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ORCHESTRATING CORPORATE SOCIAL RESPONSIBILITY IN THE MULTINATIONAL ENTERPRISE

Running Head: *The Responsible Multinational Firm*

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ABSTRACT (Research Summary)

Multinational enterprises (MNEs) invest significant resources in corporate social responsibility (CSR), but their attempts to build a global “social brand” may clash with the execution of operational strategies at a subsidiary level. Using a game-theoretic model, this research addresses the complex interplay of different contingencies that shape the coordination and control challenges facing MNEs when they implement global CSR strategies, including brand spillovers, the risk of public scandals caused by irresponsible behavior, the size of the MNE network, as well as the roles played by non-governmental organizations and altruistic managers. Challenging the view of CSR as insurance against lapses of responsible conduct, our model shows that investment in social brands helps avoid irresponsible practices across the MNE network, thereby inducing subsidiaries to “walk the talk”.

ABSTRACT (Managerial Summary)

Global social brands are increasingly valuable to multinational enterprises, which makes the control and coordination of responsible behavior across their network of foreign subsidiaries a relevant managerial challenge. Indeed, lapses of responsible conduct at the subsidiary level often generate reputational damage at the multinational level. This research explores several mechanisms that help multinational enterprises manage this coordination and control challenge. First, it shows under what conditions multinational enterprises can leverage their investments in social brands to induce responsible practices across their global network. Second, it illustrates how multinational enterprises can exploit collaborations with non-governmental organizations to reduce the costs of coordinating and controlling their

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subsidiaries. Finally, it identifies conditions under which multinational enterprises benefit from hiring altruistic managers to run their subsidiaries.

Keywords: CSR, MNEs, coordination and control, social brand, irresponsible behavior

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INTRODUCTION

Investments in corporate social responsibility (CSR) by multinational enterprises (MNEs) have increased in recent years. Jointly, *Fortune 500* companies spent more than \$15 billion in 2014 to spearhead a variety of CSR initiatives (*Financial Times*, 2014). By 2016, 71 Fortune 100 companies had set renewable energy or sustainability targets, of which 22 had committed to powering all of their operations with renewable energy.¹ In most cases, CSR initiatives are broadcasted by MNEs through sustainability reports, webpages, corporate communications, advertising campaigns, logos, and trademarks, with the ultimate goal of building global “social brands” (Huber *et al.*, 2011). Recent studies have indeed shown that investment in CSR may enhance the bottom line (Flammer and Kacperczyk, 2016; Kaul and Luo, 2018; Bode, Singh, and Rogan, 2015; Fosfuri, Giarratana, and Roca, 2015).

However, to enjoy the economic benefits stemming from CSR initiatives, MNEs must ensure that CSR actions and policies are consistently implemented across their network of subsidiaries. This task is particularly challenging in a global context, where subsidiary managers are geographically and culturally separated from each other and from corporate headquarters (HQ), thereby often leading to the reliance on financial performance as one important control mechanism (Gomez-Mejia and Wellbourne, 1991; Roth and O’Donnell, 1996). Moreover, the HQ and the subsidiaries may differ on the level of CSR engagement they deem appropriate. In a recent study, for example, Durand and Jacqueminet (2015) show that when subsidiaries face strong demands from their external constituents, they pay less attention to the internal CSR norms imposed by the HQ. Hence, when managers at the

¹ http://www.ourenergypolicy.org/wp-content/uploads/2016/12/F100_F500.pdf

subsidary level make choices about day-to-day operations, they may be tempted to cut corners to increase their subsidiary's profits, expand the output, win contracts, or simply adjust to idiosyncratic competitive conditions—even if such decisions conflict with the social brand of the MNE (Lyon and Montgomery, 2015; McDonnell and King, 2013; Aguilera *et al.*, 2007).

While issues of coordination and control within firms have been studied in the strategic management and international business literatures (e.g. Bartlett and Ghoshal, 1989; Kogut and Zander, 1996), how they specifically manifest and how they are addressed in the global CSR context have received scant attention (see Husted and Allen, 2006, and Durand and Jacqueminet, 2015, for notable exceptions). This is an important gap for, at least, two reasons. First, anecdotal evidence suggests that MNEs often fail in addressing CSR coordination challenges, as the cases of companies like Walmart, Nestlé, BP and Nike demonstrate, with severe social and economic consequences. While the disconnect between what the HQ wants and how subsidiaries actually act in the realm of sustainability has been studied at the HQ-subsidiary level (see, for instance, Filatotchev and Stahl, 2015; Marano and Kostova, 2016), little attention has been placed on the consequences of the potential interdependence among subsidiaries.² Second, CSR engagement is typically *non-experiential*—a “credence good” according to Feddersen and Gilligan (2001)—because the consumer cannot assess a firm's CSR commitment even after repeated purchases of its products or services, and it is fungible at the firm level because it is ascribed to the firm's behavior rather

² Jacqueminet and Durand (2015) theorize and show that the behavior of one subsidiary in the realm of sustainability is influenced by the behavior of all other subsidiaries; however, they use the logic of institutional theory and conformity, rather than coordination games, and treat the investment in the social brand—a key variable of interest in our paper—as exogenous.

than to the specific product. This, in turn, implies that one CSR breach at a given subsidiary might destroy an entire MNE's social image even if other subsidiaries behave responsibly, creating a special type of international interdependence among subsidiaries.

This paper explores the coordination and control challenges facing MNEs when they implement global CSR strategies. To accomplish this goal, we develop a game-theoretic model where CSR investment is motivated by its impact on the bottom line (Jones, 1995; Barnett, 2007). In our model, the MNE's headquarters (HQ) chooses a level of investment into a global social brand by performing costly and highly visible actions (which could be anything from green advertising to sponsoring social initiatives) that signal the firm's commitment to CSR (but may or may not make a real impact on social outcomes). On the other hand, subsidiaries (which top management cannot fully control) are in charge of less visible operational practices that do substantially affect social outcomes. We assume that subsidiaries have a dichotomous choice between socially responsible and irresponsible behavior in terms of their operational practices. Irresponsible behavior can produce a higher return for the subsidiary if it goes undetected by the outside world; however, if it is detected the global social brand is undermined, which in turn hurts all subsidiaries. If the responsible behavior is too costly for the HQ to enforce, a coordination problem may arise. Each subsidiary, fearing that irresponsible behavior by peer subsidiary managers will damage the global social brand, prefers to free-ride and reap the private benefits of irresponsible behavior. In this case, all subsidiaries behave socially irresponsibly in equilibrium, and the MNE's performance declines.

Beside the standard solution based on monitoring, control, and enforcement, our model highlights three CSR-specific mechanisms that attenuate this coordination problem. First, we show that MNEs might achieve CSR coordination by overinvesting in the social brand (compared to the investment in the absence of CSR coordination problems) with the goal of increasing subsidiaries' opportunity costs of non-compliance. This is a novel finding in the CSR literature where investment in social brand has typically been argued to act as an insurance policy against reputation damage caused by lapses in responsible management practice (Godfrey, Merrill, and Hansen, 2009). We show instead that investment in the social brand helps avoid, rather than cushion, socially irresponsible practices undertaken by subsidiaries, implying that social brands, under some conditions, can be positively correlated with responsible behavior. This mechanism works for a moderate number of subsidiaries, but it breaks down with more subsidiaries, and the resulting coordination failure leads the MNE to lower its social brand investment, while the subsidiaries behave irresponsibly. Thus, another novel insight of our model is the potential non-monotonicity between investment in the social brand and the scope of internationalization. In turn, this might help explain mixed empirical evidence about the relationship between CSR investment and internationalization (Attig *et al.*, 2016; Ma *et al.*, 2016). Second, we show that engagement with social activists and non-governmental organizations (NGOs) at the local level might act as a substitute for overinvestment in the social brand and/or internal monitoring. The reason is that such engagement makes irresponsible behavior more visible, thus increasing each subsidiary's costs of non-compliance. Unexpectedly, our model predicts that greater detection risk can, under certain conditions, be associated with better overall performance for the MNE. Third,

our model illustrates a novel mechanism to achieve coordination across subsidiaries, namely, by hiring altruistic managers who have intrinsic preferences for CSR. We identify under which conditions hiring an altruistic manager solves the CSR coordination problem and increases overall MNE performance, and under which conditions it is detrimental. Interestingly, we find that firms hiring more altruistic managers do not necessarily have the strongest social brands, and that altruistic managers are more likely at intermediate levels of international exposure, empirical implications that could be eventually brought to the data.

