in response to a CSR reporting mandate. New CSR reporting requirements likely affect the cost-benefit tradeoff that these firms face when evaluating the decision to seek financing in public markets or to remain present in a specific product market. If the costs rise or the benefits decline following a CSR reporting mandate, firms could abandon or reduce certain activities. Of course, it is unlikely that a reporting mandate in itself would make firms exit core business activities, but it is conceivable that firms at the margin scale back or disinvest more peripheral operations. New firms might enter thereby changing the industry composition. Alternatively, the concentration within an industry could go up.

The firms most likely to exit (enter or expand) are those with comparatively higher (lower) costs of maintaining strong CSR performance and with high (low) reputational costs at stake in light of public scrutiny over poor CSR outcomes. The relative costs of maintaining better CSR performance may be driven by factors inherent to a firm's business. For instance, for geological reasons, coal mines in certain geographic areas are inherently less safe than coal mines in other areas. If it is costlier for these mines to excel on safety metrics—everything else equal—they are more likely to reduce operations or close down after a CSR mandate requires them to provide extensive mine safety disclosures. The reputational costs of misalignment with stakeholders' CSR preferences could vary across firms. For instance, larger, highly visible firms may be easier targets for activist campaigns and subject to more media scrutiny subsequent to poor CSR performance than smaller, less known firms (e.g., Watts and Zimmerman 1978). As a result, riskier and poor performing CSR activities might shift from large to small firms after a CSR reporting mandate. Similarly, if mandatory CSR standards only apply to certain firms (e.g., SEC-registered firms or firms above a certain size threshold), then we might observe a shift of activities from regulated to unregulated firms through transaction structuring and exit.[46]

There exists empirical evidence on market exit as a regulatory avoidance strategy in areas other than CSR disclosures (e.g., Leuz et al. 2008; Kamar, Karaca-Mandic, and Talley 2009; DeFond and Lennox 2011). Evidence in the CSR literature is sparse. For instance, Rauter (2017) finds that firms subject to the disclosure of extraction payments pay higher prices for commodity extraction rights and reduce as well as reallocate their foreign investments. One interpretation of this finding is that the disclosure mandate harms firms' competitive position and, hence, firms withdraw or diminish activities in areas covered by the disclosure rules. Similarly, Christensen et

[46] This behavior would be similar to what was found around other costly regulation like the extension of the 1934 Securities Exchange Act to firms quoted on the over-the-counter bulletin board or the 2002 Sarbanes-Oxley Act (see, e.g., Bushee and Leuz 2005; Engel, Hayes, and Wang 2007; Gao, Wu, and Zimmerman 2009).

al. (2017) find that SEC-registered firms subject to mine-safety disclosure rules are more likely to shut down dangerous mine facilities than unregulated firms.

In sum, academic evidence suggests that some firms respond to a CSR reporting mandate by exiting a market, reducing their activities or avoiding the regulation when the new disclosure rules impose significant (net) costs on them (e.g., in case of negative events). The costs are likely more substantive for firms at the lower end of the CSR performance spectrum or with high reputational risks of reporting poor CSR performance and becoming target of a public CSR campaign. We note that such real effects (e.g., making the worst polluters exit the market) are not necessarily bad, but could be intended by the policymakers or regulators.

### *5.4. Implications for Mandatory Adoption of CSR Standards*

In this subsection, we derive the key implications of a mandatory adoption of CSR reporting standards for firms' real activities. In addition to the firm-level effects outlined in Section 5.2 (i.e., better governance and CSR performance, more market pressure, and learning), we also discuss potential changes for the aggregate CSR activity in the economy. First, assuming sufficiently specific CSR standards and proper enforcement, we expect that firms respond to a CSR reporting mandate by making real changes to their business operations, including their CSR activities. The primary reasons for such real effects are probably societal or stakeholder pressure as well as peer effects and benchmarking. These forces alter firms' cost-benefit tradeoffs for various CSR and non-CSR activities as well as their relative rankings. On average, we expect firms to increase the CSR activities covered by a mandate. Yet, there are also reasons why firms could reduce (or even abandon) certain activities in specific markets that are peripheral to their core operations. For one, mandatory CSR reporting can make firms look less attractive to some influential stakeholder group (e.g., socially responsible investors or consumers). Moreover, extrinsic incentives could crowd out intrinsic incentives for pro-social behavior that existed before the mandate (Bénabou and Tirole 2006). Firms that voluntarily engage in costly CSR to signal their type and build reputation in the marketplace, could lose this incentive once all firms are required to report and potentially engage in such behavior. We note that we cannot make any statements on whether the expected changes to firms' real activities (CSR or otherwise) and to the composition of the market as a whole are desirable from a societal perspective or even the viewpoint of investors.

Second, increasing CSR could be desirable from a societal standpoint even when it is costly to firms, for instance, because doing so mitigates negative externalities. A CSR reporting mandate could make it less costly for certain stakeholders (e.g., grassroots movements, activist groups, consumer associations) to acquire and process relevant CSR information. As a result, these stakeholders are more likely to exert pressure on corporations to address the externalities. In response to such (anticipated) behavior, firms could internalize the negative externalities (e.g., Amel-Zadeh and Serafeim 2018). For a CSR disclosure mandate to have such an effect, several conditions must hold: (i) the standards need to be sufficiently specific and properly enforced (so that firms actually disclose poor CSR performance or CSR omissions); (ii) poor CSR performers do not already voluntarily disclose (negative) CSR information;[47,48] and (iii) to exert pressure, the relevant stakeholders must be able to use the CSR information. This latter condition is not trivial. For instance, consumers are typically not experts when it comes to the environmental impact of production technologies and could have difficulties in understanding the relative importance of

[47] One could argue that the unraveling result of Ross (1979), Grossman and Hart (1980), or Milgrom (1981) contradicts this condition. However, the unraveling mechanism might not apply to voluntary CSR disclosures because (i) several of the recipients are arguably less sophisticated than investors (e.g., consumers, politicians), (ii) CSR disclosures contain a substantial proprietary component that prevents firms from being fully transparent (e.g., Verrecchia 1983), (iii) it is not clear to information users whether managers actually have the relevant CSR information (e.g., Dye 1985), or (iv) the relevant information is non-verifiable.

