Which Firms Leave Multi-Stakeholder Initiatives? A Resource Dependence Perspective on Delistings from the United Nations Global Compact

Abstract:
This study analyzes which firms leave multi-stakeholder initiatives (MSIs) for corporate social responsibility (CSR). Based on an analysis of all active and delisted participants from the UN Global Compact between 2000 and 2015 (n= 15,853), we find that SMEs are more likely to be delisted than larger and publicly-traded firms; that early adopters face a higher risk of being delisted; and that the presence of a local network in a country reduces the likelihood of being delisted. Based on this, we extend resource dependence theory in the context of CSR by theorizing (a) the effect of participant heterogeneity on resource dependence relationships and (b) the role of indirect influence pathways where stakeholders work through allies to manipulate the flow of resources to a firm.

Keywords: multi-stakeholder initiatives, corporate social responsibility, small-and-medium-sized enterprises (SMEs), resource dependency theory, UN Global Compact
INTRODUCTION

Multi-stakeholder initiatives (MSIs) are increasingly seen as a means of addressing social and environmental problems in areas such as human and labor rights, deforestation, and climate change. MSIs reflect voluntary predefined rules that seek to guide, assess, verify and communicate firms’ social and environmental performance (Fransen & Kolk, 2007). Although these initiatives differ in terms of their aims and underlying mechanisms, they all rest on a collaborative approach towards (global) governance. Within MSIs the authority for designing and enforcing relevant rules is shared between different interest groups, which, as a whole, cross the state/non-state and profit/non-profit-boundaries. While certification MSIs audit participating firms against a set of predefined rules (e.g., the Forest Stewardship Council), principle-based initiatives offer a set of foundational values that firms can sign up to without any certification (e.g., the UN Global Compact).

The main aim of this article is to study the characteristics of those firms that are forced to leave principle-based MSIs, because they failed to meet the minimum requirements of participation. The theoretical framework for our study rests on resource dependence theory (RDT). Based on Pfeffer & Salancik’s (1978) seminal work, RDT argues that organizations depend on resources that are supplied by actors in their environment (Davis & Cobb, 2010; Hillman, Withers, & Collins, 2009). RDT suggests that firms pay more attention to those actors who control resources that are critical for their own long-term survival. It shows that organizational strategies are not just determined by profit-seeking motives or institutional constraints, but to a certain degree also by the resource dependencies on other organizations. This line of thinking fits our study very well, as it allows us to conceptualize important elements of the relationship between MSIs and adopting firms. Based on RDT, we develop hypotheses regarding what sort of firms are more likely to be delisted from principle-based MSIs.
Our paper is motivated by shortcomings in two streams of literature. First, when looking at MSI theory, existing studies have helped us understand why firms join MSIs (Bartley, 2007), how these initiatives become institutionalized (Gulbrandsen, 2014), what influences their perceived legitimacy (Mena & Palazzo, 2012), and whether or not MSIs have an impact on the issues they are claiming to address (Berliner & Prakash, 2015). Surprisingly little analysis has been devoted to what sort of firms leave MSIs in general and principle-based MSIs in particular (for an exception see Knudsen, 2011). As MSIs reflect voluntary governance arrangements, actors can end their engagement, either because they want to exit or because they are forced to leave. Knowledge about why firms leave principle-based MSIs is important, because it shows whether the impact of a specific initiative may be selective (e.g., focusing only on specific types of firms) and thus extend our knowledge about MSIs’ output legitimacy. Such knowledge also adds insights into how to set and adjust entry and exit barriers for principle-based MSIs (Voegtlin & Pless, 2014). Second, when looking at the intersection of RDT theory and corporate social responsibility (CSR), studies have acknowledged that resource dependencies shape firms’ behavior vis-à-vis stakeholders (Frooman, 1999). However, we know very little about which type of firms are exposed to resource dependencies. Research at the RDT-CSR intersection has mostly focused on how boards (Ortiz-de-Mandojana et al., 2012) and community relationships (Kassinis & Vafeas, 2006) impact resource dependencies. These analyses usually assume the focal firm to be a rather homogenous actor (i.e. large, publicly-traded firms), while insights about how firm heterogeneity influences resource dependence relationships in the context of CSR is lacking.

Addressing these shortcomings in the literature, our study rests on an analysis of all active and delisted participants from one principle-based MSI, the United Nations Global Compact (UNGC), between 2000 and 2015 (n=15,853). We selected the UNGC for three reasons. First, it is the world’s largest MSI in terms of the overall number of business
participants that joined the initiative (more than 15,800 as of December 2015). Second, it is also the initiative with the highest number of delisted firms (more than 7,000 as of December 2015). Finally, the UNGC is a global initiative with participants from more than 163 countries and not restricted to any particular sector or firm size. Firms leave the UNGC because they are either forced to do so after failure to submit a mandatory annual Communication on Progress (COP) report or because they decide to voluntarily withdraw from the initiative. Our study is concerned with the firms that leave, because they fail to submit a COP report. While our results cannot be generalized to all types of MSIs (e.g., certification initiatives that delist because of failed audits), the analysis enhances our knowledge about what sort of firms become uninterested in principle-based initiatives that show similar features like the UNGC.

Our study contributes to two theoretical discourses. First, we extend literature at the RDT-CSR interface (e.g. Ortiz-de-Mandojana et al., 2012) by showing that the dependency of an organization on MSIs as suppliers of social legitimacy and CSR knowledge varies according to firm size and ownership status. This allows us to show the relevance of firm heterogeneity when discussing resource dependency dynamics in the context of CSR. Further, we advance knowledge on the importance of indirect influence pathways in the context of CSR – that is, situations in which stakeholders work through allies to manipulate the flow of resources to a firm. Second, our results contribute to the debate on MSIs in organization studies (e.g. Reinecke, Manning & von Hagen, 2012) by demonstrating that firms’ decision to leave principle-based MSIs is influenced by their size, ownership status, the year of joining an initiative, and the existence of local network structures that support the MSI on the ground. We advance MSI theory by showing the existence of a self-selection mechanism in the context of principle-based MSIs. In the early days MSIs’ participant base is still more heterogeneous, but as knowledge about the initiative increases over time more informed participants are attracted and hence lower delisting rates occur.
Our analysis proceeds by briefly reviewing relevant parts of the literature on MSIs in general and the UNGC in particular. We then use RDT to develop hypotheses, which predict what makes delisting more/less likely in the context of the UNGC. Next, we explain what data we used, how we measured relevant variables, what statistical analyses we conducted, and how we checked the robustness of our results. The following section presents the results of our analysis. Based on this, we outline theoretical implications of our results and thus show how RDT can be extended in light of our results, and also in how far our results challenge existing insights from MSI theory. We close by outlining policy recommendations for MSIs in general and the UNGC in particular.