Finally, because subsidiaries of MNEs are embedded in the external context in which they operate (Meyer, Mudambi, and Narula, 2011) and there is large country variation in such external contexts, we extend the basic model to address the role of heterogeneity across countries. We show that, as the heterogeneity in country markets increases, overinvestment in the social brand becomes a relatively less effective mechanism to achieve CSR coordination.

McWilliams and Siegel (2001) pioneered the notion that CSR investment should be assessed with a cost–benefit analysis; accordingly, we assume that CSR engagement, though costly, may have a positive impact on the bottom line. We depart from prior formal models of the determinants of CSR investment (e.g. Baron, 2001; Feddersen and Gilligan, 2001; Husted and Salazar, 2006) in two important dimensions.³ First, our model relaxes the assumption that the HQ can fully control CSR activities at the unit/division/subsidiary level, a constraint that has never been considered in previous formal analyses, but has been identified as an important challenge for CSR coordination in empirical research (Durand and Jacqueminet,

³ Kaul and Luo (2018) develop a formal model to study under what conditions CSR investment by a corporation is socially efficient when the same social good can be supplied by a non-profit organization.

2015). Second, our analysis explicitly incorporates and emphasizes the global (MNE) perspective in the context of CSR.

After describing the baseline model and its underlying assumptions, the next section shows how MNEs can use investment in the social brand as a mechanism to achieve CSR coordination across subsidiaries. It also explores how such a mechanism performs under different contingencies, like for instance the size of MNE network or the risk of detection. Section 3 introduces two other coordination mechanisms that exploit the social dimension of the CSR coordination challenge: interacting with NGOs and activists, and hiring altruistic managers. Section 4 investigates the consequences of different dimensions of heterogeneity across country markets. Section 5 concludes by assessing our contribution to extant literature and offering insights on future research avenues. Formal proofs, technical details and extensions are included in the online appendix.

A MODEL OF CSR COORDINATION IN MNES

Our model is a three-stage game, in which we consider an MNE with subsidiaries located in different country markets. In the first stage, HQ managers choose how much to invest in developing the *global social brand* of the MNE. This investment could include various components such as support for global campaigns to eradicate diseases, defend human rights, or protect the environment; expenditures to advertise the firm's commitment to CSR, such as profiling itself and its products as green; or efforts to create and communicate to stakeholders a certain code of conduct. A defining feature of all these endeavors is that they are *highly visible* to the relevant stakeholders and feed into the social brand of the MNE. Some of these

investments may also have a real social impact (more ‘substantive’ actions such as charity donations), while others may not (purely ‘symbolic’ actions such as advertising). Realistically, most firms’ social brand investment is likely to be a mix of symbolic and substantive actions, as we elaborate below. We assume that HQ managers choose the level of the social brand in an attempt to maximize the overall profits of the MNE (sum of all subsidiary profits minus the cost of the social brand).

Then, in the second stage, the managers of the subsidiaries choose whether to behave responsibly or irresponsibly. Broadly, responsible behavior consists of strictly substantive actions that are consistent with the social brand, whereas the irresponsible behavior violates these principles, and has negative (or less positive) social consequences. A subsidiary manager makes this choice to maximize the local subsidiary’s profits, without considering the social impact or potential effects on other subsidiaries (later, however, we will also allow the subsidiary’s managers to have intrinsic preferences for CSR). Unlike the investment in the social brand, these behaviors are difficult to observe and verify and therefore the HQ cannot write enforceable contracts with subsidiary managers around them. The HQ can create various coordination mechanisms that drive the CSR behavior of subsidiaries, but these come at a cost as we specify below. Finally, in the third stage, the MNE, through its subsidiaries, reaps profits in different country markets, and the amount of these profits depends on whether the subsidiaries behave responsibly or not, the amount of investment in the social brand, and the risk (probability) of brand damage.

Behaving irresponsibly in the second stage has two consequences for the subsidiary and the MNE: It increases the profits of the subsidiary by a certain amount, but it also creates

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the risk that the MNE's social brand will be damaged if the irresponsible behavior is detected. For example, a local subsidiary might engage in environmentally damaging manufacturing processes or adopt sweatshop-type labor practices; these options produce a trade-off between cost savings (or profit boosting) and the risk of brand damage. Here, we assume these practices are legal and cannot be restrained by lawmakers. Thus, in the absence of intrinsic preferences for responsible behavior, the risk of being detected and losing the expected benefits associated with the social brand is the only factor that might restrain the subsidiary from behaving irresponsibly.⁴ It is worthwhile clarifying that our focus here is on the profit maximizing decisions of the different agents, i.e. the HQ and the subsidiaries, although we acknowledge that both the investment in the social brand (through its substantive component) and the (ir)responsible behavior of subsidiaries have broader repercussions on social welfare. Given the goal of this research, we focus below on the "optimal" (profit maximizing) strategies of the MNE, but we will discuss how these choices may differ from the "optimal" (welfare maximizing) choices for society in the conclusion.

Our model comes with a few simplifying assumptions that, we believe, are close approximations of reality. First, while we do not explicitly model incentive schemes, our behavioral assumptions are consistent with a number of schemes that link subsidiary performance to managerial payoffs, such as bonuses, promotion ladders, risk of getting fired, etc. Basing such schemes on subsidiary performance is very common in MNEs as a simple and effective way to address the asymmetric information problem (see Roth and O'Donnell,

⁴ Linking the threat of firing subsidiary managers explicitly to irresponsible actions is likely to be insufficient to solve the moral hazard problem in our model, due to the limited liability and outside options of the managers, the difficulty of credibly committing to the threat, and the non-contractible and unobservable nature of the effort (e.g. auditing suppliers or reducing risk of environmental disasters).

1996). Second, we disregard operations that are directly managed by the HQ, as well as social brand building performed by the subsidiaries. While this can be considered a simplification, evidence overwhelmingly supports such a division of labor, where HQ managers are responsible for shared corporate resources (e.g., brand), and lower-level managers take charge of local operations (Crilly, Zollo, and Hansen, 2012; Durand and Jaqueminet, 2015).

Assumptions

We assume that the number of subsidiaries, denoted n , is exogenous at the time the HQ and the subsidiaries make their choices about CSR. We will discuss later how the scope of the MNE might depend on CSR coordination issues if treated as endogenous. With n exogenous, we can focus on the *incremental* profits due to CSR activities, which depend on the choices of both the HQ and subsidiaries. In the third stage, each symmetric subsidiary gains $B(V)$ from the social brand V developed by the MNE HQ if all subsidiaries behave responsibly. We assume that $B(V)$ is increasing, differentiable and non-convex in V and that $B(0) = 0$. As mentioned above, V is likely to be the outcome of both substantive and symbolic activities, and in the online Appendix 1 we show that our model is consistent with, for example, a Cobb-Douglas production function taking as inputs these two types of CSR. However, since the mix of symbolic and substantive activities in itself has no bearing on the profit-maximizing choice of the overall social brand level, we abstract from it in the following analyses.

By behaving irresponsibly, a subsidiary can increase its profits by Δ . For example, it might bypass some investments that would make its production less polluting, spend less time monitoring suppliers, or choose not to guarantee healthy working conditions in its

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facilities. Some industries and activities offer more of these opportunities than others and therefore have higher Δ . For instance, offshore oil drilling creates powerful trade-offs between private economic objectives (e.g., speeding up expensive drilling projects) and social objectives (e.g., minimizing the risk of environmentally damaging oil spills, see Roberto, 2011).

Irresponsible behavior is detected with probability x and goes unnoticed with probability $1 - x$. If an irresponsible behavior is detected, the value of the social brand drops to 0 for the irresponsible subsidiary, whose profits are then just Δ . Our model thus is consistent with a view that suggests CSR entails balancing cost savings with potential threats to the firm's reputation (Falck and Heblich, 2007). Importantly, however, the detection of irresponsible behavior at a given subsidiary produces *spillovers* to other subsidiaries, which could cause global brand damage. For example, BP lost nearly \$100 billion in market value in the aftermath of the Deepwater Horizon spill (Roberto, 2011). The extent to which brand crises spill over to other subsidiaries depends on the extent to which the social brand is global in nature—a contingency we capture with the parameter β , such that $0 \leq \beta \leq 1$, where lower values imply stronger brand spillovers. If irresponsible behavior is detected in any given subsidiary, the value of the social brand becomes βV in all other subsidiaries.