[48] Empirically, Boiral (2013) shows for a small set of energy and mining firms that 90% of significant negative events (e.g., major spills or conflicts with local residents) were not properly discussed in these firms' CSR reports.

different pollutants. If consumers do not respond in a sophisticated way, it is hard to see how they can impose costs on firms that reflect the relative harm of each pollutant to society and how a CSR reporting mandate can have the desired effects on overall pollution levels.[49]

Third, it may be socially desirable that underperforming firms withdraw from certain activities and only well-performing firms remain. Because performance metrics are likely imperfect, even generally well-performing firms could from time to time report poor CSR performance, especially for metrics that are not fully under their control (e.g., due to environmental catastrophes or accidents for which the firm is not to blame). A CSR reporting mandate could give rise to new reputational risks that firms otherwise would not have been exposed to. As a consequence, we expect firms to make adjustments to their CSR portfolios. The economy-wide effects of these portfolio changes are hard to predict. Firms with the most valuable brands have the most to lose from an exogenous CSR disaster, so they could react more. Yet, the firms with high reputational risk may also have the best CSR performance and, hence, may already provide the CSR disclosures voluntarily. If so, the mandate would have less of an effect on them, but rather affect firms with poor CSR performance (and low CSR transparency).

Finally, mandatory CSR reporting standards may not cover all firms in the economy. In the U.S., disclosure regulation is often limited to publicly traded and SEC-registered firms. Private firms are typically exempt from new disclosure standards (unless they are affected indirectly through measures passed down the supply chain). As a result, the gap in the level of CSR activity and transparency between public and private firms could widen. One concern is that harmful CSR

[49] Consumers' inability or high costs of understanding complex issues is an argument for implementing so-called "command and control" regulation. For instance, the U.S. Federal Aviation Administration is responsible for regulating civil airline safety and has wide-ranging powers (e.g., they can restrict an airline from flying). An alternative regulatory solution could have been to mandate that airlines must disclose safety information and leave the decision of whether an airline is sufficiently safe to consumers. Yet, in this highly complex area, disclosure regulation is unlikely to be a (cost) effective substitute for command and control regulation.

activities could shift from public to private firms. Public firms with high CSR risks or operating in industries with serious CSR issues could even choose to go private. Thus, CSR performance and transparency are likely positively biased towards public firms, while aggregate CSR in the entire economy (including private firms) could decrease after a reporting mandate. We can make a similar argument for foreign firms if CSR standards unilaterally apply to U.S. firms. A shift of harmful CSR activities abroad (e.g., in industries with high pollution) is unlikely to improve global CSR performance (e.g., reduce worldwide pollution). At the same time, well-performing foreign firms could feel attracted to a more stringent CSR environment. For instance, Boubakri, El Ghoul, Wang, Guedhami, and Kwok (2016) show that U.S. cross-listed foreign firms exhibit better CSR performance than non-cross-listed peers, that the CSR performance increases at the time of the cross listing, and that the benefits are larger for firms domiciled in countries with weak institutions. These results are consistent with bonding benefits from stringent CSR standards. On the cost side, a unilateral CSR reporting mandate could lead to higher compliance costs for regulated domestic firms and, at least in the short-run, hurt the U.S. economy and financial markets.[50]

## 6. Implementation Issues for Mandatory CSR Reporting Standards

Having discussed the potential effects on various stakeholders (Section 4) as well as potential firm responses (Section 5), we now turn to a few key implementation issues for the mandatory adoption of CSR reporting standards. While these issues are common to accounting standard setting in general, we incorporate the specific features of the CSR setting into the analysis. Specifically, we discuss (i) the process of establishing and maintaining CSR reporting standards; (ii) the role of materiality for financial reporting and CSR reporting, including a review of the

[50] The pressure of moving less costly but also less efficient technologies abroad could be short-lived and eventually benefit domestic industries if they get a head start in developing and marketing innovative technologies of the future (e.g., development of the autonomous car, applications of artificial intelligence, etc.).

empirical evidence on the effects of material CSR disclosures; (iii) the use of boilerplate language to avoid compliance with CSR standards or to mask poor CSR performance; and (iv) challenges for the enforcement of CSR reporting standards as well as the role of assurance providers for the certification of CSR reports.

### *6.1. CSR Standard Setting Process*

Financial reporting standards are set by the Financial Accounting Standards Board (FASB) through a process that aims to consider all stakeholders' views. The FASB accomplishes this goal through a number of measures, including taking requests and recommendations for new standards from stakeholders and having public comment periods before issuing new standards. The SEC has a similar approach to setting new (disclosure) rules. Regardless of whether mandatory CSR standards are set by an independent, private-sector and not-for-profit standard setter or directly by the SEC, a similar due process is likely to be followed.[51] However, there are several unique features of the CSR setting that, in practice, are likely to make the CSR standard setting process different from the process for financial reporting standards.

Most importantly, the potential user group is likely broader for CSR information than for financial reporting. Of course, standard setters could define the scope of their standards as well as the target audience for CSR information more narrowly. But even when CSR standards are developed with only the needs of investors in mind, once the information is publicly disclosed, anyone can use it. Thus, the users of CSR reporting may include groups that are relatively unsophisticated when it comes to reading financial reports (e.g., consumers or activist groups). These users could also participate in the standard setting process and if they do, they likely have

[51] For instance, the SASB follows a similar due process to the FASB and SEC, including having consultation and comment periods before issuing sustainability reporting standards.

objectives that are not necessarily aligned with those of investors. For instance, activist groups may attempt to use CSR standards to change firm behavior, accomplish certain political goals, or promote certain moral values. Shareholders could push back on such attempts if they reduce firm value. Thus, the debate over the role and value of the underlying CSR activities will likely enter the CSR standard setting process unlike the debate for financial reporting standards, which typically does not focus on the merits of the underlying transactions (such as leases, pensions or debt contracts). The diverse set of views of the various stakeholders that participate in the standard setting process could make it difficult for a standard setter to objectively weigh arguments against each other and arrive at a set of standards that harmonizes CSR reporting practices.

To illustrate this point, consider the Dodd-Frank requirement that firms disclose information on the use of conflict minerals in their regulatory filings (Section 1502 of the Dodd-Frank Act). The provision for conflict mineral disclosures (CMD) was motivated by a concern that purchases of war minerals by Western companies could fuel the longstanding conflict in the Democratic Republic of Congo (DRC) and, viewed from a higher level, is an attempt to make firms internalize negative externalities from war mineral purchases.[52] The SEC received more than 700 comment letters on its proposal for implementing the CMD regulation. Of these letters, 62% were from the general public and humanitarian organizations supporting the rule's intent and 38% were from businesses, trade and industry associations, the investment/financial community, professional audit firms, and relevant government entities.[53] Such heavy involvement of the general public and humanitarian organizations in standard setting is uncommon for financial reporting standards or

[52] By requiring CMD, Congress intended to "bring greater public awareness of the source of issuers' conflict minerals and promote the exercise of due diligence on conflict mineral supply chains … [thereby] inhibit[ing] the ability of armed groups … to fund their activities by exploiting the trade in conflict minerals … [and] put pressure on such groups to end the conflict" (SEC Release No. 34-67716; File No. S7-40-10).