**MULTI-STAKEHOLDER INITIATIVES**

**What Are Multi-stakeholder Initiatives?**

MSIs reflect voluntary initiatives, which involve public and private as well as profit and non-profit actors (Fransen & Kolk, 2007; Mena & Palazzo, 2012; Rasche, 2012). Based on multi-stakeholder processes, MSIs define, implement and enforce rules that direct firms’ social and environmental behavior in selected areas. Even though participation in MSIs is voluntary, firms are expected to comply with the underlying rules once they have signed up to a particular initiative. The literature distinguishes three types of MSIs in the field of CSR (see e.g. Gilbert, Rasche & Waddock, 2011): (1) principle-based MSIs – i.e. initiatives that define broad principles of engagement without any monitoring and certification (e.g., the UN Global Compact); (2) certification MSIs – i.e. initiatives that outline criteria for certifying factories along global supply chains (e.g., Social Accountability 8000); and (3) reporting MSIs – i.e. initiatives that outline frameworks for disclosing non-financial information (e.g., the Global Reporting Initiative). Our study focuses on what sort of firms leave principle-based MSIs using the example of the UN Global Compact.
The interdisciplinary academic discourse on MSIs has focused on different topics. First, a number of studies have looked at the “production” of MSIs. These studies have highlighted the political nature of standard-setting processes (Moog, Spicer, & Böhm, 2015), the lack of inclusiveness of standard making and governance (Boström, 2006), and the role of input legitimacy (Glasbergen, 2013). Second, numerous studies have looked at the “institutionalization” of MSIs, focusing, for instance, on how different actors influence patterns of diffusion (Gulbrandsen, 2014), the effects of competition between MSIs on market creation processes (Reinecke et al., 2012), and isomorphism among standard adopters (Manning & von Hagen, 2010). This stream of literature has also discussed possible benefits of adoption that drive institutionalization processes (Amer, 2015). Finally, some studies have looked at the (lack of) impact of MSIs. Scholars have examined whether MSIs have any effect on the practices of participants (Clark & Kozar, 2011), while other studies have more directly researched MSIs’ impact on the problems they are claiming to address (Oosterveer et al., 2014). Some studies have highlighted that MSIs’ impact on social and environmental problems is questionable, as local practices are often incompatible with global standards (Barrientos & Smith, 2007).

Depending on the type of MSI, there are different ways to exit: (1) Principle-based MSIs usually demand a mandatory annual disclosure of implementation progress from participants, non-reporting participants are delisted (e.g., the Principles for Responsible Investment require an annual disclosure of participants’ progress vis-à-vis their principles); (2) Certification MSIs delist participants that fail to reach certain performance standards during audits; and (3) all types of MSIs allow that firms decide to voluntarily withdraw (e.g., Volkswagen left the UNGC after discussions around the manipulation of diesel engines started in September 2015).
The UN Global Compact

Launched in 2000, the UNGC offers businesses the opportunity to voluntarily align their business practices with ten principles in four issue areas (i.e. human rights, labor rights, environmental protection, anti-corruption). The ten principles are not tied towards a particular sector, region or type of corporation; rather, they are supposed to be universally valid (Kell, 2013). While the UNGC primarily aims at enlisting businesses in support of the ten principles, non-business actors (e.g., NGOs and unions) can also join the initiative. The UNGC has created rather low entry barriers. Corporations wishing to join have to send a Letter of Commitment (signed by the CEO) to the UN Secretary-General. Firms also need to provide some basic information via an online application form (e.g., size of business, country). To support the contextualization of the ten principles and to generate local communities for interaction, the UNGC has created so-called local networks. Such networks reflect “clusters of participants who come together voluntarily to advance the Global Compact and its Principles at the local level […] by providing on-the-ground support and capacity-building tied to distinct cultural, economic and linguistic needs” (Whelan, 2010: 318). So far, such networks have been established in over 100 countries. UNGC participants can, but do not have to, join these networks.

The UNGC does not monitor whether participants live up to their commitment. Rather, all business participants have to submit an annual Communication on Progress (COP) report in order to remain listed as “active”. The COP is considered to be a public document (available via the UNGC’s website) and its main purpose is to inform all stakeholders about a company’s efforts in support of the UNGC (Hamid & Johner, 2010). The content of COP reports is not verified by the UNGC. COP reports are not standardized and only need to meet certain minimum requirements. They need to include: (a) a statement by the chief executive expressing continued support, (b) a description of practical actions in support of the four issue
areas (i.e. human rights, labor, environment, and anti-corruption), and (c) a measurement of outcomes (UN Global Compact, 2017). If a participant does not address one or more of the four issue areas, it needs to explain the omission. Whenever a firm submits a COP, which does not meet the basic requirements, it is given a one-off, 12-month “grace period.” During this period, the participant is offered support and guidance to come up with an adequate COP. Participants, who do not submit a COP on time, are not immediately delisted. Rather, they are first designated “non-communicating.” If a non-communicating participant does not submit a valid COP report within another 12 months of becoming non-communicating, it is finally delisted from the UNGC (UN Global Compact, 2017). Hence, it can take up to 36 months to delist a participant (initial 12 months of non-disclosure, plus 12 months grace period, plus 12 months non-communicating status). Other principle-based MSIs have adopted similar mechanisms and grace periods (e.g., the Equator Principles, the Principles for Responsible Investment). All expelled companies are listed on the UNGC website. Our analysis assumes that the decision to leave the UNGC is a delibera\textit{te} one, either because the firm does not want to (or cannot) produce the COP report. Prior to being delisted, participants receive a number of warnings from the Global Compact Office. The COP Policy came into effect in 2003, and the first delistings were undertaken from 2008 onwards.

Despite the public nature of delistings and their high relevance for the UNGC, surprisingly little research has focused on what sorts of firms leave the initiative and why they do so. Knudsen’s (2011) early analysis of delistings provided some valuable insights. She found that participants operating in countries with stronger domestic governance institutions were less likely to delist. Further, she found that participants from Eastern Europe and Africa have a higher likelihood of being delisted, while firms from the oil and gas sector were less likely to be delisted. Although these results give important initial directions, they also need to be treated with care, as the underlying dataset included only 227 firms that were delisted.
during the first six months of 2008. As we are working with a dataset of the full population (i.e. all active and delisted participants from 2000-2015), the conclusions that can be drawn from this study leave no concern for sample significance.

HYPOTHESES DEVELOPMENT

Our approach is designed to enable understanding of firm delistings from the perspective of the external control of organizations. We draw on RDT to hypothesize what sorts of firms are likely to be delisted from the UNGC. The term resource is used rather widely within RDT and includes physical resources (e.g., materials) as well as non-physical ones (e.g. legitimacy and knowledge). Davis & Cobb (2010: 6) summarize the basic claim of RDT like this: “the power of A over B comes from control of resources that B values and that are not available elsewhere.” RDT captures very well that the UN provides participating organizations with resources that are controlled by relatively few actors. The UNGC possesses two resources that are relevant to participants: legitimacy and CSR knowledge.