Finally, the total cost of building a social brand for the MNE is $\lambda C(V) + (1 - \lambda)nC(V)$. The first term captures the “fixed” (country-invariant) costs and the second term the “marginal” (per-country) costs of social brand building. The fixed costs could be seen as the costs of creating the social brand, and the marginal costs as those of rolling out this brand on a country-by-country basis. Thus, $\lambda \in [0,1]$ captures the extent of economies of

scale in global brand building. If $\lambda = 0$, such economies do not exist and the cost of building the social brand, $nC(V)$, increases linearly with the number of countries. For instance, a company that wants to build a global green brand might make its production plants energy efficient by installing solar panels on the roofs, or support activities to fight deforestation, in each different location. On the other hand, if $\lambda = 1$, the costs become $C(V)$ and are therefore independent of n . In this case, a social brand is a fully fungible and scale-free resource, which, once developed, can be applied everywhere at zero marginal costs. We assume $C(V)$ is increasing, differentiable and strictly convex in V .

Solution

We can solve the game by backward induction, analyzing what happens in stage 2 before moving to stage 1, having already defined profits in different country markets and contingencies (stage 3) in the previous subsection. In stage 2, the level of the social brand developed by the HQ is taken as given by the managers of the subsidiaries. In their decision, they assess the benefits of irresponsible behavior, i.e. an increase in profits by Δ , relative to its costs, i.e. the loss of the expected benefits associated with the social brand. The latter component depends on the detection risk, x , but also on the behavior of other subsidiaries. Indeed, the expected benefits of the social brand are higher if all other subsidiaries behave responsibly, implying that the focal subsidiary has less incentive to adopt an irresponsible behavior. Instead, if all other subsidiaries behave irresponsibly, the losses associated with an irresponsible behavior are lower because it is more likely that the social brand is already damaged by irresponsible behaviors in other parts of the MNE network.

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Stage 2 of the game consists therefore in finding the equilibrium of this coordination game among subsidiaries. Before formalizing the solution in Proposition 1, it is worthwhile to emphasize three intuitive elements of the equilibrium of such a game. First, the choice of the managers of each subsidiary depends on the level of the social brand. The higher the social brand, the costlier is the potential loss associated with the detection of an irresponsible behavior, other things equal. Second, because subsidiaries are ex-ante symmetric, it is plausible to expect that they all behave the same in equilibrium either responsibly or irresponsibly. Finally, in coordination games, multiple equilibria might arise. In our setting, this implies that there are situations in which both all subsidiaries behaving responsibly and all behaving irresponsibly are equilibria. Advances in game theory (theoretical and experimental) have supported Harsanyi and Selten's (1988) concept of *risk dominance* as a realistic criterion for equilibrium selection in case of multiple equilibria (Carlsson and Van Damme, 1993; Kandori, Mailath, and Rob, 1993; Matsui and Matsuyama, 1995; Battalio, Samuelson, and Van Huyck, 2001).⁵ We accordingly assume it to guide subsidiary actions in the absence of HQ coordination.

We can now state the following proposition (see online Appendix 2 for a formal proof):

Proposition 1: Using risk dominance as a criterion for equilibrium selection, all subsidiaries behave responsibly if the social brand is sufficiently strong ($V \geq V^C$, where V^C solves $\Delta/x = (1 - x/2)^{n-1}B(V) + [1 - (1 - x/2)^{n-1}]B(\beta V)$). Otherwise, they all behave irresponsibly.

⁵ This concept assumes that players are uncertain about the actions of their opponents (Harsanyi, 1955; Selten, 1955), consider the potential costs of miscalculating opponents' strategies, and evaluate off-equilibrium payoffs.

The key result of Proposition 1 is that when the social brand moves above a certain threshold (V^C), subsidiary managers switch from an irresponsible to a responsible behavior. Technically, by increasing the cost of irresponsible behavior, social brand investment transforms the responsible behavior of each subsidiary into the less risky strategy in equilibrium.

We can now move to stage 1 and study the optimal investment in the social brand by the MNE. We provide the gist of the argument here, while the full analysis with comparative statics is included in online Appendix 3. The HQ anticipates the outcome of the coordination game among subsidiaries and chooses the level of the social brand accordingly. The willingness of the HQ to invest depends on the anticipation of subsidiary actions, i.e. whether they behave responsibly (R) or irresponsibly (I). If all subsidiaries are expected to be responsible, the MNE HQ will choose its social brand level by solving:

$$\max_V nB(V) - \lambda C(V) - (1 - \lambda)nC(V). \quad [1]$$

From the first-order condition, one obtains the optimal social brand level for the responsible MNE, V^R . Instead, if all subsidiaries are expected to be irresponsible, the MNE chooses its level by solving:

$$\max_V n \{(1 - x)[B(\beta V) + (1 - x)^{n-1}[B(V) - B(\beta V)]] + \Delta\} - \lambda C(V) - (1 - \lambda)nC(V). \quad [2]$$

From the first-order condition again, one obtains the optimal social brand level of the irresponsible MNE, V^I . Equations [1] and [2] imply that $V^I < V^R$. Intuitively, if the HQ expects subsidiaries to behave irresponsibly, it invests less in the social brand because the marginal benefit of a social brand is lower than in the case in which all subsidiaries behave responsibly.

Implementing CSR: Hierarchical Control or Overinvestment

Suppose that MNE profits when all subsidiaries are responsible ($\pi_R(V^R)$) are higher than when all subsidiaries are irresponsible ($\pi_I(V^I)$). This is a plausible assumption that makes CSR choices relevant and interesting. Ideally, the HQ would then invest V^R and the subsidiaries would behave responsibly. If they do so on their own accord, we call the resulting strategy as a “self-enforcing responsible strategy”.

However, we know from Proposition 1 that subsidiaries may not act responsibly if left to their own will—in particular, they respond to a social brand of V^R with an irresponsible behavior if $V^R < V^C$. In this case, it might be profitable to create mechanisms that direct subsidiaries to choose the responsible behavior, through hierarchical means, using monitoring and directives; contractual means; or socialization, such as expatriate staffing and personnel rotation (see e.g. Baliga and Jaeger, 1984; Epstein and Roy, 2007). We assume that such activities, which we refer broadly to as *hierarchical control*, are costly and parameterize them as a cost, $F(n)$, which increases with the number of subsidiaries that must be coordinated. If the cost of control is smaller than the differential performance of the responsible strategy, i.e. if $F(n) < \pi_R(V^R) - \pi_I(V^I)$, the MNE would prefer to pursue a “coordinated responsible strategy” in which it invests V^R and then implements a responsible behavior in the subsidiaries, rather than pursuing an irresponsible strategy.

In addition, the HQ can use the investment in the social brand as a control device, because the choice of the subsidiaries (in the absence of hierarchical control) depends on the level of the social brand (as highlighted by Proposition 1). Thus, the MNE HQ could increase V up to V^C , thereby *overinvesting* in the social brand relative to the optimal investment if all

subsidiaries were responsible. If the cost of this overinvestment is lower than the cost of moving to an irresponsible strategy and the cost of hierarchical control, an “overinvesting responsible strategy” is the preferred solution.

Finally, if both of these coordination mechanisms, hierarchical control and overinvestment, are too expensive, the MNE HQ will instead develop a social brand that is consistent with an irresponsible behavior of the subsidiaries and reap profits $\pi_I(V^I)$. We refer to this outcome as a “suboptimally irresponsible strategy”, since the MNE would have preferred a responsible strategy, but is unable to implement it.

Proposition 2 fully characterizes the level of the social brand chosen by the MNE HQ:

Proposition 2: If a responsible strategy is desirable for the MNE ($\pi_I(V^I) < \pi_R(V^R)$), one of the following outcomes will occur. If $V^R \geq V^C$, the MNE HQ chooses V^R and all subsidiaries behave responsibly (self-enforcing responsible strategy). If $V^R < V^C$, on the other hand, there are three possibilities. The MNE HQ chooses V^C if $\pi_R(V^C) \geq \max\{\pi_I(V^I), \pi_R(V^R) - F(n)\}$ and all subsidiaries behave responsibly (overinvesting responsible strategy), while the MNE invests in costly coordination mechanisms and chooses V^R if $\pi_R(V^R) - F(n) \geq \max\{\pi_R(V^C), \pi_I(V^I)\}$ (coordinated responsible strategy); otherwise, it chooses V^I and all subsidiaries behave irresponsibly (suboptimally irresponsible strategy).