[53] We collected these data from ELM Consulting Group International LLC (2011), retrieved on January 31, 2018.

securities regulation more broadly. Moreover, it is clear from reading a subset of the comment letters that many arguments in favor of CMD are based around the severity of the conflict and the costs of the conflict for people in the DRC, rather than on how CMD might be relevant to investors in their decision making.[54] Corporate representatives and their interest groups, while generally supporting the overall objective of CMD, often point to the reporting costs they would incur as a result of the disclosure rule. While the latter arguments are similar to those in comment letters regarding financial accounting standards, the former arguments are not.

The CMD example illustrates the challenges that a CSR standard setter likely faces because of the widespread interests in certain CSR topics. For instance, it is unclear how a standard setter can objectively trade-off the severity and costs of armed conflicts against the regulatory burdens and costs imposed on firms by CSR disclosure requirements. These challenges are different and potentially more political (and less economic) in nature than those faced by a financial reporting standard setter. As a result, the CSR standard setting process cannot just focus on key economic tradeoffs (such as cross-firm comparability) but instead likely also involves social justice or moral judgments. When set by such a process, CSR standards could become less relevant to investors and other capital-market participants.

### *6.2. Materiality of CSR Disclosure Items*

In this subsection, we begin by briefly outlining the definition of materiality as used in financial reporting. We then apply and adapt this concept to the specificity of CSR reporting. Depending on whether a standard setter wants to tailor CSR reporting to the needs of just equity investors as opposed to a broader set of stakeholders (e.g., employees, customers, policymakers),

[54] Comment letters were also submitted by investors and organizations representing investors that identify as socially responsible. They often argue that the CMD will help them assess firms' social responsibility efforts.

the CSR standards might look differently and have different implications. We conclude with a review of the empirical evidence on the concept of materiality in the CSR literature (see also Panel B of Table A7 in the online appendix).

### *6.2.1 Definition of Materiality for Financial Reporting*

Materiality is a key construct to define the scope of reporting standards. The Supreme Court defines information as "material" if there is a substantial likelihood that the disclosure of the omitted fact would have been viewed by a reasonable investor as having significantly altered the "total mix" of information made available (TSC Industries, Inc. v. Northway, Inc., 426 U.S. 438 1976). Consistent with this definition, the FASB defines accounting information as material if "the magnitude of an omission or misstatement of [this] accounting information […], in the light of surrounding circumstances, makes it probable that the judgment of a reasonable person relying on the information would have been changed or influenced by the omission or misstatement" (Concepts Statement (CON) No. 2).[55]

Given this definition, a central question for the practical application of materiality is who the users of the information are and for what purpose(s) they are using the information. The FASB defines the target audience as present and potential investors and creditors—broadly defined—when making investment, credit, and similar decisions and who have a reasonable understanding of business and economic activities (CON No. 1). In short, accounting disclosures and financial reporting target sophisticated stakeholders with a financial interest in the firm. The magnitude of the potential information effect is also important to determine materiality. For instance, for a firm

[55] We note that the FASB definition of materiality recently was in flux, but after several proposed amendments, reverted to the language used in Concept Statement No. 2. The FASB definition is very similar to and consistent with the materiality notion used by the SEC, the Public Company Accounting Oversight Board (PCAOB), and the American Institute of Certified Public Accountants (AICPA).

that is predominantly financed by debt, the materiality of financial information partly depends on how close the firm is to breaching any accounting-based covenants. The closer the firm is to breaching a covenant, the lower the threshold of what is considered material information.

### *6.2.2 Application of Materiality to CSR Reporting*

The application of the above materiality notion to CSR disclosures poses several challenges. First and foremost, the set of relevant decision makers for whom CSR information could be material is likely broader for CSR disclosures. By their very nature, CSR topics are of interest to a large set of stakeholders that goes beyond equity investors. From this perspective, defining and assessing materiality of CSR disclosures is much more difficult (e.g., the set of potential decisions to consider is much larger), especially when the scope of the CSR standards is broad.

One way to reduce the complexity of this problem is to reduce the scope of the CSR standards, say to the information needs of investors.[56] Under an investor-focused approach to materiality, the standards would prescribe reporting on only the subset of CSR topics relevant to investors' decision making (in a given industry). This narrower focus makes it easier for firms to determine what CSR information should be reported and could reduce compliance costs. However, even with a clear focus on investors, the boundaries of what needs to be disclosed are not always clear cut. The reason is that other stakeholders might care about CSR topics relevant to the firm and their (innate) interests in these topics could prompt them to act. If such stakeholder responses have financial consequences for the firm, then any CSR information that mitigates (or enhances) the

[56] The SASB is an example of a standard setter that follows such a narrower, investor-focused approach with its standards (SASB 2017b).

valuation impact of the (anticipated) stakeholder responses becomes material to investors (even if the CSR issue per se may seem immaterial).[57]

Another complicating factor is that an increasing number of investors appears to make investment decisions not only based on expected stock returns, but also considers non-monetary aspects and social norms (e.g., Hong and Kostovetsky 2012). For investors who incorporate non-monetary CSR topics in their decision making, the set of relevant information is much broader. For instance, an investor who disapproves of child labor wants information on a firm's stance on this issue including the use of child labor in the supply chain, even when it has little bearing on financial performance. Thus, maximizing firm value is not necessarily the same as maximizing shareholder welfare (Hart and Zingales 2017). Information related to shareholders' CSR preferences could become material and, hence, part of CSR standards even with a narrow investor focus.[58] As a result of both stakeholder actions with financial effects as well as shareholders' non-monetary preferences, the differences between purely investor-focused and broader stakeholder-focused CSR reporting standards may be smaller than they appear at first.

Aside from defining the target audience, several additional issues arise when applying the notion of financial materiality to CSR disclosures with regard to (i) measurement, (ii) learning, (iii) the balance between firm versus industry determinants, and (iv) changes over time. When it comes to measurement, CSR information is rarely expressed in monetary units, and the link

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[57] To illustrate, if it turns out that consumer responses (through boycotts) or NGO activism (through demands from management) can impose (significant) costs on a firm, then any information those consumers or social activists care about is potentially relevant to predicting the stakeholder responses and, hence, the firm's future cash flows. A good example may be the environmental impact of plastic packaging or containers (like drinking straws). Plastic packaging generally makes up a small portion of product costs, but increasingly has become a concern to consumers and environmental groups.