The relevance of legitimacy as a resource for UNGC participants is supported by research, which showed that 77% of all participants joined the initiative in the hope that this would increase trust in the company and boost social acceptance (UN Global Compact, 2011). Haack, Pfarrer and Scherer (2014) showed that the UNGC’s legitimacy spills over to participants and hence can be used by them. We view legitimacy as a “generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions.” (Suchman, 1995: 547) Legitimacy can have strategic and institutional qualities. We focus on the former understanding by seeing legitimacy as a resource that organizations can obtain by engaging in strategies that reduce their dependency (Drees & Heugens, 2013). This argumentation assumes (a) that legitimacy is a resource that is conferred to organizations by actors in their
environment (Sonpar, Pazzaglia, & Kornijenko, 2010) and (b) that managers have some control of the legitimation process. The relevance of CSR knowledge as a resource for UNGC participants is supported by the finding that the vast majority of participants join because they want to gain knowledge about CSR-related issues and use the initiative as a springboard to network with like-minded companies (UN Global Compact, 2011; see also Kell, 2013). Although CSR knowledge is also available elsewhere and not exclusively controlled by the UNGC, the initiative’s local networks offer an restricted and protected space for knowledge sharing (Whelan, 2010). Further, the UNGC has pioneered a number of CSR tools to which participants often had exclusive access in the early phases of implementation (e.g., the UNGC Board Program).

**Corporate Size**

We can expect that the size of corporate participants can affect their ability and willingness to remain part of the UNGC. RDT argues that resource dependence occurs if the “resource is a critical or important part of the focal organization’s operation.” (Pfeffer & Salancik, 1978: 44) The importance of a resource is influenced by (a) the magnitude of the use of the resource and (b) the criticality of the resource (i.e. the capacity of a firm to function in the absence of the resource; Pfeffer & Salancik, 1978: 46-47). Both the magnitude of the use and the criticality of legitimacy are likely to be higher for larger firms. Larger firms are more often exposed to reputational risks and get more critical attention from stakeholders than smaller firms do (Kostova & Zaheer, 1999). The more visible a company is to relevant stakeholders, the higher its potential reputational risk (e.g., in case of NGO activism; see also Brown & Knudsen, 2012). Larger firms thus have more incentives to comply with the UNGC’s COP policy, as they are more likely to face adverse reputational effects when being delisted, especially since delistings are publicly communicated. Also, larger firms are better
able to use the “UN label”, for instance when interacting with NGOs (who target larger firms more often, Sigwatch, 2016) and governments (who often value UNGC participation when deciding on public procurement contracts). Even though firms can get access to social legitimacy through other means (e.g., by participating in other multi-stakeholder initiatives), the UNGC is a highly attractive initiative due to its association with the UN system. The UN remains one of the most legitimate societal actors of our time. Despite constant critique of its decisions and structures, the UN enjoys high levels of legitimacy because it is viewed as a universal and inclusive organization (Barnett & Finnemore, 2008; Torgler, 2008). The most recent Edelman (2017: Q11-620) Trust Barometer finds that the UN enjoys much higher levels of trust around the world than other international organizations (e.g., the International Monetary Fund) and supranational entities (e.g., the European Union).

RDT also assumes that the extent to which an organization will be able to satisfy external demands depends on its capability to develop relevant actions in support of these demands (Hillman et al., 2009; Pfeffer & Salancik, 1978). Larger firms are more likely to possess the required resources that are necessary to design a COP report (Brammer & Pavelin, 2006). When signing up to the UNGC corporations have to undergo some degree of change that requires financial as well as non-financial resources (Rasche, Waddock & McIntosh, 2013). Firms have to collect and analyze relevant data and also write up the annual COP report. Companies with limited resources will face difficulties in developing and submitting such a report and hence can be expected to face a higher likelihood of being delisted. SMEs have on average fewer resources available to manage their commitment to CSR (McWilliams & Siegel, 2001), and hence should face a higher likelihood of being delisted. The degree of required organizational change also depends on the extant CSR engagement of a participant. Companies, which were already engaged in CSR reporting prior to their commitment to the UNGC, can submit these reports as a COP. This is due to the flexible COP policy of the
UNGC. As CSR reporting is particularly widespread among larger corporations but still not significantly developed among smaller firms (KPMG, 2015), we can expect that SMEs face a higher likelihood of being delisted, as smaller firms would have to create a new reporting infrastructure from scratch. All of the above leads us to hypothesize:

*Hypothesis 1a: SMEs are more likely to be delisted from the UNGC than larger companies.*

We can expect that the hypothesized effects of organization size on a firm’s ability and willingness to submit a COP report are particularly strong for well-known global firms given their assumed greater vulnerability to targeting by critical NGOs and the mainstream media. Hence, we include an analysis of the delisting status of the *Financial Times* (FT) Global 500 firms. These companies are ranked by market capitalization. FT 500 firms usually have significant resources devoted to CSR and have a well-developed CSR infrastructure (e.g., dedicated departments; Baumann-Pauly et al., 2013). Also, FT 500 firms are disproportionately exposed to reputational risk and hence remain the main target of NGO campaigning (Sigwatch, 2016). Hence, we can assume that the magnitude of the use of social legitimacy and its criticality are both very high for these types of firms. We, therefore, hypothesize:

*Hypothesis 1b: FT 500 firms are less likely than other participants to be delisted from the UNGC.*

**Ownership Status**

We expect that participants’ ownership status affects the likelihood of being delisted. In particular, we believe that publicly traded firms will behave differently than privately held firms. Publicly traded firms are likely to have a high resource dependence on investors, who
increasingly recognize the importance of CSR issues for assessing the risks and opportunities related to their portfolio (Gond & Piani, 2013). Publicly traded firms are particularly visible and hence it is rather easy for investors to judge non-compliance. Pfeffer & Salancik’s (1978: 44) analysis showed that the extent to which an organization complies with relevant external demands depends to some degree on whether its actions or outputs are visible and can be assessed by others. Such visibility matters in the context of the UNGC. Prior research has shown that publicly traded companies that fail to submit a COP report are penalized by financial markets with an average cumulative abnormal return of -1.6% over a period of 5 trading days (Amer, 2015). Investors seem to be aware of delistings and are prepared to punish non-communicating companies (e.g., because of higher perceived risk levels). This is not surprising, as the status of COP reports is available to investors via the Bloomberg Professional service, which is one of the most widely used platforms for financial professionals worldwide.

In the case of publicly traded companies it is less the resource dependence on the UNGC that influences delisting behavior. Rather, it is investors’ consideration of the UNGC and their control of a critical resource that impact participants’ actions (see also David, Bloom, & Hillman, 2007). Larger institutional investors can influence companies’ attitude towards UNGC commitment, as participating companies depend on their financial resources. Over 1,500 institutional investors have signed up to the Principles for Responsible Investment (PRI) thereby promising to integrate CSR-related concerns into their investment decisions. The PRI emerged as a spin-off initiative from the UNGC and holds close ties with the UN system. It can thus be expected that at least some PRI investors monitor the COP status of publicly traded UNGC participants (Coulmont & Berthelot, 2015; Gond & Piani, 2013). This exposes publicly traded firms to higher degrees of risk in the event of being delisted. Further, prior research has found that publicly traded firms, which engage in CSR activities, benefit
from insurance-like effects if negative events occur (Shiu & Yang, 2017) and also decreased costs of equity capital (Dhaliwal et al., 2011). However, such effects only exist if firms can credibly signal their CSR commitment to investors (e.g., through COP reporting). Delisting from the UNGC would undercut such signaling effects.

