Reputational Spirals: How Reputational Imprints Constrain Sustainability-Driven Innovation

Organizations' reputations are increasingly informed by their responses to environmental, social and governance (ESG) issues (Barnett & King, 2008; Brammer & Pavelin, 2006). In many cases, organizations operate with some discretion in managing their reputations—that they act strategically to protect their reputation and avoid any associated costs when ESG incidents arise (Barnett & Hoffman, 2008; Grimes, Williams & Zhao, 2019; McDonnell & King, 2013). In this paper we conceptualize ESG incidents as public scandals derived from both traditional and non–traditional media sources regarding a firm's unsustainable practices. Such incidents, for instance, include expressed media criticism regarding a firm's negative contributions to a host of sustainability issues, including climate change, forced labor, corruption, and controversial products and services, among many others. One of the critical assumptions within the existing literature is that ESG incidents offer potential opportunities for organizations to demonstrate learning and innovation. For instance, the strong public environmental criticisms on Dow Chemical Company, since 1992, have triggered the company to introduce massive innovation including waste reduction, new solar–cell products, and processes for improved corporate governance (Eccles & Serafeim, 2013). Drawing on the longstanding literature on organizational imprinting, however, we question these assumptions by exploring how firms' exposure to ESG incidents during periods of crisis imprints upon those organizations' reputations thereby constraining firms' discretion in responding to such public criticism. In other words, while prior research has clearly demonstrated how ESG incidents represent substantial reputational threats, triggering organizations to respond by way of either symbolic or more substantive reforms in order to protect their reputations (Briscoe & Gupta, 2016; Durand, Hawn & Ioannou, 2019; Grimes et al., 2019), we have little insight as to how those incidents might imprint upon corporate reputations, such that they constrain future sustainability innovations.

In this study, we combine research on corporate reputation and organizational imprinting to suggest that economic and social crises represent "periods of organizational transition, upheaval, and instability" (Marquis & Tilcsik, 2013, p. 200), during which firms' longstanding reputations are particularly sensitive to the imprinting effects of ESG incidents. Because crises raise audience awareness of corporate scandals in the media (Coombs, 2007; Dean, 2004; Wei, Ouyang, & Chen 2017), such momentary scandals experienced during periods of crisis may form durable reputational effects even after the crisis has subsided (Marquis & Tilcsik, 2013). Specifically we examine how such reputational imprints formed during periods of crisis contribute to lasting differences between how firms approach sustainability–driven innovation, the relative "integration of ecological and social aspects into products, processes, and organizational structures" (Klewitz & Hansen, 2014; p. 57). We argue that even if firms and their leaders recognize the need for and are motivated to pursue sustainability–driven innovation, such reputational imprints create divergence in both the accessibility of sustainability–related resources (Waldron, Navis, & Fisher, 2013) as well as the capacity to effectively capitalize on related investments (Barnett, 2007; Barnett & Salomon, 2012).

To test these arguments, we empirically examine changes in ESG practices in response to ESG incidents, which cover a comprehensive range of 28 ESG issues in both traditional and social media, across 4,738 unique firms in 89 countries and 62 industries over a 12–year period beginning during the 2007–2008 global financial crisis. ESG practices are defined as the extent to which a company has developed policies, programs, and strategies to manage its ESG risks and opportunities of exposures to ESG issues. This is consistent with our previously stated definition of sustainability–driven innovation. Panel Vector Autoregression (PVAR) is particularly suitable for our study given that the method allows us to examine the dynamic recursive feedback loops between firms' sustainability reputations and their sustainability–driven innovation as well as the dynamic evolution of the systems through the impulse response functions. PVAR is used in the sustainability context by Lev, Petrovits & Radhakrishnan (2010) and Dowell, Hart & Yeung (2000). Thus, we employ PVAR to explore how reputational imprinting shapes firms' responses and path dependent spirals over time in testing our conceptual model in Figure 1A and 1B.

Figure 1A and 1B summarize our key findings: differences in firms' exposure to ESG incidents during a period of crisis imprint upon the firms' reputations, thereby leading to the emergence of both virtuous (Figure 1A) and vicious cycles (Figure 1B), whereby firms pursue competitive advantage in different ways following the crisis. Positively imprinted firms address future ESG incidents after the crisis by increasing their ESG–driven innovation, whereas negatively imprinted firms decrease their ESG innovation. We further demonstrate how the two conditions, (1) product market competition, and (2) stakeholder accountability, amplify and mitigate these reputational constraints. We find that intense product market competition intensifies the observed reputational spirals, widening the discrepancy of responses between these two groups of firms, whereas increased stakeholder accountability or supply–chain related scrutiny can suppress negative reputational spirals while accentuating positive ones. Interestingly, we observe this divergence in sustainability practices over time despite the fact that these two groups of firms initially revealed similar ESG practices. These findings suggest that such divergence was not due to different initial capabilities or other organizationally determined inertial forces, but shaped by the aforementioned reputational imprints.

Taken together our findings challenge and extend prior research on corporate reputation and organizations' responses to normative pressures. First, our study advances scholarship on how firms strategically respond to public criticism. While prior research has suggested that firms respond to public criticism in ways that seek to actively manage their reputations and associated legitimacy (Durand et al., 2019; Grimes et al., 2019), our findings suggest that such criticism can imprint upon firms' reputations, narrowing the potential strategic pathways that are perceived as possible. Second, the findings also advance prior theory regarding the sources of reputational inertia (Barnett, 2014; Schultz, Mouritsen, & Gabrielsen, 2001). While existing studies of corporate reputation have acknowledged external, audience–based and internal, path–dependency based sources of reputational inertia, our findings serve to bridge this literature by introducing the concept of reputational imprints. Such reputational imprints reveal how audiences' criticism of firms' sustainability practices during periods of crisis creates path dependence by channeling firms with initially similar sustainability practices, competencies and perhaps even identities toward radically different approaches to sustainability–driven innovation. Lastly, our findings further scholarly understanding of the effectiveness of public criticism (Bednar, 2012; McDonell & King, 2013). Although meant to create accountability and induce organizational learning during crisis, such criticism can have unintended effects, by leading to increased polarization between organizations' practices. And yet we also offer a possible resolution to this theoretical and practical dilemma by highlighting evidence that when such public criticism is supplemented by additional supply–chain scrutiny, positive reputational cycles are reinforced, while at the same time negative reputational cycles are diminished.

FIGURE 1A: VIRTUOUS CIRCLE
Positively imprinted firms "race to the top"

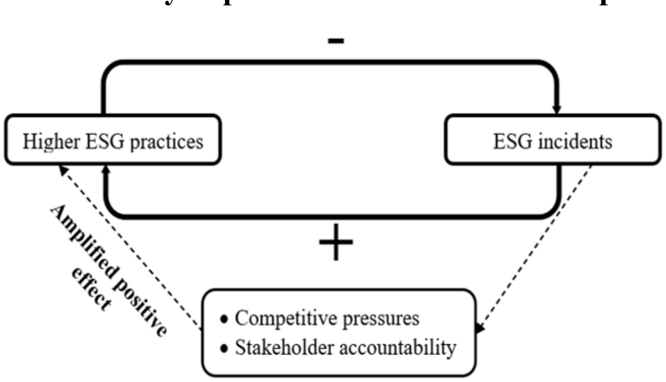

FIGURE 1B: VICIOUS CIRCLE
Negatively imprinted firms "race to the bottom"