Building Alliances for Socially Responsible Sourcing

Introduction. A series of armed conflicts have afflicted the Democratic Republic of the Congo (DRC) since the 1960s, causing more than five million deaths from 1998 to 2007 alone. A main source of funding for these war groups is minerals mined in the DRC used by a wide range of manufacturers. By using these minerals, the manufacturers inadvertently funnel funds into the conflicts. In response to this humanitarian crisis, the U.S. Congress passed legislation requiring manufacturers who use these minerals to trace and disclose their sources and NGOs launched various campaigns pressuring manufacturers to address the issue. In 2008, a collection of manufacturers across industries established the Responsible Minerals Initiative (RMI) to collectively audit upstream suppliers, especially smelters. The RMI improved the cost efficiency of certifying smelters and avoided smelters’ “auditing fatigue” caused by manufacturers auditing separately. To boost the initially sluggish smelter participation, five companies—Apple, GE, HP, Intel, and Microsoft—donated funds to launch an Initial Audit Fund (IAF) to reimburse smelters for their first year’s audits. In the years that followed, many more manufacturers followed suit.

Given the relatively small number of smelters for these minerals worldwide, the manufacturers’ mineral supply chains intertwine and overlap substantially. In addition, any manufacturer may procure from RMI-certified smelters (and can thus demonstrate that their minerals are “conflict-free”), regardless of whether they contribute to the IAF or not. As a result, the IAF resembles a public good: the whole industry benefits when it exists; however in equilibrium no company has incentives to contribute (the free-rider problem). So why do companies donate to the IAF? Three features of the IAF may elucidate the forces at work: First, the identities of the contributors are publicly listed on RMI’s website; second, the five initial contributors are listed separately and prominently above the subsequent contributors; and third, contributors are heterogeneous in their reputation and brand recognition as measured by their brand value and the five initiating donors are clearly among those with the most prominent brands. Based on these
observations, we propose two main mechanisms that explain the firm’s incentives to contribute: (i) an early contribution stage, when some companies may take the lead to establish the Fund by donating first, and (ii) differences in status in the form of the brand value that influence the companies’ decisions: A company wants to be associated with other well-known companies beyond any direct economic benefits. The objective of this work is to study whether and how these two mechanisms affect companies’ contributions to the fund.

**Model.** We model this voluntary contribution problem as a two-stage game with four players (representing companies)—two with high status and two with low status. Each player decides whether to contribute an initial endowment to a shared fund (the public good) or not to contribute anything. All contributions to the fund generate a return that benefits all players equally. In the first stage, called the *invitation stage*, a randomly selected *initiator* is given the option to invite another player to commit to contribute together in the second stage. If the initiator chooses to invite another player and she accepts, then both the initiator and the *invitee* commit to contribute; otherwise, no player is committed. In the second stage, called the *contribution stage*, every committed player automatically contributes, while each uncommitted player decides whether to contribute or not. At the end of the game the return from the fund is distributed equally among the four players with each player who has not contributed keeping her endowment. As in the canonical public good game, the parameters are such that if everyone contributes then every member is better off, but if each member only maximizes her own direct monetary payoff, no one contributes in equilibrium.

We assume a player cares about the monetary payoff and about status. We show that when a player’s *concern for status* is sufficiently high, an uncommitted low-status player will contribute if at least one high-status player contributes. Therefore, when the initiator has low status, either there is no contribution in equilibrium or the initiator will invite a high-status player, who will accept the invitation (depending
on the concern for status and the marginal benefit from the public good). In equilibrium three players—both committed players and the other low-status player—contribute to the public good. When the initiator has high status, both high-status players will commit and all players will contribute to the public good in the unique equilibrium.

**Experiment.** Our theoretical model predicts that both the invitation stage and the difference in status are necessary for contributions to arise. To test these predictions, we design a laboratory experiment with four treatments: The Baseline Treatment is a canonical public good game with neither an invitation stage nor status difference. In the Status Treatment the players have different statuses (the computer randomly assigns each subject a high- or low-brand-value status) but no option to commit early. In the Invitation Treatment, the players have no status difference but can invite and commit early. In the Full Treatment, both the invitation mechanism and the status difference are present.

We find that a significant proportion (67.5%) of initiators choose to send out invitations. High-status players are invited about twice as often as low-status players. Most invitations are accepted. Importantly, when at least one of the initiator or invitee has high status, the probability of acceptance is significantly higher. When an alliance is established, the uncommitted players contribute significantly more (nearly ten times as much) than without an alliance. However, there is no significant difference in the followers’ contributions between different alliance member status combinations. The invitation mechanism significantly increases the overall contributions while the presence of status makes no significant difference therein.

These results suggest that allowing an early contribution opportunity by some companies improves the effectiveness of fundraising for a shared social responsibility program. If the initiating company is of a lesser-known brand, they may want to approach some big names in the industry who will be more likely to join the undertaking.