The role of investors needs to be considered together with another source of external control: the ability to regulate corporate behavior (Drees & Heugens, 2013). Pfeffer & Salancik (1978) viewed the ability to make and enforce regulation as an important driver of external control. Both private and public regulators of financial markets have emphasized the need to report on non-financial issues. In fact, KPMG’s most recent survey of the regulation of non-financial reporting emphasizes that many market regulators by now expect publicly traded firms to annually report on their social and environmental performance (relevant requirements exist, for example, in China and Singapore; KPMG et al., 2016). Publicly traded firms often have to produce the information, which are required for the COP report, because of existing financial regulations. Hence, they do not need to invest additional resources when preparing the mandatory COP report. All of these insights lead us to hypothesize:

**Hypothesis 2:** Publicly traded firms are less likely than other firms to be delisted from the UNGC.

**Early and Late Adopters**

RDT argues that resource dependence will be higher if alternative sources for the resource are not easily available (Pfeffer & Salancik, 1978). Firms usually engage in multiple resource dependency relationships in order to decrease their overall environmental dependence (Hambrick et al., 2005). In the absence of multiple resource providers, the dependency relationships to those actors that can provide the resource increase. In the case of
the UNGC it is reasonable to assume that early adopters had not many alternative sources of social legitimacy and hence were more easily attracted by the initiative, even if the Compact did not fully fit their needs at the time.

The UNGC was announced in 1999 and launched in 2000. At this time, few competing principle-based MSIs were around. The World Business Council for Sustainable Development (WBCSD) already existed, as it was created in 1995, but enjoyed rather low levels of legitimacy due to its exclusive focus on large business actors and its closed-club mentality (firms could only join by invitation from the Executive Committee). Many principle-based MSIs with a sector or issue focus emerged after the launch of the UNGC – for instance, the PRI was created in 2006; the Equator Principles were launched in 2003; and the Extractive Industries Transparency Initiative (EITI) was set up in 2002. The UNGC was in a rather unique position at the time of its creation; it offered an easy entry into the CSR discourse (Coleman, 2003) and was one of the few principle-based MSIs that allowed firms to signal commitment by becoming a member (e.g., it is not possible to join the OCED Guidelines for Multinational Enterprises, although firms can support and follow them). All of this leads us to conclude that early adopters faced a situation in which fewer alternative sources for the resources that the UNGC had to offer (i.e. social legitimacy and CSR knowledge) existed. By contrast, late adopters could chose (a) among a greater variety of principle-based MSIs and (b) often had the opportunity to join principle-based MSIs that are specialized on CSR issues in their respective sector. We can thus expect that early adopters are more likely to leave the UNGC than late adopters. Late adopters had to decide more deliberately for the UNGC (and against other competing MSIs), while at least some early adopters can be expected to have joined the UNGC for a lack of anything better at the time (Baccaro & Mele, 2011). In other words, early adopters did not have access to social...
legitimacy from other sources at the time of joining and moved to issue or industry-specific MSIs once they became available.

Further, the capability of adopters to develop actions or outputs that satisfy the UNGC’s demands is also likely to be influenced by the time that firms joined the UNGC. As the UNGC was in many ways an institutional experiment (Ruggie, 2001), early adopters faced high levels of uncertainty around (a) what exactly was expected from them and (b) which capabilities were needed to meet the UNGC’s emerging requirements. The initiative changed many of its engagement opportunities in the early days (e.g., the first local network was not launched until 2003 and the COP policy was adjusted multiple times; Rasche & Kell, 2010). We can thus expect that late adopters have more knowledge about what the initiative is all about, whether it is of potential value to the organization, and whether the organization is capable of meeting the mandatory disclosure requirements. Based on these insights, we hypothesize that:

Hypothesis 3: Early adopters are more likely than late adopters to be delisted from the UNGC.

UNGC Local Networks

The degree of resource dependence between organizations also depends on the concentration of resource control. It is not only important whether or not firms can substitute resources, but also whether those firms that need the resource can be influenced in an easy way. The concentration of resource control means that influence attempts can be concentrated in some way (Frooman, 1999). Such concentration occurs if influence attempts can be focused on just a few targets. As Pfeffer & Salancik (1978: 51) write: “If an organization wanted to influence a class of organizations when there are many such organizations to be
influenced, it would be in a better position to exert influence if the multitude of organizations were regulated by a single agency.” The UNGC uses its local networks as such agencies to influence participants on the ground. Local networks only exist in selected countries. In those countries where such networks exist, the global UNGC Office in New York can focus its influence attempts on only one target (i.e. the local network focal point) and hence influence participants more easily. The main function of local networks is to influence participants’ behavior and to make sure that firms submit their required COP. Many networks support their participants in creating COP reports. The 2014 Local Networks Report states that “local networks received in-depth training and guidance to support their participants with issues related to reporting and fulfilling their COP [...] requirements.” (UN Global Compact, 2014: 14). We can therefore expect that the UNGC can better influence participants to submit COP reports in countries where local network structures exist. Based on this, we hypothesize:

*Hypothesis 4a: Firms operating in countries with local networks have a lower share of delisted firms from the UNGC.*

However, it is necessary to acknowledge differences between local networks. Prior research has suggested that the level of engagement with a particular local network is dependent upon the number of network participants (Rasche, 2012; Whelan, 2010). Local networks with more participants are likely to have access to more resources (e.g., because they can charge local fees) and hence show higher levels of engagement. As UNGC participants are not forced to join the local network in their respective country, we can expect networks with a high rate of participation to also show higher levels of activity (e.g., because they have access to more interested firms). We can therefore expect that the concentration of resource control is particularly high in local networks, which have a high number of participants. Network strength (i.e. networks with higher levels of participation and hence
engagement) influences the concentration of resource control and hence participants’ willingness and ability to submit a COP. We therefore also hypothesize:

\textit{Hypothesis 4b: Firms operating in countries with local networks that attract a high share of participants have a lower share of delisted firms from the UNGC.}

**METHODOLOGY**

**Dataset**

Our analysis is based on the complete dataset of the UNGC’s active and delisted participants as of 31 December 2015 (n=15,853). The Global Compact Office in New York provided the dataset. We excluded participants, which joined between 1 January 2013 and 31 December 2015, as due to the UNGC’s current COP policy, firms that joined during these years cannot be delisted (UN Global Compact, 2017). A firm that joined on 1 January 2013 cannot be delisted before 1 January 2016 due to the current submission deadlines and available grace periods. Our analysis therefore includes all participants that joined the UNGC before 1 January 2013, and that were either labeled “active” or “delisted” by December 2015. This results in a sample of 11,815 firms for our analysis.