[58] At a roundtable held at Harvard Law School on June 19, 2017, most legal scholars present expressed their believe that information speaking to such non-monetary investor objectives already falls under the current materiality definition by the Supreme Court (SASB 2017a).

between CSR activities and firm value or financial performance is tenuous and difficult to assess (see also Section 4.1). Moreover, CSR is often long-term and intangible in nature (e.g., increasing consumer goodwill or improving employee relations). These attributes imply that standard setters (ex ante) and managers (ex post) face substantial discretion in assessing the materiality of CSR topics (Matsumura et al. 2017; Amel-Zadeh and Serafeim 2018). With regard to learning, there is little history or precedent for setting materiality thresholds specifically for CSR disclosures. Thus, new CSR reporting standards need time to evolve, and standard setters, firms, and accountants time to learn. At the same time, establishing a common materiality threshold and applying it to a broad set of firms for the very first time, could have substantial benefits in terms of the amount and the comparability of CSR disclosures relative to the status quo.

Regarding the balance between firm and industry determinants, industry-specific factors are likely more important for CSR. In financial reporting, what is material depends largely on firm-specific circumstances even though there exist within-industry similarities in capital structure and operating activities. For CSR reporting, business (or production) processes largely determine common CSR topics for all firms in the same industry. While some CSR topics apply to many firms across industries (e.g., worker safety, labor relations, sustainable sourcing), most are rather industry specific (e.g., greenhouse gas emissions for energy firms, hazardous waste for chemical firms, systematic risk management for financial institutions). The strong industry component of CSR materiality could hamper cross-industry comparability. All this is not to say that firm-specific factors play no role (see Section 3.1) because, ultimately, whether a certain CSR topic is material for a firm in a given industry often depends on individual firm characteristics.

Finally, with respect to changes over time, CSR issues may rise and disappear from public discussion based on current moods, trends, or events and are not just a function of how CSR issues affect firm economics. The reactive nature of regulation and, specifically, of financial reporting regulation is nothing new and has existed for a long time (Hail et al. 2018). Such fluctuations in what information is deemed material are potentially even more pronounced for CSR reporting. CSR topics generally concern issues of broad societal interest. What is material does not only depend on economic arguments but also on public opinion. Societal issues can change quickly, encompass a wide variety of subjects (many of which are argued based on normative, moral, or political grounds), and sometimes are triggered by exogenous events (e.g., natural catastrophes, environmental accidents). In sum, all the above points suggest that defining materiality for CSR standards (and their subsequent application) faces serious challenges, even when the standards closely follow the materiality definition of existing financial reporting regulation.

### *6.2.3 Evidence on CSR Materiality*

Empirical studies on the determinants and economic consequences of materiality in general and for CSR disclosures in particular are rare, even though most users of financial reports agree on the importance of material information.[59] One possible explanation for this lack of evidence is that identifying material information is difficult. A way to tackle the measurement problem is to consider the dollar amount of a disclosure item. In a Regulation S-K setting, Cho, Freedman, and Patten (2012) show that firms' decisions to provide CSR information on environmental capital expenditures (whose disclosure is required if material) are not just a function of the magnitude but also driven by strategic considerations. They find that several of the reported amounts are small and arguably immaterial. Thus, firms likely pursue other goals than only informing investors.

[59] For instance, Amel-Zadeh and Serafeim (2018) find in a survey that professional investors primarily focus on CSR information they consider financially material and use it to assess a firm's risk position.

Perhaps, the disclosures are an attempt to mitigate political or regulatory pressure.[60] However, there is also a debate that adding immaterial disclosures could increase the complexity, impose higher processing costs and reduce the decision-usefulness of financial reports (e.g., Merton 1987; Barber, Odean, and Lu 2005; Dyer et al. 2017).

Dhaliwal et al. (2012) tackle the issue of measuring materiality by adopting a user perspective, essentially arguing that what matters for the user must be material. The authors find that CSR information (proxied by the issuance of a stand-alone CSR report) is associated with lower analyst forecast errors and that this relation is stronger in stakeholder-oriented economies and for firms or in countries with more opaque financial disclosures. The results suggest that CSR materiality depends on the institutional environment and, in turn, the implementation of common CSR standards likely will differ across countries. Moreover, in environments that put more weight on nonfinancial information, the materiality threshold for CSR disclosures could be lower.

Moroney and Trotman (2016) conduct an experiment to examine differences in auditors' materiality judgment between CSR engagements and regular financial statement audits. They find that auditors apply tighter materiality thresholds for financial statement differences than for CSR reporting differences. Qualitative factors (e.g., closeness to breaching a contract or the presence of a special interest group) affect the assessment of CSR materiality more. The authors argue that differences in auditor liability, lack of guidance or experience for CSR assurance, and different justifications for CSR versus financial audit gaps contribute to these findings.

Several recent studies make use of the SASB standards. These studies exploit that, by design, the SASB classification distinguishes between what should be material and immaterial information

[60] Along those lines, Marquis and Qian (2014) find for a sample of Chinese firms that in provinces with more developed government institutions and monitoring mechanisms, firms' CSR disclosures become less symbolic and more substantive.

to investors. For instance, Khan et al. (2016) examine the value implications of material CSR investments (according to the SASB classification) using the association with one-year-ahead stock returns as benchmark. They find that the SASB materiality distinction captures something that is reflected in stock returns. But we have to be careful in interpreting these results. To illustrate, assume there exist value-creating (material) CSR activities and irrelevant CSR activities. Let us further assume that the market learns about firms' CSR activities (through various sources) and prices them accordingly. If the SASB standards (or topics) roughly capture this distinction, then we will find an association between material CSR activities and stock prices. But this association does not imply that the information about what is material came through the SASB standards or that the materiality distinction in the SASB standards is useful to investors.[61] In fact, the results merely show that the market was able to price firms' CSR activities differentially even without the new standards being in place.[62]

Grewal et al. (2018) also examine which CSR issues are material to investors. They construct a firm-specific disclosure score of material CSR information (based on SASB topics) and find a negative association between (changes in) this score and (changes in) stock price synchronicity. One interpretation of this finding is that material CSR disclosures better enable investors to incorporate firm-specific information into price. The results are stronger after the introduction of new SASB standards, for firms for which CSR issues are more important, or when shareholders have better processing capabilities and stronger CSR preferences. The authors do not find a similar

[61] See Holthausen and Watts (2001) for a similar criticism of the use of value relevance research to justify the design of financial reporting standards.