A key implication of Proposition 2 is that MNEs can overinvest in the social brand to induce their subsidiaries to behave responsibly by raising their opportunity cost of non-compliance. This interesting and novel finding speaks to the debate between symbolic and substantive actions in the realm of sustainability (Berrone, Fosfuri, and Gelabert, 2017). While one could interpret V as (at least partly) symbolic actions (that is, the MNE “talks” about CSR), the actions undertaken by the subsidiaries are by definition purely substantive. Thus, by “talking” more about CSR, the MNE can commit its subsidiaries to “walk the talk”, at least under certain circumstances (Delmas and Cuerel-Burbano, 2011).

Most importantly, it implies that the visible investments in CSR are a reliable signal of truly responsible practices. As such, our model challenges the notion of CSR as insurance (Werther and Chandler, 2005), where firms would undertake visible activities as an insurance policy against reputation damage caused by lapses in responsible management practice (Godfrey, Merrill, and Hansen, 2009). Recent evidence based on an unbalanced panel data of 4500 firms over 19 years finds little support for CSR as an insurance mechanism (Kang, Germann, and Grewal, 2016). Our model shows, instead, that investment in the social brand helps avoid, rather than cushion, socially irresponsible practices undertaken by subsidiaries.

Proposition 2 shows that a CSR coordination challenge only arises when $V^R < V^C$. By studying how V^C and V^R change when some of the parameters change, one can conclude that a CSR coordination problem is more likely to arise if: investing in the social brand does not bring unbounded benefits at trivial costs; the expected return for a subsidiary's irresponsible behavior is sizable, as is the associated brand damage; economies of scale in social brand building are not extremely high. Analytical proofs are reported in online Appendix 3.

MNE network size and social brand investment

In this section, we analyze how the actions of subsidiary managers and the investment in the social brand change with the number of subsidiaries—in other words, what happens to CSR strategies as the MNE expands its subsidiary network into an increasing number of countries? First, notice that the effect of n on the likelihood that the MNE faces a CSR coordination problem is somewhat ambiguous: On the one hand, V^C increases in n because with a larger network it is more likely that an irresponsible behavior occurs somewhere else, thereby

making less profitable for each subsidiary to behave responsibly. On the other hand, V^R also increases with n to the extent that there are economies of scale in social brand building. In what follows, we assume that these economies are weak enough so that the former effect dominates the latter. Subsequently, we will examine the boundary conditions for this assumption.

Suppose that $F'(n) > 0$ and $F''(n) > 0$, such that coordination costs are increasing and convex in the number of subsidiaries.⁶ In this case, the CSR strategy of the MNE is sensitive to the size of the MNE network. To provide a graphical illustration, we parameterize our model. We use the following functional forms for Figures 1–4: $B(V) = bV$, where b captures the strength of the benefits from a social brand, $C(V) = dV^2$, where d parameterizes how costly is to increase the social brand, and $F(n) = fn^2$, making hierarchical control costs an increasing and convex function of the number of subsidiaries. The specific parameter values are indicated and explained below each figure.

*** Figure 1 About Here ***

Imagine the costs of social brand building are relatively low, such that we move along the gray arrow in Figure 1. In a small MNE with 2 to 5 subsidiaries, coordination challenges do not emerge and the responsible strategy is self-enforcing, because subsidiaries behave responsibly by their own choice ($V^C < V^R$). However, as the MNE grows to 6 subsidiaries or more, each subsidiary anticipates a risk of irresponsible behavior somewhere else in the

⁶ Convex coordination costs arise, for example, due to the bounded rationality and limited cognitive capacity of the top management team and the exponentially increasing complexity of managing interdependencies across multiple units. The alternative assumption (non-convex coordination costs) would imply it is possible to manage infinitely large firms—an implication that defies both common sense, theory (e.g. Williamson, 1967), and observed reality.

increasingly large MNE network and therefore switches to irresponsible behavior if the HQ chooses V^R (because now, $V^C > V^R$). The optimal response of the MNE HQ is to increase the social brand investment to V^C (*overinvestment*) and thus retain the incentive for responsible behavior among subsidiaries. However, when the MNE has 12 subsidiaries or more, overinvestment in the social brand becomes prohibitively costly, and the MNE instead exerts *hierarchical control* by implementing coordination mechanisms to ensure responsible behavior. Finally, as the MNE's size increases above 20 subsidiaries, coordination becomes too expensive to achieve, and the MNE reverts to a suboptimally irresponsible strategy.

*** Figure 2 About Here ***

Building on this analysis, Figure 2 shows how this increment in the number of subsidiaries n influences the chosen level of the social brand V . When the geographic scope of the MNE is limited, investment in the social brand is sustained and consistent with a responsible strategy. After the network reaches a certain size, the social brand level increases gradually with the number of subsidiaries, because the MNE HQ overinvests in the brand to counter rising coordination problems. However, above a certain level of n , it becomes too expensive to induce responsible behavior by subsidiaries by using overinvestment in the social brand as a coordination device, and the MNE prefers instead to implement direct coordination mechanisms. For a very large number of subsidiaries, as $F(n)$ also increases, even control is too expensive, so the MNE adjusts to the irresponsible equilibrium. In this latter case, the level of the social brand is declining in n and much lower than it would be for small values of n . We therefore find an interesting non-monotonicity between the social brand and the

geographical scope of the MNE, which is a novel insight of our model. We summarize these arguments in the following, empirically testable prediction:

Prediction 1: When social brand building is attractive but the MNE faces a CSR coordination challenge, the relationship between the level of the social brand and network size can be non-monotonic: As the number of subsidiaries increases, the level of the social brand first increases and then decreases.

A key implication of Prediction 1 is that empirical models that estimate the relationship between a MNE's visible CSR practices (related to the social brand in our model) and its international scope might deliver biased findings if they do not account for the potential non-monotonicity of the relationship. The direction of the bias will depend on the sample being employed by the researcher, and the estimated coefficient might turn positive, negative or non-significant depending on how sample firms are distributed across the international scope dimension. For example, in samples formed mostly by large MNEs our model predicts a negative association between visible CSR practices and international scope since the effect of coordination challenges dominates, while in samples of relatively small MNEs scale economies and overinvestment dominate thereby leading to the prediction of a positive relationship. This might also help explain the mixed empirical evidence about the relationship between CSR investment and internationalization (Attig *et al.*, 2016; Ma *et al.*, 2016).

Global Social Brands and the Scalability of Socially Responsible Strategies

We now explore under which contingencies (i.e. the boundary conditions) an expansion of the MNE eventually leads to the coordination challenges described above. A responsible strategy will inevitably cease to be self-enforcing as n increases, as long as the strength of scale economies in social brand building (λ) does not exceed a certain threshold (see online

Appendix 4). This threshold, in turn, is increasing in the marginal cost of brand building, the benefit of irresponsible behavior, and the extent of global brand spillovers—which make coordination challenges more likely to arise—and decreasing in the detection risk and the marginal benefits of the social brand, which make these challenges less likely to occur. Whether strong scale economies in social brand building is a common occurrence in the real-world is ultimately an empirical question that would be important for future studies to examine, although our motivating examples for this paper seem to indicate that also large MNEs often struggle with coordination problems.

Another aspect that may influence the ‘scalability’ of CSR is a possible correlation between economies of scale in social brand building and brand spillovers. In our model, the two parameters capturing these dimensions (λ and β) are independent. However, if a social brand can be built on a global scale, it could be argued that this brand might also be globally vulnerable to scandal (Lei, Dawar, and Lemmink, 2008). Furthermore, increased global integration of markets (e.g. cross-border flow of information, people, and goods) might lead both to increased international economies of scale in social brand building and to increased brand spillovers, suggesting a covariance between the two dimensions. In online Appendix 4, we analyze the effect of such a link and show that, if global brand spillovers increase together with economies of scale in brand building, the former will diminish and in some cases eliminate the effect of the latter. This means that λ and β become irrelevant and the likelihood of a coordination problem depends only on detection risk and on the cost-to-benefit ratio of social brand building and the benefit of irresponsible behavior.

Endogenizing MNE scope

In the analysis so far we have assumed the size of the MNE network (n) to be exogenous. Implicitly, this amounts to assuming that other concerns (e.g. economies of scale and scope in production, applicability of resource-based competitive advantages in foreign markets, entry costs, etc.) override CSR-related concerns when the MNE makes decisions about its geographic scope. For many firms, this would be an acceptable simplification. However, in some cases the firm's business model may rely on CSR to an extent that the coordination and control issues identified above take on an important influence when the MNE makes market entry and exit decisions. Examples could be companies like The Body Shop or Burt's Bees, for which protecting the social brand is likely to weigh heavily compared to other concerns, e.g. about market size and scale economies in manufacturing.