Overall, the UNGC delisted 7,017 firms until December 2015. Of these the vast majority were expelled for failure to submit a COP (84.81%), while only a minority was delisted because of voluntary withdrawal or other reasons (see below). We only include companies in the analyses that were expelled from the UNCG because they failed to submit the mandatory COP report, resulting in a final sample size of 10,704 firms (i.e. all firms that joined before 1 January 2013 and that were mentioned as “active” or that were “delisted” due to non-reporting).
**Variables**

As the aim of this study is to find systematic patterns of firms being delisted from the UNGC, our dependent variable is whether a firm is delisted or not from the UNGC. We excluded firms that left the UNGC for the following reasons: merger or acquisition (n=60); organization does not exist anymore (n=194); participant requested withdrawal (n=795), consolidation of commitment under the parent company (n=45), and other reasons (n=17). Hence, we only include firms that are listed as active (n=4,798) and firms that were forced to leave the UNGC (n=5,906) into our dataset. We create a dummy variable where 1 indicates that a firm was delisted and 0 that a firm is still active.

The independent variables are defined according to our generated hypotheses. For H1a, we measure the size of a firm according to the official recommendation by the EU (EU 2003/361/EC) where microenterprises are firms with less than 10 employees, SMEs with less than 250 employees, and corporations are firms with 250 or more employees. We recoded the number of employees into a dummy variable where 1 reflects micro-enterprises and SMEs and 0 larger firms. Such a classification is in line with prior empirical work on SMEs (Berliner & Prakash, 2012). For H1b, we used the information of whether a firm is enlisted in the FT500 index. Again, we created a dummy variable with 1 “FT500 enlisted” (UNGC participant is/is not listed in the Financial Times Global 500 as of December 2015).

For hypothesis H2, which assumes that publically traded firms are less likely to be delisted from the UNGC, we collected the publicly traded status of a firm and created again a dummy variable where 1 means “publically traded” and 0 “private company, subsidiary, or state-owned company”. To test hypothesis H3, which assumes that early adopters are more likely to be delisted, we analyzed the time at which firms joined the UNGC. To distinguish early and late adopters, we chose 2008 as a cut-off year, as the UNGC had gained a robust membership base until then (6,207 participants until the end of 2008). The UNGC started out
with 50 firms in 2000 and grew especially in 2006, 2007 and 2008 (as participants from China and India started to join). Again, we created a dummy variable where 1 reflects “early adopters” and 0 “late adopters”.

To test hypothesis H4a, which concerns the relationship of local networks to the likelihood of being delisted, we collected data on whether local networks in the respective countries exist. This data was retrieved from the UNGC website. If a local network existed, we differentiated between a weak and a strong network to address hypothesis H4b. We classified all local networks in which more than 70% of country participants are organized as strong networks. This threshold was chosen, as most networks above this threshold showed a high level of activity and participant engagement (UN Global Compact, 2015). The resulting variable describing the existence and strength of a local network in a particular country is then coded as 0 = “no network or no information available”; 1 = “weak network defined as less than 70% of country participants are organized in the network”; and 2 = “strong network defined as at least 70% of country participants are organized in the network”. We then split this variable into three dummy variables one capturing all firms with no network, the second all firms with a weak network, and the last one including all firms with a strong local network. We include dummy variables for countries, industry sectors, and whether a country is an OECD member as control variables.

Models

To test our hypotheses, we employ multilevel mixed-effects generalized linear model (MMGLM) where our dependent variable is whether is firm is delisted or active. There is a self-selection bias with regard to who signs up to the UNGC – that is, it can be assumed that only firms anticipating a benefit from joining will participate. Hence, the participating firms
in the UNGC (or any other MSI) will not be representative for all firms. Still, we abstain from correcting for such a self-selection bias, as we take all firms that joined the UNGC as the population of interest to investigate which characteristics are related to being active or being delisted.

We then control for contextual effects such as shared environments by employing a multilevel mixed-effects generalized linear model. The UNGC database has a nested structure with two levels: country and firms. In such a sample, the individual firm observations are generally not independent as firms within one country are subject to national legislation and other national factors (Hox, 2002). The estimated model looks as follows:

\[D_{ij} = \beta_{0j} + \beta_1' X_{ij} + \beta_2' C_{ij} + \epsilon_{ij}\]

where \(D_{ij}\) is the measure of whether firm \(i\) in country \(j\) is delisted or active. \(\beta_{0j}\) is the average outcome in country \(j\) which is equal to the sum of the population average (\(\beta_0\)), the country specific effect (\(\nu_{0j}\)) and the effect of being an OECD member (\(O_0\)). \(X_{ij}\) captures all independent variables relevant for testing the hypotheses and \(C_{ij}\) comprises dummies for the industry sectors. \(\epsilon_i\) is the individual error-term. The composite model looks as follows:

\[D_{ij} = \beta_0 + \beta_1' X_{ij} + \beta_2' C_{ij} + \beta_3 O + \theta_{0j} + \epsilon_{ij}\]  

\[\text{fixed effects}\]
FINDINGS

Descriptive Statistics

The overall descriptive statistics and the Pearson correlations are presented in Table 1. 59.39% of the 10,704 firms are delisted. Hypotheses H1 to H4 are tested by descriptive statistics with the final sample of 10,704 firms. In Table 2, we present the descriptive statistics by listing status of a firm. Hypothesis H1a suggests that SMEs are more likely to be delisted than larger firms. In total, 6,304 SMEs were listed in the UNGC whereof 67.26% were delisted between 2000 and 2013. For larger firms, only 37.86% were delisted over the same period of time. Hence, the share of delisted SMEs is much larger than the one of participants with more than 250 employees – supporting H1a. Hypothesis H1b suggests that FT500 firms are less likely to be delisted from the UNGC than other participants. This hypothesis is supported. Out of all UNGC participants, 184 firms were listed in the FT500. Only 1 of these 184 firms was delisted, while the delisting rate of non-FT500 firms is at 56.31% (5,901 of 10,515 firms). H2 predicts that publicly traded firms are less likely than other firms to be delisted from the UNGC. We find support for this hypothesis, as publicly traded firms have a lower share of delisted firms (20.23%) than firms with other ownership structures (59.29%).

Hypothesis H3 suggests that late adopters are less likely to be delisted than early adopters – this is supported by the data. While we find that 66.30% of the early adopters are delisted, in contrast 42.18% of late adopters are delisted. Hypothesis H4a suggests that firms operating in countries with local networks have a lower share of delisted firms from the
UNGC. This hypothesis was supported, as the delisting rate for firms originating from countries without a local network is much higher (74.00%) than for firms originating from countries with either strong or weak local networks (see below). Hypothesis H4b predicts that firms operating in countries where a high number of participants are organized in the network face a lower likelihood of being delisted. This hypothesis is not supported. The delisting rate for firms from countries with weak networks (48.37%) is even lower than for firms from countries with strong networks (54.28%).

**Regression Results**

Table 3 presents the multilevel mixed-effects generalized linear model (MMGLM). We estimated two models where we added the duration of membership in the second model (Table 3, Column 2). The regression analyses produce similar results for all hypotheses but H4 concerning the influence of local networks. For the interpretation of the estimates, we focus on the second model.