[62] Khan et al. (2016) use firm-specific metrics of material CSR disclosures to form portfolios and find that high CSR-materiality firms outperform low CSR-materiality firms. The same relation does not hold for CSR information that is immaterial. Importantly, however, the SASB materiality distinction was not yet available to investors at the time of the tests, considering that the SASB disclosed its provisional standards at the beginning of 2012 while the tests in Khan et al. (2016) are based on stock returns from 1992 to 2013.

relation for immaterial CSR disclosures. However, again, the study already finds this relation before the SASB standards were issued, suggesting that investors were able to make the distinction beforehand. It is therefore not clear that the materiality distinction in the SASB standards can be (fully) credited for the results, though we note that the changes specifications and the analyses around the introduction of new SASB standards mitigate these concerns.

Matsumura et al. (2017) examine climate-change risk disclosures. The SEC flagged climate risk in 2010 as potentially material under Regulation S-K, but since then did not consistently enforce its guidelines, creating ambiguity for managers about whether this disclosure is mandatory or voluntary. The authors find that in industries in which information on climate risk is material according to the SASB classification, disclosing firms have significantly lower costs of equity capital than non-disclosing firms. In industries without a material impact of climate risk, no such gap exists. One interpretation is that the materiality distinction in the SASB standards works in identifying firms for which the disclosures are more relevant to investors and, hence, priced in the cost of capital. But there is again the concern that the distinction captures (unobservable) firm and industry characteristics that are associated with cost of capital. The study uses propensity score matching to address this issue, but the technique only captures observable differences.

In a similar vein, Grewal et al. (2017) classify activist shareholder proposals into those dealing with material and immaterial CSR issues. Using a difference-in-differences design, they find that proposals on both material and immaterial issues are followed by better CSR performance. Yet, the firm value associations are quite different. Tobin's q slightly decreases in the years after immaterial CSR proposals, but it increases following material proposals.[63] The evidence is

[63] In a related study, Schopohl (2017) also examines the determinants and consequences of material and immaterial shareholder CSR proposals. The author shows that certain investor groups are better at seeking out financially

consistent with the notion that the SASB materiality distinction matters to investors (and for firm value) but, as the authors discuss in their paper, such an interpretation hinges on the extent to which the design addresses the selection on unobservable differences across firms.

The aforementioned studies using the SASB materiality classification clearly show that the CSR metrics prescribed by the SASB standards are highly correlated with what investors—at least historically—deemed important or priced. This insight is useful but has to be interpreted carefully considering that historical evidence of value relevance is also one ingredient of how the SASB determines materiality (SASB 2017b). Presumably, firms have, for a long time, engaged in CSR and reported on CSR topics when they considered them material. We also doubt that firms have strong incentives to disclose information on immaterial issues.[64] Researchers have to be careful when they divide historically disclosed information into material versus immaterial based on standards that were only available ex post. There is the concern that the standards likely focus on topics that in the past were material. Relevant tests need to be constructed around the adoption of standards as well as with post-adoption data. The current findings leave open the important question of how well a standard setter can determine, ex ante, what CSR information will be material to investors or other users in the future (see, e.g., Hail et al. 2018, for similar arguments on the effectiveness of regulation preventing future managerial misconduct).

### *6.3. Use of Boilerplate Language for CSR Disclosures*

Another potentially important implementation issue is the use of boilerplate language when providing CSR disclosures. By boilerplate disclosures, we mean that firms could make general or

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material CSR issues than others, and firms with material CSR issues and concerns in the past are more likely to be targeted by activist investors.

[64] Of course, the definition of the relevant user group (i.e., who considers the CSR information material) could differ between firms, standard setters, and investors. Moreover, firms could engage in hypocrisy driving a wedge between corporate CSR disclosures and CSR actions (e.g., Cho et al. 2015a).

generic disclosures (mostly verbal statements) that are not tailored to the firm or its circumstances and are unlikely to be informative to any of the firm's stakeholders (e.g., Lang and Stice-Lawrence 2015). Boilerplate disclosures can be considered as irrelevant or immaterial. In principle, the issue of boilerplate language arises for all verbal disclosures (e.g., risk factor disclosures; Kravet and Muslu 2013; Campbell, Chen, Dhaliwal, Lu, and Steele 2014; Hope et al. 2016). But as providing boilerplate language can be an important avoidance strategy for firms, this issue is relevant for our primary scenario. That is, it matters to what extent firms with weak incentives to report meaningful CSR information can use boilerplate language to comply with the letter but not necessarily the spirit of mandatory CSR standards. For instance, Cho et al. (2015a) argue that contradictory societal and institutional pressure pushes firms to engage in hypocrisy and decouple the CSR disclosures from the underlying CSR activities. Using a large global sample, Marquis et al. (2016) show that firms exposed to strong CSR scrutiny and global norms are less likely to engage in such selective (or boilerplate) disclosures.

In financial reporting, boilerplate disclosures are relatively common (see, e.g., statements in SEC 1998, 2013; Higgins 2014), occur in many countries (Lang and Stice-Lawrence 2015) and over extended periods of time (Dyer et al. 2017). Assuming that complex financial disclosures are often boilerplate, evidence by Li (2008), Dyer, Lang, and Stice-Lawrence (2016), and Dyer et al. (2017) suggests an upward time trend in reporting complexity (and, hence, boilerplate disclosures) relative to hard and specific information.[65]

[65] Findings in Guay et al. (2016) indicate that firms might use voluntary disclosures to mitigate the effects of increased financial statement complexity.

Boilerplate disclosures are common in current CSR reporting practices (see Section 3).[66] To the extent that mandated CSR disclosures are (net) costly, firms are expected to use boilerplate language as an avoidance strategy. As a result, the prevalence of boilerplate disclosures in CSR reporting is likely to go up. A potential consequence of more boilerplate disclosures is that reports morph into compliance documents rather than means of communication (Hoogervorst 2013). Considering that processing information is costly and users of financial reports often have limited attention or limited processing ability (e.g., Merton 1987; Barber et al. 2005; Barber and Odean 2008), then adding boilerplate language could obfuscate or crowd-out more relevant disclosures.

CSR standards can limit boilerplate language by prescribing what and how firms have to provide information (e.g., insisting on metrics or numerical disclosures). Much depends on the specificity of the standards. However, the more specific the standards, the less applicable they are to a broad set of firms and circumstances. In light of the heterogeneous nature of firms' CSR activities, such specificity is a challenge for standard setters. Moreover, specificity can run counter to the goal of comparability (e.g., across industries). To the extent that CSR standards are broadly applicable, they have to leave managers with substantial disclosure discretion, opening the door for boilerplate language (see also Section 2.4.3). Consistent with these arguments, textual analysis of financial reports suggests that firms often respond to new disclosure requirements with extending their boilerplate disclosures (Dyer et al. 2017).