To analyze such cases, we assume that the CSR-related benefits analyzed so far are economically important compared to the profits the MNE reaps from its international operations. In this case, many scenarios are possible but three are particularly interesting. First, if the CSR coordination challenge is manageable, the MNE will choose a larger scope than otherwise in order to reap additional global scale economies on social branding. In this case, social branding is the fungible resource that drives the international expansion of the MNE. Second, if the CSR coordination challenge is demanding but social brands are highly valuable, the MNE will choose a more limited scope than otherwise, such as to reduce the cost of implementing a responsible CSR strategy through overinvestment in the social brand. Put differently, CSR considerations act as a constraint to international expansion. Finally, if the CSR coordination challenge is demanding and social brands are only moderately valuable, there could be multiple CSR strategies that are open for managers to pursue—in

particular, an expansive irresponsible strategy and a contracted overinvesting responsible one—with approximately the same performance outcomes. This raises the possibility of (near) “equifinality” (Doty, Glick, and Huber, 1993) and opens up for managerial discretion in choosing CSR strategies. A full analysis of this variant of the model is included in online Appendix 5.

ALTERNATIVE CONTROL: EXPLOITING THE SOCIAL DIMENSION

Hierarchical control and investment in brands are arguably control mechanisms that could be deployed not only in the realm of CSR, but also in relation to other functions and activities performed by the MNE.⁷ Indeed, it has been suggested that CSR can be seen as a means of achieving (reputation-based) competitive advantage and, hence, as a special case of product differentiation (McWilliams and Siegel, 2001, 2011; Boehe and Cruz, 2010). However, we argue in this section that CSR in certain ways is different from product differentiation and that these differences are central to the CSR coordination challenge faced by MNEs.

In particular, what differentiates CSR from product differentiation is that the former is a “credence good”, while the latter is an “experience good” (Feddersen and Gilligan, 2001). The social profile of a product is a non-functional attribute relying exclusively on the consumer’s beliefs about the social profile of the firm, and the consumption of the product itself has no (direct) bearing on those beliefs. In our model, this gives rise to the parameter x . This parameter, capturing detection risk, is thus a CSR-specific parameter that is crucial to the outcomes of the model as outlined above, and which we endogenize in this section.

⁷ The franchising literature has emphasized coordination and control challenges of franchisees, each of whom may benefit from the shared brand of the franchisor while refraining to invest in quality (Lafontaine and Shaw, 1999), with the number of “repeat customers” being a key contingency. However, this logic has limited applicability to the CSR context, where the detection of socially irresponsible actions takes place independently of the customer (e.g. through NGOs and the media).

Furthermore, CSR is arguably a special type of credence good, since the beliefs driving consumer behavior primarily operate at the firm as opposed to the product level.⁸ This makes it more central to corporate strategy as it gives rise to accountability effects that are fungible throughout the company, while product differentiation is a classic business strategy decision. Hence, if just one instance of a product is revealed to be based on irresponsible practices, that revelation immediately taints all units of all products with the mark of irresponsibility (Flammer, 2013), a feature captured by the parameter β in our model. This is possible because the key concern of a consumer is not the quality of his or her individual instance of the product, but rather the overall social impact of the firm, suggesting in turn that CSR cannot be fully understood through the lens of strict rationality, but must explicitly or implicitly rely on *altruism* on the consumer side (Husted and Salazar, 2006).⁹

The importance of altruism and social impact extends to other external stakeholders and to managers. First, an important driver of CSR is the external scrutiny on firms' social practices exerted by, for example, NGOs and social activists (Campbell, 2007; Berrone *et al.*, 2013; Briscoe and Gupta, 2016), which in our model can be captured by variations in the detection risk, x . Second, the actions of subsidiary managers may be guided not only by profit seeking but also by their intrinsic preferences (i.e. their altruism) for various social objectives (Hemingway and Maclagan, 2004), an idea that can be incorporated into our model with a simple extension. Perhaps surprisingly, we will see that the MNE can exploit both of these

⁸ This distinction is inconsequential in the model by Feddersen and Gilligan (2001), where each firm is a coherent entity providing only one product in one market, but it becomes central in our model where the social brand is shared by multiple subunits.

⁹ Following Husted and Salazar (2006) we refer to an altruistic individual as an agent who "receives utility from the consumption of others as well as from his/her own consumption."

CSR-specific characteristics to its advantage by using them as informal coordination mechanisms. In this section, we explore this idea by treating detection risk and managerial preference as strategic choices made by the MNE.

Working with NGOs and social activists

While the risk of detection of irresponsible behavior is to some extent outside the complete control of the MNE, there are many actions that the HQ can take to either increase or decrease that risk. For example, it might choose to be more or less transparent in its dealing with the press, to invite observation by outside organizations or close its doors towards them, and to form or not form partnerships with NGOs. Prima facie, it might seem natural to expect that MNEs always prefer a lower risk of detection and that an increase in such a risk should lead to a decline in performance. For instance, Kobel, Busch, and Jancso (2017) show that firms' corporate social irresponsibility covered by media with higher reach generates greater financial risk. However, our results indicate that this view is too simplistic. The comparative statics with respect to x are shown in Figure 3, where MNE performance and the optimal social brand level are plotted as functions of detection risk.

*** Figure 3 About Here ***

When detection is almost impossible (x is close to 0), the MNE invests aggressively in its social brand but still accepts irresponsible subsidiary behavior, so it is not really “walking the talk” (Westphal and Zajac, 1994, 1998; Delmas and Cuerel-Burbano, 2011). As x increases, both the optimal brand level and the expected performance of the MNE decline, making the talk more consistent with the walk. At some point, detection of irresponsible behavior becomes likely enough for the MNE to prefer responsible subsidiaries but still not likely

enough for subsidiaries to behave responsibly, creating a suboptimally irresponsible MNE. However, as x continues to increase, it eventually becomes too costly for the MNE to maintain irresponsible subsidiaries, so it is worthwhile to implement coordination mechanisms to avoid it. At this point, the social brand level jumps, and performance stops declining, because no irresponsible behavior occurs in the MNE's network anymore.

As x increases above this level, both the social brand level and performance remain constant. However, behind the scenes, greater detection risk makes irresponsible behavior less attractive for each individual subsidiary, thus gradually reducing the benefit of coordination. At some point, the incentives for the subsidiaries to be irresponsible become sufficiently weak, and the MNE HQ can switch to an overinvestment instead of a coordinated strategy. At this point, the social brand jumps again to an even higher level (overinvesting). However, as detection risk rises further, the necessary level of overinvestment declines, so the social brand level decreases while performance increases. Finally, the detection risk becomes sufficiently high to incentivize subsidiaries to behave responsibly, and overinvestment is no longer necessary. We summarize this analysis in another prediction:

Prediction 2: When social brand building is attractive but the MNE faces a CSR coordination challenge, its performance first declines and then increases with the level of detection risk. It is thus lowest at an intermediate level of detection risk.

Intuitively, the first part of the prediction always holds: when $x = 0$, an irresponsible strategy is always optimal, and therefore a small increase in detection risk will initially reduce performance. However, if the benefit-to-cost ratio of social brand building is sufficiently attractive, an increase in detection risk will eventually make a responsible strategy more profitable than an irresponsible strategy. If such a strategy, in turn, is associated with

coordination problems as described above, higher detection risk will reduce the need for overinvestment, thereby increasing performance.