Also when controlling for all other variables that are hypothesized to be associated with being delisted or not, the descriptive results are largely confirmed. For example, SMEs have a higher likelihood of being delisted compared to larger firms (Odds Ratio OR = 3.178, p≤.001), meaning that the likelihood of being delisted is 3.178 times higher compared to the likelihood of a larger firm being delisted. Also hypotheses H1b and H2 are confirmed (Table 3). Firms with the following characteristics have a lower likelihood of being delisted: being listed in the FT 500 and being publicly traded. Thus, hypotheses H1a, H1b and H2 are
supported. For a sensitivity analysis, we investigated all companies that joined the UNGC and were delisted at one point, i.e., including firms that requested their withdrawal (n=795). Rerunning the regression analysis with all firms provides results similar to the ones presented for the sample that only includes firms which were delisted due to failure of COP reporting.

Another factor increasing the likelihood of delisting is being an early adopter (OR = 3.222, p≤.001) supporting hypothesis H3. It is interesting to note that once we include the duration of membership into the model, the ORs for early adopter more than double in size (OR=3.222 in model 1 to OR=7.462 in model 2, all p≤.001). Duration itself has a protective effect on being delisted (OR=0.746, p≤.001). Hence, taking out the effect of duration on being delisted or not, early adopters are 7.46 times more likely to be delisted than late adopters. For the effect of local networks on the likelihood of being delisted (H4), the estimates change largely when taking the two-level structure of the data (firm in country) into account. Taking no existing local networks as the reference category, firms in countries with weak local networks are less likely to be delisted (OR = 0.563, p≤.001), but firms in countries with strong local networks are 2.626 times more likely to be delisted than are firms in countries with weak networks. Countries explain 12.62% of the variance of being delisted (ICC Intra Class Correlation coefficient).

**DISCUSSION AND IMPLICATIONS**

**Theoretical Implications for Studying the RDT-CSR Link**

Our results show the relevance of RDT for theorizing firms’ commitment to CSR. Pfeffer & Salancik’s (1978) contribution contained an explicit mentioning of corporate political activity (pp. 188-224). They noted: “the organization, through political mechanisms, attempts to create for itself an environment that is better for its interest.” (p. 189) While some
scholars have highlighted the general importance of firms’ interactions with their stakeholders for the flow of resources (see e.g., Hess & Warren, 2008), our study extends these insights by offering a more fine-grained analysis in two important contexts.

**Participant Heterogeneity and Resource Dependence.** Prior research has shown that resource dependencies drive firms’ CSR activities (Ortiz-de-Mandojana et al., 2012). But these contributions have treated firms, which depend on resources, as a rather homogenous entity. Existing studies at the intersection of CSR and RDT have mostly looked at larger companies (de Hafsi & Turgut, 2013; de Villiers, Naiker & van Staden, 2011). To further advance theory we need to know more about the boundary conditions under which RDT is more/less predictive of practices like CSR. Our study shows firms’ willingness and ability to use CSR as a strategy to manage environmental dependencies is influenced by their size and ownership status, which both act as boundary conditions of RDT in the context of managing CSR via principle-based MSIs. Hence, RDT explanations of CSR aim more towards larger and publicly traded firms. This is not to say that SMEs do not face any resource dependencies in the context of CSR. It is very likely that such dependencies exist vis-à-vis the local community context to which smaller firms are usually more directly attached (Spence, 2016). However, it is less likely that principle-based MSIs help SMEs to manage these dependencies. We thus extend resource dependence theory by showing that the dependency of an organization on principle-based MSIs as suppliers of social legitimacy and CSR knowledge varies according to firm size and ownership status.

Conversely, we can state that principle-based MSIs’ ability to influence their participants, either directly or indirectly, is related to the resources they control vis-à-vis participants and hence also limited to larger and publicly traded firms. This insight has direct consequences for the types of influence strategies that MSIs can use vis-à-vis firms (Frooman, 1999). MSIs have discretion over resource allocation, because they have the “ability to
articulate a credible threat of withdrawal” (Pfeffer & Leong, 1977: 779), for instance the removal of being listed as an active participant in the UNGC. But our results show that the success of such a withholding strategy is contingent upon size and ownership status of participants, and that the existence of a mere threat of withholding may work as an effective strategy for these participant groups. While SMEs can walk away from principle-based MSIs without much harm to themselves, larger firms can hardly do this and go unnoticed. One important area to explore in the future is to assess whether the dependencies between MSIs and larger firms are mutual. In situations of reciprocal exposure, principle-based MSIs depend to a certain degree on the participation of large firms and hence may not be able to withhold relevant resources without harming themselves.

**Indirect Influence Pathways.** So far, the literature on the RDT-CSR link has focused on those scenarios where those possessing a resource directly influence the provision of this resource to a firm (e.g., when wealthy neighborhoods receive preferential treatment by firms because of their financial and political influence; Kassinis & Vafeas, 2006). Our results confirm this perspective, because the MSI-participant link mostly rests upon a direct influence pathway. However, our study also extends this view by revealing the relevance of indirect influence pathways in the context of CSR. Frooman (1999: 198) defines such indirect pathways as situations “in which the stakeholder [here the MSI] works through an ally, by having the ally manipulate the flow of resources to the firm.” Our results confirm such indirect pathways for firm-investor links. We show that publicly traded firms, which usually have direct investor links, face a much lower likelihood of delisting, mostly because investors seem to directly punish delisting (Amer, 2015). This, in turn, demonstrates that principle-based MSIs’ themselves do not necessarily have to threaten participants as long as the latter have dependence relationships with other actors who care about participation in the initiative. Given that CSR is an area in which firms are confronted with different dependence
relationships, as relevant actors (e.g., NGOs and investors) have heterogeneous interests, such indirect influence pathways seem very relevant when studying MSIs. Observing such pathways in future research has to consider that a number of actors, who can indirectly influence MSI participation, can attach conditions to the continued supply of their resources to participants. Overall, this discussion shows that power related to resource relationships can be exercised (a) in different ways (either by completely withholding resources or by making the supply depended on conditions) and (b) by different actors (either MSIs themselves or other stakeholders).

**Theoretical Implications for MSI Theory**

*Participant Self-Selection.* So far, there is little longitudinal analysis of principle-based MSIs (mostly due to a lack of relevant data; for an exception see Haack et al., 2012). Our analysis suggests that late adopters face a lower likelihood of being delisted, while early adopters were delisted more often. Theoretically speaking, this points towards the existence of a self-selection mechanism. Over time, MSIs may attract those participants that know what they are getting into and that also know whether or not they can live up to the proposed principles. In the early days of an MSI the participant base is still more heterogeneous and knowledge about what the initiative is (and is not) is (a) increasing and (b) diffusing over time. As the MSI becomes more established, it is more attractive to a narrower base of informed potential participants. We believe that this mechanism is likely to hold for principle-based MSIs in general, as these initiatives have low entry barriers and therefore attract a broad mix of participants in their early days. We can thus assume that principle-based MSIs run through an initial phase where delistings can expected to be high, although this rate should decrease over time as participants gain more knowledge of the MSI. This insight shows the relevance of institutional-level learning (Haunschild & Chandler, 2008). A track record of
successes and failures of prior adopters is available once a MSI’s diffusion has progressed. Based on this, potential adopters can better judge whether and how a certain initiative fits their needs. Such an explanation of adoption behavior later in the diffusion process is not yet sufficiently integrated into the MSI literature.