[66] A report by the Business & Human Rights Resource Centre (2017) examines disclosures related to the U.K. Modern Slavery Act of 2015 designed to combat modern slavery and human trafficking. It finds widespread use of boilerplate language under this regulation to formally comply with the law.

### 6.4. Oversight and Enforcement of CSR Disclosures and CSR Standards

#### 6.4.1 Effective Enforcement of Mandatory CSR Reporting Standards

A large body of academic literature suggests that enforcement is critical to the successful implementation of financial regulation and accounting standards (e.g., Djankov et al. 2003; Daske, Hail, Leuz, and Verdi 2008; Holthausen 2009; Christensen et al. 2013). The same is likely true for mandatory CSR reporting. For instance, Peters and Romi (2013) show that, even when using bright-line materiality thresholds, compliance with SEC disclosure rules for environmental sanctions is low. The study also highlights that reporting incentives affect compliance with mandatory CSR disclosure requirements, consistent with the evidence for financial reporting (see Section 2.4.3). Relative to the status quo (i.e., no explicit enforcement mechanism for voluntary CSR disclosures), institutionalized enforcement is likely more effective if a common set of CSR standards is widely adopted and regulators (or courts) have specific rules against which they can compare firm disclosures, rather than just a set of vague principles.[67]

Creating an effective enforcement regime for mandatory CSR reporting poses several challenges. First, a key feature of enforceable standards is verifiability. Verifiability depends on the extent to which CSR standards pertain to information that can be verified or audited by a third party. Given the nature of many CSR topics and activities, verifiability of CSR information and disclosures is likely difficult and may differ across activities and firms. CSR metrics frequently rely on internal information, are highly subjective, and lack external reference points like price data or industry benchmarks, which would be helpful for verification.

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[67] See also Shleifer (2005) for a related point regarding the enforcement of disclosure regulation by courts. We note, however, that enforcement cannot address discretion that is deliberately built into the standards to allow firms to adjust their reporting to varying circumstances (Leuz 2007).

Second, unlike financial reporting, for which the double-entry bookkeeping system acts as disciplining mechanism and foundation for reported accounting numbers, CSR reporting draws on many separate and ad hoc measurement systems (O'Dwyer 2011). In some cases, CSR standards pertain to issues outside of the realm of the reporting firm (e.g., CSR issues related to the supply chain), which are difficult to oversee and enforce. But even if measurement systems exist or are developed, establishing an audit trail for CSR can be challenging. Illustrating these difficulties, Kim and Davis (2016) show that out of more than 1,300 firms required to report under Section 1502 of the Dodd-Frank Act whether their products contained "conflicted minerals" from the DRC, 80% were unable to do so, and only 1% could attest with certainty that their products were conflict-free. Effective compliance and enforcement essentially require an internal control system for CSR information similar to firms' internal controls over financial reporting. Such a system could drive up compliance costs, especially for smaller firms, as the debate on SOX compliance shows (e.g., Coates and Srinivasan 2014; Leuz and Wysocki 2016).[68]

Third, the enforcement (or auditing) of financial reporting often requires non-accounting expertise (e.g., geologists to verify oil and gas reserves). Such expertise is likely an even more significant issue for CSR reporting. For instance, establishing the age of workers in certain regions of the world could be difficult and require medical knowhow. Similarly, accurately analyzing pollution levels entails technical and scientific knowledge. Enforcement agencies that oversee compliance with securities regulation and financial reporting do not necessarily have the skills and resources to extend their oversight to a CSR reporting system. Thus, effective enforcement of CSR standards likely involves substantial investments in infrastructure and expertise.

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[68] Poor internal controls can also give rise to costs in the form of misreporting and associated consequences in capital markets (e.g., Ge, Koester, and McVay 2017).

Fourth, the degree of centralization is another design choice affecting effective enforcement (e.g., Shleifer 2005). It might make sense to create a central enforcement mechanism for CSR reporting or to embed the enforcement of CSR standards in an existing mechanism (e.g., the SEC regime). In principle, individual firms or groups of firms could set their own CSR standards and create an independent enforcement mechanism. But there are likely substantial economies of scale. Thus, a comprehensive set of CSR standards combined with central enforcement seems more cost effective and has the potential to avoid duplication and reduce learning costs (e.g., Kothari, Ramanna, and Skinner 2010). Mandating one particular set of CSR standards, rather than leaving the choice among several standards to firms, can further lower the costs of coordination for firms as well as the costs of dealing with multiple standards for users.[69]

Finally, standard setters can adopt a "comply or explain" approach (e.g., Ho 2017). This approach was first introduced in the U.K. in the 1990s for corporate governance and since has spread to many areas including CSR disclosures. For instance, the EU Directive on non-financial reporting (2014/95/EU) or the CSR disclosure requirements at the São Paulo Stock Exchange in Brazil contain comply or explain provisions. This approach offers flexibility when the underlying activities exhibit substantial variation (as is typical for governance or CSR). Rather than forcing all firms to report in a particular way, it allows firms to deviate—for good reasons—from CSR standards (which are seen as best practices endorsed by a regulator or standard setter). Comply-or-explain could lower implementation costs and allow firms to flexibly adapt their reporting to new trends and developments (Ho 2017). The main concerns are that firms could give perfunctory

[69] However, allowing for competition among standards and standard setters also has its benefits as it could foster innovation in standard setting and let firms choose the appropriate level of regulation. See, for instance, Dye and Sunder (2001) or Hail et al. (2010b) for discussions in the context of financial reporting.

explanations for non-compliance and only a small subset of firms would end up adopting the full set of CSR standards.

### *6.4.2 Role of Accounting and Consulting Firms as Providers of CSR Assurance*

An issue related to the enforcement of CSR standards is the role of assurance and certification providers, namely accounting and consulting firms. In financial reporting, auditing plays a major role in ensuring information quality and decision usefulness (e.g., Beatty 1989; Blackwell, Noland, and Winters 1998; Willenborg 1999; Weber and Willenborg 2003; Minnis 2011). Considering the nature of CSR and the discretion firms have in CSR reporting, the credibility of CSR disclosures may be low and assurance could be even more important than for financial reporting (e.g., Hasan, Roebuck, and Simnett 2003; Pflugrath et al. 2011; De Meyst, Cardinaels, and Van den Abbeele 2017). It is therefore not surprising that a market for attesting voluntary CSR reports has evolved both in the U.S. and abroad, in which accountants and consultants play a role (Simnett et al. 2009; Casey and Grenier 2015; Michelon, Patten, and Romi 2019).