The implication of this proposition is twofold. First, it confirms the extant view that greater detection risk, for instance through higher media coverage (Kobel, Busch and Jancso, 2017), leads to reduced performance, under certain conditions. Second, it provides a novel insight: MNE performance may, in other cases, benefit from more scrutiny from the outside world. In particular, an MNE facing an intermediate detection risk level may have an interest in increasing that risk. Greater visibility to the media or more attention from NGOs and social activists (Feddersen and Gilligan, 2001; Briscoe and Gupta, 2016) might be profit enhancing; in effect, these outside actors substitute for internal monitoring, which would be prohibitively expensive for the MNE HQ (Berrone *et al.*, 2013), leading to better performance and stronger social brands.¹⁰ For instance, McDonnell, King, and Soule (2015) argue that Nike's receptiveness to activists has helped the company to fulfill its social commitment to stakeholders. To formalize this idea, suppose that, by working with NGOs and social activists, detection risk can be increased at a cost, which is increasing and non-concave in the magnitude of the change. The MNE's stance towards NGOs and social activists will then depend on which scenario in Figure 3 is the starting position. If the starting position is an overinvesting responsible strategy, the MNE can potentially increase its performance by increasing x . However, as seen in the figure, the marginal benefits of a change in x decline with higher x , and the MNE will stop when these marginal benefits equal the marginal cost of

¹⁰ In a model of asymmetric information between firms and consumers, Calveras and Ganuza (2016) show that working with NGOs helps firms to commit to not manipulate the information regarding their business practices thereby increasing performance.

the change. This will happen *before* the responsible strategy becomes fully self-enforcing (because at that point, the marginal benefit of an increase in x is 0). Hence, the MNE will always combine the strategy of working with NGOs and social activists with some degree of overinvestment in the social brand, and these can thus be considered complementary control mechanisms.

On the other hand, if detection risk is lower such that the MNE is pursuing a deliberately or suboptimally irresponsible strategy, it would have an interest in reducing that risk further by walling itself off from outside scrutiny. If the marginal cost of doing this is low enough compared to the slope of the leftmost part of the curve in Figure 3, the MNE might even reduce it all the way to 0.

In combination, this analysis implies that the efforts of the MNE to become more or less transparent by collaborating with or walling from NGOs and activists may in fact serve as a reliable signal of its underlying practices rather than offering insurance against reputation damage caused by lapses in responsible management practice (Werther and Chandler, 2005; Godfrey, Merrill and Hansen, 2009), an observation similar to the one we made earlier for its social brand. We stress here the coordinative potential of the firm's transparency to NGOs and activists and, more in general, of its social brand—a potential that is only useful for MNEs with a responsible strategy—as well as the perils of combining expensive social branding, transparency, and irresponsible practices, which might bring significant social brand damage upon the firm.

Hiring altruistic managers

A key assumption in the analysis until now is that subsidiary managers care only about subsidiary profits. However, studies of CSR and organizational behavior have highlighted that managers may be driven (also) by personal values in their CSR decisions within the firm (Hemingway and Maclagan, 2004). Since the coordination and control problem described above is based on insufficient incentives for subsidiary managers to behave responsibly, a possible way to address that problem is to hire managers who have intrinsic preferences for social outcomes (Husted and Salazar, 2006). To capture this, we assume that these types of ‘altruistic managers’ aim to maximize not just subsidiary profits, but a utility function consisting of subsidiary profits plus a psychological payoff of r if and only if they choose the responsible behavior (this is equivalent to assuming that they instead incur a ‘bad conscience’ psychological disutility of r for behaving irresponsibly).

Adding the psychological utility to the payoff of the responsible behavior implies that the risk-dominant threshold of altruistic managers, V^A , must now solve $(\Delta - r)/x = (1 - x/2)^{n-1}B(V) + [1 - (1 - x/2)^{n-1}]B(\beta V)$. Hence, if $r = 0$, $V^A = V^C$, and as r increases towards Δ , the brand value necessary to induce the responsible behavior decreases towards zero. When $r = \Delta$, subsidiary managers always behave responsibly irrespective of the value of the social brand.

Suppose that the responsible strategy is not self-enforcing ($V^C > V^R$) and hierarchical control and working with NGOs and social activists are prohibitively expensive, leaving altruistic managers and overinvestment as the only available mechanisms of coordination.¹¹

¹¹ If these mechanisms were cheaper than the cost of altruistic managers, the MNE would use them instead. However, if one assumes that each of these mechanisms displays increasing marginal costs, i.e. it might be increasingly costly to find more altruistic managers and to induce further monitoring

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These are substitutes: the more altruistic the managers employed by the MNE, the lower the necessary overinvestment (as V^A is reduced from V^C), and at some level of altruism, the need for overinvestment disappears altogether (as V^A is reduced to V^R). We denote this level of altruism by $\hat{r} \in [0, \Delta]$.

If there is no downside to having altruistic managers, the HQ will always choose \hat{r} and hire managers that are sufficiently altruistic to eliminate the need for costly overinvestment. However, it is plausible to assume that there are added costs to hiring altruistic managers. For example, such managers may expend resources to pursue social goals that are unrelated to the social brand of the MNE, and therefore impose additional costs on the subsidiary without contributing to the coordination of the CSR strategy of the MNE. Let these costs be αr for each subsidiary, implying that the costs are higher the stronger the preference for altruism.

In this case, hiring altruistic managers only makes sense if there is a CSR coordination problem to address ($V^C > V^R$) and if solving it leads to higher profits than the suboptimally irresponsible strategy. The MNE HQ will select subsidiary managers with a level of altruism that equalizes the marginal cost of altruism ($n\alpha$) with the marginal benefit (the reduction in overinvestment). Similarly to the NGO case, the marginal benefit of reducing overinvestment declines to 0 when V^A is reduced to V^R , implying that the MNE hires managers with some $r < \hat{r}$ and handles the residual coordination problem with a small level of overinvestment.

*** Figure 4 About Here ***

by NGOs, then in equilibrium the MNE would combine them (i.e. hiring altruistic managers and working with NGOs) to achieve CSR coordination, together with social brand overinvestment.

Figure 4 shows different equilibrium configurations as a function of both the cost, α , of hiring altruistic managers and the MNE network size, n , that positively correlates with the extent of the CSR coordination problem. As expected, other things equal, altruistic managers are more likely to be employed (i.e. they are chosen for a larger parameter space) when the cost of altruism is sufficiently low. The relationship with respect to the MNE network size is less straightforward. Consider a situation in which the cost of altruism is intermediate, which in Figure 4 corresponds to the horizontal arrow ($\alpha = 4$). To fix the CSR coordination problem, the MNE HQ uses a pure overinvestment strategy when there are few subsidiaries and only above a certain number of subsidiaries begins to hire altruistic managers. As the network size increases further, the MNE HQ hires increasingly altruistic managers. This enables it to further lower its social brand value toward V^R as the socially minded managers substitute for the overinvestment. However, the profit margin (performance per subsidiary) declines because the coordination problem is magnified and the additional cost of the increasingly altruistic managers outweighs the reduced overinvestment. This performance decline eventually leads the MNE to abandon the altruistic strategy and revert to an irresponsible strategy. We summarize this discussion in the following prediction:

Prediction 3: When social brand building is attractive but the MNE faces a CSR coordination challenge (and the costs of altruism are intermediate), the MNE may hire increasingly altruistic managers as it expands while maintaining a diminishing (but positive) level of overinvestment. However, as the network size increases further, the MNE stops employing altruistic managers altogether and reverts to a suboptimally irresponsible strategy.

Prediction 3 suggests that it is more likely to observe altruistic managers leading subsidiaries of MNEs when such corporations have an intermediate size. MNEs with few subsidiaries would not need altruistic managers, as they do not face a CSR coordination

problem. Hiring altruistic managers would harm performance in this case. At the other extreme, when the CSR coordination problem becomes too severe, as it is the case when the MNE has a large number of subsidiaries, hiring altruistic managers is not enough to fix it and performance would therefore again suffer if an MNE hires managers with a preference for social outcomes.

A second insight from our analysis comes from the substitution between overinvestment in the social brand and the extent of altruism of subsidiary managers. This has an interesting empirical implication: firms hiring more altruistic managers do not necessarily have the strongest social brands. To the extent that investments in the social brand are captured in proxies employed for CSR performance, one could have the surprising empirical finding that firms with more altruistic managers display lower CSR performance.

Finally, this analysis contributes to the large debate about whether social actions also contribute to performance (McWilliams and Siegel, 2000), which in the context of our model translates into whether managerial altruism is good for economic performance. The bottom part of Figure 4 shows how performance changes with different level of altruism of subsidiary managers. If the coordination problem cannot be fixed (i.e. if the intercept of the graph is higher than the internal maximum), altruism harms performance and no altruism at all is preferable to some degree of altruism. This indicates a tension between instrumentally and morally driven responses to social issues (Hahn *et al.*, 2016). However, if the CSR coordination problem can be fixed, as shown in the figure, performance is maximized at a positive level of altruism, suggesting that morally driven and instrumentally driven responses to social issues can be complementary (Hahn *et al.*, 2016). Even here, however, there is a

“too much of a good thing” effect (Pierce and Aguinis, 2013), as altruism beyond a certain level harms performance. Overall, this suggests that the relationship between managerial altruism and performance is more complex than one might suspect.