**Local Networks and Legitimacy Spillovers.** Our analysis shows that the mere existence of local networks influences the delisting rate, while the strength of a network (measured by the number of active participants) does not seem to affect delistings significantly. This finding calls into question existing MSI theory, which suggests that the presence of more participants in a local network increases the level of engagement (Rasche, 2012). Our findings suggest that the presence of a network is already sufficient to prevent participants from leaving MSIs. Local networks with many participants do not automatically show lower delisting rates. We argue that what keeps participants from leaving an MSI is the existence of legitimacy spillover effects from existing network participants to newcomers.

Prior research has argued that “similarity” acts as a heuristic that allows outsiders to construct legitimacy transfers based on established categories (Kostova & Zaheer, 1999; Kuilman & Li, 2009). Being part of a local network acts as such an established cognitive category, in that networks unite firms that are similar in terms of their support for the UNGC. Outside audiences thus confer legitimacy to UNGC participants based on whether they can typify them into a category of organizations that share a common feature (Haack et al., 2014). Leaving the UNGC would imply losing access to the local network and hence the perceived association with a similar class of organizations. Although participants in local networks are likely to differ in terms of their size and sector, they are all similar in terms of being perceived as working towards goals that are organized under the UN umbrella. As the UN enjoys high levels of trust and legitimacy, we can expect that outsiders will confer legitimacy to organizations that they can typify into a recognized cognitive category (i.e. “UNGC local
networks members”). We believe that such legitimacy spillovers are tied to local networks, as these networks are the “face” of the UNGC on the local level and hence more known to local audiences.

Policy Recommendations

**Principle-based MSIs.** Our study shows that principle-based MSIs may be at risk of suffering from adverse selection in their early stages of development. Low entry barriers and a high level of delisting are likely to damage the reputation and legitimacy of an initiative. The legitimacy of an MSI is hard to judge from the outside and by non-experts. Hence, evaluators will rely on heuristics (see above). Publicly available information on delistings (via a website) acts as such a heuristic and thus influences MSIs’ perceived legitimacy. In case of a high delisting rate, firms with a strong CSR profile will find it harder to credibly signal their performance. As a result, better performing companies may shy away from participation, as they expect negative legitimacy spillovers. For policy makers this implies (a) that it is important to sufficiently differentiate MSI participants within an initiative (e.g., through different levels of participation) and (b) to carefully adjust entry barriers. Currently, most principle-based MSIs have rather low entry barriers. We suggest increasing entry barriers to a level that ensures that participants have a basic willingness to engage in the initiative and the necessary resources to do so. This could be done in different ways (e.g., by changing reporting requirements and asking for a sign-up fee). However, we also caution that entry barriers and graduated levels of entry need to be set in a way that the respective MSIs are able to keep a diverse participant base. Club theory suggests that MSIs, which only attract CSR leaders, may be ineffective due to a lack of learning effects (Berliner & Prakash, 2014). Principle-based MSIs have to reward leaders, while, at the same time, allow laggards to ratchet up their performance.
**UN Global Compact.** One key recommendation would be to make COP reporting a condition for entering the UNGC, instead of making it an outcome of participation. Our results suggest that a large number of firms do not seem to be interested in aligning their business practices and strategies with the UNGC’s ten principles. Hence, those who argue that a large number of firms misuse the initiative for “blue-washing” (Berliner & Prakash, 2015) may indeed have a point. Making the submission of a COP report a precondition for participation would slightly increase entry barriers and also offer a baseline from where to judge future implementation progress. The COP report could then outline how the ten principles are addressed at the time of joining, and what plans exist for the future. Such a policy change would also ensure that new participants have already gained some experience with reporting non-financial information and are aware of the required resources.

Our results also suggest that the UNGC currently has no mechanism in place that allows deviant companies to be punished. The UNGC assumes that delisted firms are punished through the *public* nature of delistings – all expelled firms are listed on a “name and shame” board on the initiative’s website (Hamid & Johner, 2010). Our findings suggest that this mechanism is likely to influence larger publicly traded firms, while it does not show much effect on SMEs. As the exit option is not costly for SMEs, and as delisted firms can reapply to the UNGC at any time, there are incentives for firms to free ride (i.e. join the initiative for three years without any reporting). We thus recommend requiring asset-specific investments from all new participants. Such investments create sunk costs and hence make the exit option more costly (Prakash & Potoski, 2007). Practically speaking, such investments can be required by making participation in local networks mandatory for all participants. This would require firms to participate in and contribute to collective action activities. As such activities are only accessible by network members, participants’ investment in them (either financial or non-financial) is hard to regain.
CONCLUDING REMARKS

Given the growing attention to principle-based MSIs in organization studies (e.g. Haack, et al., 2012; Helms, Oliver, & Webb, 2012) and their relevance to address social and environmental problems (Fransen & Kolk, 2007), it is crucial to better understand what types of firms are affected by this mode of private regulation. Recently, there have been calls on management scholars to address the “grand challenges” of society – that is, the “specific critical barrier(s) that, if removed, would help solve an important societal problem with a high likelihood of global impact through widespread implementation.” (George et al., 2016: 1881) As MSIs attempt to regulate many of these grand challenges, we view our analysis of what types of firms voluntarily leave a leading principle-based MSI as important and timely.

Our results show that firm size, ownership structure, join year, and the existence of local networks influence whether firms decide to leave MSIs. Our discussion reveals that these results have important implications for better understanding the significance of participant heterogeneity and indirect influence pathways when thinking about how resource dependencies influence firms’ CSR-related activities. We do not claim that our findings hold for all types of MSIs. Our research is based on an in-depth investigation of the UNGC – the largest principle-based MSI at the moment. Our results are likely to be applicable in the context of other principle-based initiatives, such as, but not limited to: the Principles of Responsible Investment and the Equator Principles. Although these initiatives differ in some respects, they also share some commonalities (e.g., they require annual implementation reports and delist non-compliant participants). Future research can test the robustness of our results in the context of these initiatives, and can also discuss in how far resource dependency relationships differ between principle-based MSIs and other types of initiatives. A particular challenge is to gain deeper insights into whether other stakeholders than investors allow MSIs
to use indirect influence pathways to control the flow of resources. For instance, it is likely that governmental actors can play a similar role in those national contexts where public procurement decisions are impacted by firms’ MSI participation.
# Table 1. Descriptive statistics and correlations (dependent and independent variables)