Accounting firms and consulting firms differ in the way their assurance is perceived by market participants.[70] For instance, Pflugrath et al. (2011) conduct an experiment among financial analysts and find that the assurance value is larger for accounting firms. Michelon et al. (2019) document differences in the behavior of accountants and consultants, especially when it comes to CSR restatements. The study suggests that the behavior of accountants is shaped by their experiences in financial reporting.

[70] Firm characteristics like the composition of the board or whether the firm employs a Chief Sustainability Officer can also affect the choice between accounting firms or consulting firms (e.g., Peters and Romi 2015) as do country-specific factors like whether firms are domiciled in stakeholder-oriented economies (e.g., Simnett et al. 2009).

The enforcement of CSR standards and the assurance of CSR reporting could be left to private parties with only limited public oversight. Self-interested managers would hire their own auditors or consultants to certify their behavior. However, even then, comprehensive CSR standards that are sufficiently specific and auditable could make private assurance services more credible and cost effective (e.g., Ackers and Eccles 2015). In practice, a combination of public and private enforcement seems more feasible (e.g., Djankov et al. 2003), especially if CSR reporting comes with an audit mandate.[71] In fact, publicly listed U.S. firms already face a combination of private and public enforcement under the status quo for CSR disclosures that are deemed material under existing securities law. By implication, these disclosures fall under the audit (or review) mandate of the audit firm if included in the regulatory SEC filings.

Mandatory adoption of CSR standards by U.S. firms likely leads to a substantial expansion of the demand for assurance services (regardless of whether the mandate includes an assurance requirement or not). Supporting this argument, Ioannou and Serafeim (2017) show that after the introduction of CSR mandates in China, Denmark, Malaysia, and South Africa, the propensity of firms voluntarily seeking assurance of CSR reports increases. Firms might undergo this costly process to increase the credibility of the CSR disclosures and avoid pooling with the other firms. It is not clear that accounting and consulting firms currently have the capacity and expertise to provide high-quality CSR audits for a broad set of SEC-registered firms, leading to significant transition costs. In addition, the mandate could give rise to spillover effects. Especially smaller, unregulated firms could face difficulties and higher cost in retaining high-quality auditors or CSR

[71] See, for instance, Gipper, Leuz, and Maffett (2017) for a similar argument on the role of public oversight of private auditing firms in financial reporting.

consultants (see, e.g., Duguay, Minnis, and Sutherland 2018, for a similar argument regarding the costs of auditing for private firms after SOX).

## 7. Summary of Main Insights and Avenues for Future Research

This study provides an economic analysis of the determinants and consequences of CSR and sustainability reporting. To frame our analysis, we adopt the viewpoint of a widespread mandatory adoption of CSR reporting standards in the United States. In this section, we summarize and synthesize the main insights we derive from the analysis. For ease of exposition, we adopt the same ordering as in the analysis. That is, we (i) lay out how extant literature in accounting, finance, and economics offers insights that also apply to our assessment of the economic effects of CSR reporting; (ii) review the key determinants and the current state of CSR reporting; (iii) discuss potential effects of mandatory CSR reporting standards for important stakeholders such as investors, lenders, analysts and the media, consumers, employees, but also for society at large; (iv) outline firm responses and real effects from mandatory CSR reporting standards; and (v) consider important implementation issues for an effective CSR reporting mandate. In each part, we also briefly outline what we perceive as important questions and unresolved issues for (mandatory) CSR reporting, which could provide scholars with opportunities for future research.

Related to (i), conceptual underpinnings, to the extent that firms' CSR disclosures provide information that is relevant to capital market participants, much of the existing literature on the effects of corporate disclosure and reporting applies. This literature suggests that more and better (CSR) information can benefit capital markets through greater liquidity, lower cost of capital, and better capital allocation. In addition, corporate disclosures can have real effects. Such real effects seem particularly relevant in a CSR context as one of the goals of CSR reporting could be exactly to influence firms' CSR activities and policies in a certain way. Real effects are more likely to follow from reporting mandates than from voluntary disclosures. This insight implies that a CSR reporting mandate can lead to unintended consequences for a firm's (CSR) activities, which are not necessarily beneficial from an investors' or societal perspective. Prior literature also shows that corporate disclosures involve proprietary and litigation costs. Proprietary costs are one reason why firms often are reluctant to voluntarily provide information. Proprietary costs can be relevant for CSR reporting as they mainly arise when (CSR) disclosures are specific and detailed as well as for smaller firms. The relation between disclosure and litigation risk is nuanced and depends on the disclosure type, news content, and on insiders' trading behavior. Thus, the effects of a CSR reporting mandate on litigation costs are ambiguous. From the international financial reporting literature, we can infer that the role of standards in harmonizing reporting practices is limited, particularly when managerial reporting incentives differ across firms (and countries). The same should hold for mandatory CSR reporting, pointing to a crucial role of the reporting infrastructure and the enforcement mechanisms in place when implementing these standards.

One reason for why the above general insights from the literature do not necessarily carry over one-for-one to CSR reporting is because of the wide-ranging, multifaceted, often long-term and intangible nature of CSR topics as well as the large set of users and uses of CSR information. On the other hand, the argument that CSR often is implemented to account for externalities caused by firms' business activities could make the need for a CSR reporting mandate even more pressing (and the potential benefits larger). Ultimately, the question of whether and to what extent the insights from the general literature apply to different CSR settings is an empirical issue.

Related to (ii), key determinants and current state of CSR reporting, our review of the CSR literature and of CSR reporting practices by U.S. firms shows that there is substantial heterogeneity in CSR disclosures, both across and within industries. While this evidence could be viewed as suggesting a need for harmonization and CSR standards, the observed variation likely also reflects heterogeneity in firms' business activities, in the materiality of these activities for firms (and their investors) and in firms' perceived costs and benefits of providing CSR information. Thus, past reporting practices can shed light on potential compliance issues of a CSR reporting mandate. Many of the determinants of voluntary CSR reporting shown in the literature are similar to those documented for financial reporting. This result suggests that there exits substantial commonality in the economic forces that drive the two sets of disclosure choices. The commonality, in turn, makes it difficult for researchers to separately estimate the effects of CSR disclosures on capital-market and other outcomes. Separating out these factors and identifying additional CSR-specific determinants of CSR reporting are largely unresolved issues in the literature. It also remains an open issue whether the heterogeneity in voluntary CSR disclosures prevails under a mandate and whether the stipulated harmonization effects are indeed stronger within industry rather than across industry. Finally, we expect the general upward trend in CSR disclosures to continue, indicating a rising (market) demand for CSR information that will also feedback into firms' disclosure practices. Identifying the underlying sources of this demand is a challenge.