INTERNATIONAL DIVERSITY AND DIFFERENTIATED STRATEGIES

So far, we have depicted subsidiaries of an MNE as homogenous objects characterized by symmetric costs and benefits functions. This choice was motivated by our focus on CSR coordination issues and the underlying goal of understanding the properties of different mechanisms to implement the desired CSR strategy. However, IB literature has emphasized that subsidiaries are embedded in the external context in which they operate (Meyer, Mudambi, and Narula, 2011) and there is large country variation in such external contexts. Because the subsidiaries of a given MNE face different external conditions, their responses to investment in the global social brand are likely to display a considerable amount of heterogeneity, with implications for both the CSR strategy chosen by the MNE and the total investment in the social brand.

In this section, we explore the implications of accounting for differences across countries in subsidiary size, social brand impact, and detection risk. To simplify the analysis, we fix the number of subsidiaries to two, which represents the simplest case that still allows us to capture country heterogeneity. For the sake of brevity, we only report here the main insights, and refer to online Appendix 6 for more (technical) details.

The first implication of accounting for international diversity is that the MNE might find it optimal to have different CSR strategies in different countries. With two countries, the

MNE might benefit from having one subsidiary behaving responsibly, while the other behaves irresponsibly. This additional CSR strategy becomes attractive only when markets are sufficiently differentiated in any of the three dimensions we analyze: subsidiary size, social brand impact, and detection risk. More precisely, the MNE would like the irresponsible subsidiary to be the one with the largest size (as the benefits of irresponsible behavior increase with size), with the lowest detection risk (to minimize damages on the global social brand), and located in the country with the lowest appreciation for the social brand.

This differentiated strategy might also suffer from a coordination problem whereby managers of the subsidiary supposed to be responsible engage instead in an irresponsible behavior. Our analysis shows that this is always the case when the asymmetry is due to subsidiary size; it occurs when social brand building is sufficiently costly if there are differences in detection risk; it happens only when brand spillovers are limited if there are asymmetries in the social brand impact. When such a challenge emerges, the MNE can use any of the mechanisms we have discussed above: overinvestment in the social brand, working with NGOs and social activists, hiring altruistic managers. However, because the investment in the social brand is global, while the other mechanisms can have a local implementation, overinvestment becomes a less efficient coordination tool in the presence of country heterogeneity.

Finally, since market selection is a key strategic variable in MNEs, we might consider all the aforementioned characteristics to be endogenous. Hence, CSR concerns might influence the selection of markets if these concerns are an important element in the profit function (see our previous discussion on endogenizing the MNE scope). With that

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perspective, it will generally be best to enter large markets irrespective of which CSR strategy is pursued; to enter markets in which social brands provide high benefits and to pursue socially responsible strategies in those markets; and to enter markets in which detection risk is either sufficiently low to enable an irresponsible strategy, *or* sufficiently high to make a responsible strategy enforceable. Pushing this last argument a step further, government policies that attempt to raise detection risk (for instance, by forcing to greater transparency) might have the undesired effect of reducing a country's attractiveness to foreign subsidiaries if such policies increase detection risk from a low to an intermediate level (but increasing attractiveness if the risk is moderately high to start with).

FINAL REMARKS

This article presents a game-theoretic model of CSR coordination and control in a global context. On the one hand, many MNEs make costly and highly visible investments in CSR with the objective to gain legitimacy among stakeholders and build global social brands. On the other hand, these efforts may be undermined by failing to enforce consistently responsible behaviors throughout MNEs' geographically dispersed operations, where the trade-offs between social and economic objectives become concrete and pertinent to subsidiary managers. This tension between "CSR talking" and "CSR walking" has thus far received very little formal modeling effort, which represents an important gap in extant research, because—given the complexity of this phenomenon—a modeling approach can result in new insights that are difficult to obtain by other means. Indeed, we find that social brand investments, responsible behavior, and MNE performance vary with the contingencies of our model in

complex and subtle ways. Coordination of CSR is fraught with dilemmas and challenges that managers and scholars must appreciate.

The insights from our model contribute both to the CSR and global strategy literatures. By studying the coordination and control challenge in the realm of sustainability, we advance some novel mechanisms that help MNEs implement their global CSR strategies. Our first mechanism, overinvestment in the social brand, provides a different perspective on the much-debated issue of decoupling between symbolic and substantive actions (sometimes referred to, in the specific realm of environmental management, as greenwashing). While extant literature posits that firms resort to symbolic actions to gain legitimacy but refrain from undertaking costly, substantive endeavors (Delmas and Cuerel-Burbano, 2011; Berrone, Fosfuri, and Gelabert, 2017), we show that greater investment by the HQ in the global social brand can trigger substantive actions at the subsidiary level. To the best of our knowledge, the mechanism by which this response takes place—such that the social brand of the firm increases the opportunity costs of non-compliance among lower-level managers—has not been discussed previously in decoupling literature. We also show that overinvestment in the social brand becomes a less effective CSR coordination mechanism when the heterogeneity about social issues grows larger among the MNE's network of subsidiaries.

Our second mechanism provides some additional insights to the literature that has approached NGOs and social activists as external stakeholders that often function beyond formal channels, but still can influence organizational processes and public sentiment (King and Pearce 2010; King and Soule 2007). For instance, engagement with these external stakeholders has been shown to increase legitimacy (Berrone *et al.*, 2013). We contribute to

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this debate by focusing on the surveillance role of these agents. In particular, we find that engaging with NGOs and social activists increases the ability of a MNE to coordinate its subsidiaries around a global CSR strategy because it boosts the probability that irresponsible behavior is detected. This, in turn, can lead to a better overall performance because it reduces the cost of other control mechanisms. Interestingly enough, we find that, under some conditions, MNEs that are closer to NGOs and social activists invest less on their global social brand as they do not need it to trigger coordination across subsidiaries.

Our third mechanism provides some additional insights on why some companies might benefit from hiring local managers with a preference for CSR (Christensen *et al.*, 2014; Hafenbradl and Waeger, 2017). While such managers are likely to sacrifice profits for accomplishing with the highest standards of sustainability, an MNE facing a CSR coordination problem across its subsidiaries can still increase its global performance by hiring altruistic managers because it economizes on other, more expensive control mechanisms. We find that altruistic managers are more likely to lead subsidiaries of middle-sized MNEs and that, perhaps surprising, MNEs hiring more altruistic managers do not necessarily have the strongest social brands.

We also contribute to international business literature that has explored boundaries and existence of MNEs (Buckley, 2016). Our results show that CSR engagement coupled with a strong social brand can be either a source of competitive advantage driving MNE growth, or a constraint for international expansion. The severity of CSR coordination challenges thus plays a crucial role in making CSR investment a blessing or a curse in internationalizing firms.

Needless to say, our model has several limitations that could be addressed in future research. Indeed, given our focus on CSR coordination concerns, we have kept the model extremely simple in some dimensions. First, we have abstracted from competition in the downstream market. If an MNE's subsidiary competes with a domestic firm, a social brand might play a more complex role warranting a dedicated analysis. Second, we have focused on a horizontal MNE; however, CSR coordination challenges are also likely to occur in vertical MNEs where subsidiaries located in different countries specialize in different steps of the value chain. In this case, decisions about whether to outsource a given activity could be influenced by how much irresponsible behavior across the global value chain spills over the social brand of the MNE. Third, an aspect that would require a separate modeling effort is a detailed assessment of welfare implications. Our model is useful to provide some informed guesses about such implications, however. If subsidiaries' irresponsible behavior generates a social cost (e.g., environmental damage or deteriorated employee health) that is greater than the private economic benefit accruing to the MNE (Δ), a welfare-maximizing solution would imply a responsible strategy. When such a strategy is profitable and self-enforcing, the MNE can thus be considered an efficient "market-based" vehicle for ensuring social outcomes. However, we have also seen that a responsible strategy may come with various coordination costs (which would detract from welfare) and can sometimes be economically unattractive or impossible to implement (in which case both subsidiary behavior and social brand investment might fall short of their welfare-maximizing levels). An interesting observation in this regard is the dual role of the symbolic component of social brand investment (cf. online Appendix 1). Since this component, by definition, does not add to social outcomes, it could be

considered a waste from a welfare viewpoint, but it might also represent a necessary evil for ensuring CSR coordination and the desirable social outcomes throughout the MNE network.