<table>
<thead>
<tr>
<th>#</th>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Delisted</td>
<td>0.59</td>
<td>0.49</td>
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<td>1</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>SME</td>
<td>0.60</td>
<td>0.49</td>
<td>0</td>
<td>1</td>
<td>0.29***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3</td>
<td>FT500</td>
<td>0.02</td>
<td>0.13</td>
<td>0</td>
<td>1</td>
<td>-0.15***</td>
<td>-0.16***</td>
<td>1</td>
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</tr>
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<td>4</td>
<td>Publically traded</td>
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<td>0.30</td>
<td>0</td>
<td>1</td>
<td>-0.24***</td>
<td>-0.36***</td>
<td>0.38***</td>
<td>1</td>
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</tr>
<tr>
<td>5</td>
<td>Early adopter</td>
<td>0.53</td>
<td>0.50</td>
<td>0</td>
<td>1</td>
<td>0.24***</td>
<td>-0.09***</td>
<td>0.06***</td>
<td>0.06***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>local network: none</td>
<td>0.12</td>
<td>0.32</td>
<td>0</td>
<td>1</td>
<td>0.14***</td>
<td>-0.01</td>
<td>-0.04***</td>
<td>-0.05***</td>
<td>0.09***</td>
<td>1</td>
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</tr>
<tr>
<td>7</td>
<td>local network: weak</td>
<td>0.26</td>
<td>0.44</td>
<td>0</td>
<td>1</td>
<td>-0.08***</td>
<td>0.00</td>
<td>0.05***</td>
<td>0.06***</td>
<td>0.00</td>
<td>-0.22***</td>
<td>1</td>
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<tr>
<td>8</td>
<td>local network: strong</td>
<td>0.62</td>
<td>0.49</td>
<td>0</td>
<td>1</td>
<td>-0.02***</td>
<td>0.01</td>
<td>-0.02*</td>
<td>-0.02</td>
<td>-0.06***</td>
<td>-0.48***</td>
<td>-0.75***</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$;
Table 2. Testing hypotheses with descriptive statistics and ANOVAs

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Variable</th>
<th>Total</th>
<th>Listed</th>
<th>Delisted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n</td>
<td>(%)</td>
<td>(%)</td>
</tr>
<tr>
<td>H1a</td>
<td>SMEs</td>
<td>6,304</td>
<td>(100%)</td>
<td>(32.74%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2,064</td>
<td>(32.74%)</td>
<td>(67.26%)</td>
</tr>
<tr>
<td>H1b</td>
<td>MNEs</td>
<td>4,400</td>
<td>(100%)</td>
<td>(62.14%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2,734</td>
<td>(62.14%)</td>
<td>(37.86%)</td>
</tr>
<tr>
<td></td>
<td>FT500</td>
<td>184</td>
<td>(100%)</td>
<td>(99.46%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>183</td>
<td>(99.46%)</td>
<td>(0.54%)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>10,515</td>
<td>(100%)</td>
<td>(43.88%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4,614</td>
<td>(43.88%)</td>
<td>(56.12%)</td>
</tr>
<tr>
<td>H2</td>
<td>Publicly traded firms</td>
<td>1,127</td>
<td>(100%)</td>
<td>(79.77%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>899</td>
<td>(79.77%)</td>
<td>(20.23%)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>9,577</td>
<td>(100%)</td>
<td>(40.71%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3,899</td>
<td>(40.71%)</td>
<td>(59.29%)</td>
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<tr>
<td>H3</td>
<td>Early adopters</td>
<td>6,766</td>
<td>(100%)</td>
<td>(33.70%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,943</td>
<td>(33.70%)</td>
<td>(66.30%)</td>
</tr>
<tr>
<td></td>
<td>Late adopters</td>
<td>4,938</td>
<td>(100%)</td>
<td>(57.82%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2,855</td>
<td>(57.82%)</td>
<td>(42.18%)</td>
</tr>
<tr>
<td>H4a/b</td>
<td>No network/ no information</td>
<td>1,323</td>
<td>(100%)</td>
<td>(26.00%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>344</td>
<td>(26.00%)</td>
<td>(74.00%)</td>
</tr>
<tr>
<td></td>
<td>Weak network</td>
<td>2,789</td>
<td>(100%)</td>
<td>(51.63%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,440</td>
<td>(51.63%)</td>
<td>(48.37%)</td>
</tr>
<tr>
<td></td>
<td>Strong network</td>
<td>6,592</td>
<td>(100%)</td>
<td>(45.72%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3,014</td>
<td>(45.72%)</td>
<td>(54.28%)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>10,704</td>
<td>(100%)</td>
<td>(44.82%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4,798</td>
<td>(44.82%)</td>
<td>(55.18%)</td>
</tr>
</tbody>
</table>

Note: * if p < 0.05, ** if p < 0.01, *** if p < 0.001.
Table 3. MMGLM estimates of H1 to H4 on being delisted from the UNGC

<table>
<thead>
<tr>
<th>Variables</th>
<th>(1) Delisted Odds ratios</th>
<th>(2) Delisted Odds ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hypothesis H1a</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMEs</td>
<td>3.506***</td>
<td>3.506***</td>
</tr>
<tr>
<td></td>
<td>(0.210)</td>
<td>(0.210)</td>
</tr>
<tr>
<td>Other</td>
<td>ref.</td>
<td>ref.</td>
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<tr>
<td><strong>Hypothesis H1b</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FT 500</td>
<td>0.017***</td>
<td>0.017***</td>
</tr>
<tr>
<td></td>
<td>(0.017)</td>
<td>(0.017)</td>
</tr>
<tr>
<td>Other firms</td>
<td>ref.</td>
<td>ref.</td>
</tr>
<tr>
<td><strong>Hypothesis H2</strong></td>
<td></td>
<td></td>
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<td>Publicly traded firms</td>
<td>0.374***</td>
<td>0.375***</td>
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<tr>
<td></td>
<td>(0.037)</td>
<td>(0.037)</td>
</tr>
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<td>Other firms</td>
<td>ref.</td>
<td>ref.</td>
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<td><strong>Hypothesis H3</strong></td>
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<td>Early adopters</td>
<td>3.222***</td>
<td>3.222***</td>
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<tr>
<td></td>
<td>(0.306)</td>
<td>(0.306)</td>
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<td>Late adopters</td>
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<td>ref.</td>
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<tr>
<td><strong>Hypothesis H4a/b</strong></td>
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<td>no network/no</td>
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<td>ref.</td>
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<tr>
<td>information</td>
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<tr>
<td>local network exists</td>
<td>2.424***</td>
<td>2.424***</td>
</tr>
<tr>
<td></td>
<td>(0.103)</td>
<td>(0.103)</td>
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<tr>
<td>weak network</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.544***</td>
<td>(0.018)</td>
</tr>
<tr>
<td>strong network</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>2.424***</td>
<td>(0.103)</td>
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<tr>
<td>log likelihood</td>
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<td>-5.592</td>
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<td>ICC</td>
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<td>12.62%</td>
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<tr>
<td>n Groups</td>
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<td>112</td>
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<tr>
<td>N</td>
<td>10,565</td>
<td>10,565</td>
</tr>
</tbody>
</table>

Note: * if $p < 0.05$, ** if $p < 0.01$, *** if $p < 0.001$. Odds ratios are presented, robust standard errors in parentheses. The dependent variable is the dummy delisted, the controls include dummies of industry sectors on the firm level and a dummy for OECD on the country level.
REFERENCES