Related to (iii), potential effects of a mandate for the recipients of CSR reporting, we conclude based on reviewing the extant literature that CSR reporting standards have the potential to improve information to investors and other stakeholders. The magnitude of the capital-market effects from a CSR reporting mandate depends, among other things, on the extent to which firms currently withhold material CSR information required under existing securities laws. If firms largely comply, then CSR standards should not produce much new information for investors and the primary benefits must come from standardization, benchmarking, and cost savings. If compliance is rather low, as evidence suggests, and the mandate is able to force out new or better CSR information, then capital markets should respond as theory predicts, that is, in the form of improved liquidity, lower cost of capital, and higher asset prices. Which of these two cases prevails, is largely an empirical matter. At the same time, more transparency can also evoke more proprietary costs and heightened scrutiny by stakeholders. Thus, the net effects of a CSR mandate are not a priori obvious.

Much of the empirical evidence in the CSR literature focuses on the valuation and performance effects of CSR activities, not of CSR reporting. The key challenge therefore is to disentangle the reporting effects from the effects of the underlying CSR activities, especially when both disclosures and underlying CSR activities are largely voluntary. In face of this dual selection problem it is little surprising that studies on voluntary CSR reporting find more favorable results than studies on CSR reporting mandates. However, research on mandatory CSR reporting is still relatively scarce and, if anything, focuses on the traditional capital-market outcomes (and investors as recipients). Thus, aside from better identification that lets researchers separate the effects of CSR disclosures from CSR activities, we need more insights on whether *mandated* CSR disclosures mitigate information asymmetries, give rise to externalities, and can provide market-wide cost savings or generate comparability benefits. In addition, the scope of the research on CSR reporting should be extended beyond the traditional capital-market participants and also include other relevant stakeholder groups, because it may very well be that these groups—and not investors or debtholders—are the primary target audience of the CSR regulation.

Related to (iv), potential real effects of mandatory CSR reporting, we expect that firms respond to a CSR reporting mandate by making changes to their business operations, including their CSR activities. The literature suggests that firms generally respond by expanding and adjusting their CSR activities and that better governance and CSR performance, more societal or stakeholder pressure as well as peer effects and benchmarking are the main explanations for these changes. Increasing CSR is typically costly to firms, and firms with high reputation risk and poor CSR performance are affected more. With a mandate, we also expect managers to scale back on CSR activities that are not in shareholders' interest, reducing agency problems. It is possible that some firms disinvest activities that are highly sensitive to CSR issues and peripheral to core operations. Mandatory CSR reporting could make it easier for influential stakeholder groups to exert pressure on firms to address externalities. As a result, certain (harmful) activities might shift abroad or to private firms if the mandate unilaterally applies to U.S. public firms.

Overall, it is difficult to predict whether the firm responses are net positive or negative from the perspective of investors, other stakeholders, or society. Real effects can induce firm responses that reduce firm value and, hence, are negative to investors. However, CSR issues often pertain to negative externalities and, in turn, improvements in CSR could be desirable from a societal standpoint. We need more research to better understand these tradeoffs as well as on how and why firms respond to specific CSR reporting mandates. For instance, we know little about how a firm's ownership, customer, and supplier structure relates to its real responses or how the causality chain works from the release of CSR information to firms reacting to the (anticipated) behavior of certain stakeholders because they care for the CSR issue and/or respond to the CSR disclosures.

Related to (v), select implementation issues for an effective CSR reporting mandate, we identify the following important issues: the CSR standard setting process, materiality of CSR disclosures, the use of boilerplate language as avoidance tool, and enforcement or assurance of CSR reporting. The process of setting CSR standards is likely shaped by societal, political, and moral debates about the CSR topics themselves (over and above the typical economic arguments that dominate the debate over financial reporting standards). As a result, the usefulness of CSR standards to investors could decline. As researchers, we have to adapt to this variety of objectives because the traditional capital-market outcomes might not fully capture the underlying goals of the mandate. We also have little knowledge on how these differences in standard setting affect who participates in the process, what the arguments are they put forth, and whether the standards succeed in achieving the stipulated (non-financial) goals.

The materiality of CSR information can be defined using the same principles as for traditional financial disclosures but determining "what" is material to "whom" is more difficult. At the core of the problem is the observation that the link between CSR activities and financial performance is tenuous, yet central to the definition of materiality (e.g., with the information needs of investors in mind). Because investors have preferences for non-monetary CSR issues and other stakeholders care about specific CSR issues and—by doing so—can affect firm performance, the scope of CSR materiality is likely broad. Thus, assessing materiality from a narrower investor viewpoint might not reduce the boundaries of CSR standards by as much as one would hope. Extant research on CSR materiality often suffers from hindsight bias. That is, what was relevant to investors in the past does not necessarily carry forward into the future. Moreover, showing a relation between material CSR disclosures and firm value is not enough to draw a causal link. This research could benefit from tighter identification, particularly around the introduction of CSR reporting mandates. We also need more evidence on how well a standard setter can determine, ex ante, what CSR information is material to investors. Other unresolved issues include the extent to which firms currently withhold material CSR information and, conversely, why many firms appear to report CSR activities that are arguably immaterial to investors.

The issue of boilerplate language highlights the difficulty of forcing firms to provide meaningful CSR information. CSR standards can play a role in reducing boilerplate language by prescribing what and how firms have to provide information but only if the standards are specific enough (e.g., require specific metrics or numerical disclosures). However, specificity also restricts managers' ability to convey private information about the firm and, if standards are set at the industry-level, diminishes across industry comparability. Prior literature shows that boilerplate CSR disclosures are common, but we have little evidence on why this is the case and how it affects users' decision making. Another interesting issue is whether firms use boilerplate language as an avoidance strategy to hide (unfavorable) CSR performance or retain proprietary information.

Finally, enforcement plays a major role if a widespread CSR reporting mandate is to have substantive economic effects. To achieve this goal and shape managers' reporting incentives requires substantial investments in infrastructure and human expertise. Based on the evidence from financial reporting, a combination of private assurance with public enforcement is most likely to succeed. Even absent an audit requirement, mandatory adoption of CSR standards likely leads to an expansion of the demand for assurance services. Central questions in this context are whether and how CSR standards improve the effectiveness of enforcement, how the assurance of CSR reports performed by audit firms differs from specialized CSR consultants, and how public and private enforcement bodies interact with each other to ensure effective oversight.

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