As a final remark, our model provides implications for managers of MNEs. First and foremost, it reinforces the point that HQ managers cannot just announce CSR strategies and then rely on subsidiary managers in geographically and culturally distant units to implement them. Our analysis provides the insight that breaches of CSR compliance may emerge, not just as a consequence of a reluctance to follow HQ directives, but also due to a coordination problem driven by uncertainty and lack of trust in the compliance of other subsidiary managers, especially when MNE expansion leads to a certain network size. This is inherently a game-theoretic phenomenon but has not until now been portrayed as such. We show when such a coordination problem is more likely to occur and provide suggestions for CSR-specific strategies that can be devised to address it. In sum, our findings highlight the complex interactions between social and economic performance that are becoming increasingly important for MNEs to understand and to manage.

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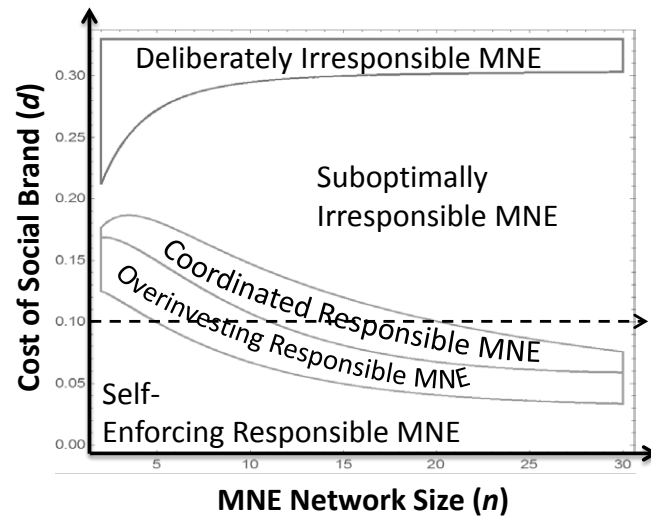
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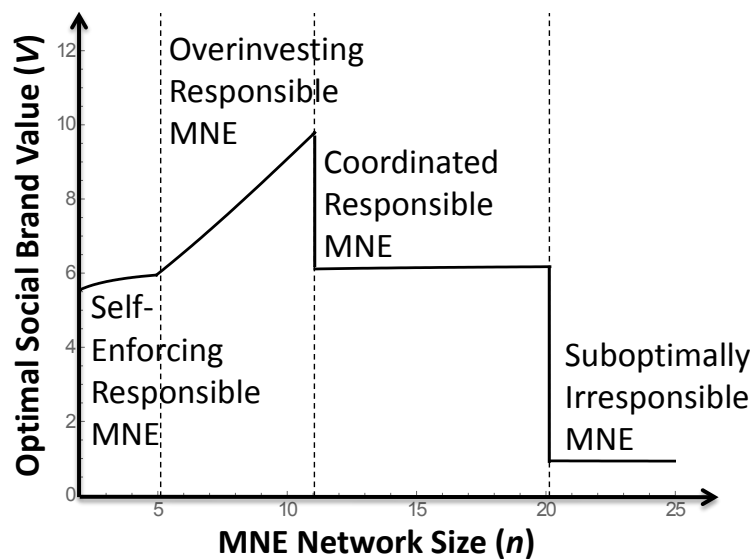
Williamson O. 1967. Hierarchical Control and Optimum Firm Size. *Journal of Political Economy* **75**(2), 123-138.

Figure 1: Different CSR strategies as a function of the cost of social brand building and MNE network size.



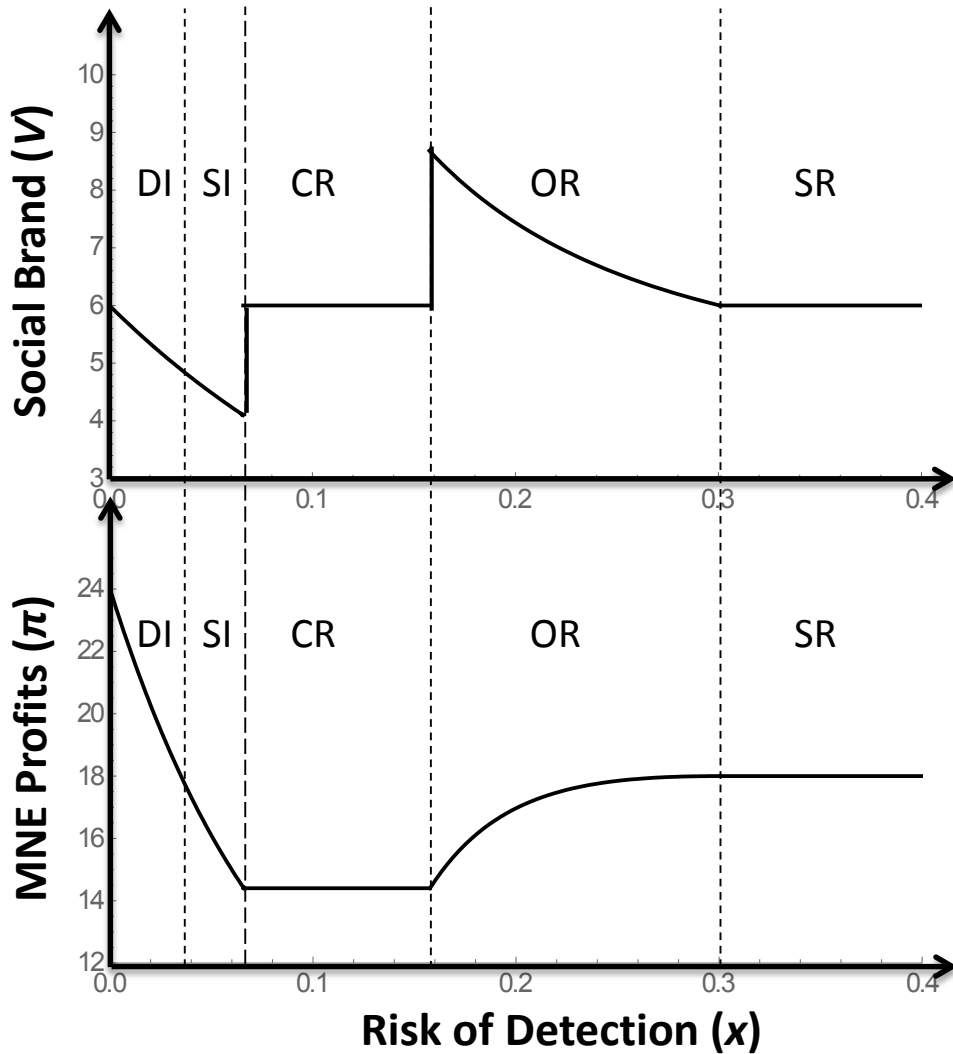
This figure shows the emergence of different equilibrium configurations (i.e. different CSR strategies chosen by the MNE) for combinations of costs of social brand building and number of subsidiaries. Parameter values: $x = 0.25$, $\beta = 0.2$, $\Delta = 1$, $\lambda = 0.2$, $b = 1$, $f = 0.1$. These values are chosen such that all different equilibrium configurations appear in the figure. For instance, a high value of f , the cost of hierarchical control, would shrink and potentially eliminate the region where the coordinated responsible strategy is chosen.

Figure 2: Optimal social brand value as a function of MNE network size



This figure shows how the optimal value of the social brand (V) responds to changes in the number of subsidiaries, accounting for different equilibrium configurations. Parameter values: $x = 0.25$, $\beta = 0.2$, $\Delta = 1$, $\lambda = 0.2$, $b = 1$, $f = 0.1$, $d = 0.1$. These values guarantee that social brand building is attractive, but that there is a coordination problem for n sufficiently large. For instance, a too high cost of brand building ($d=0.3$) would imply that the MNE always chooses an irresponsible CSR strategy.

Figure 3: Optimal social brand (V) and MNE profits (π) as a function of detection risk



DI = Deliberately Irresponsible MNE
 SI = Suboptimally Irresponsible MNE
 CR = Coordinated Responsible MNE
 OR = Overinvesting Responsible MNE
 SR = Self-Enforcing Responsible MNE

This figure shows how the optimal social brand and MNE profits respond to variations of the detection risk. Parameter values: $n = 6$, $\beta = 0.2$, $\Delta = 1$, $\lambda = 0.2$, $b = 1$, $f = 0.1$, $d = 0.1$. These values ensure that social brand building is attractive, but that there is a coordination problem to deal with.

Figure 4a: Different CSR strategies as a function of the cost of altruistic managers and MNE network size.

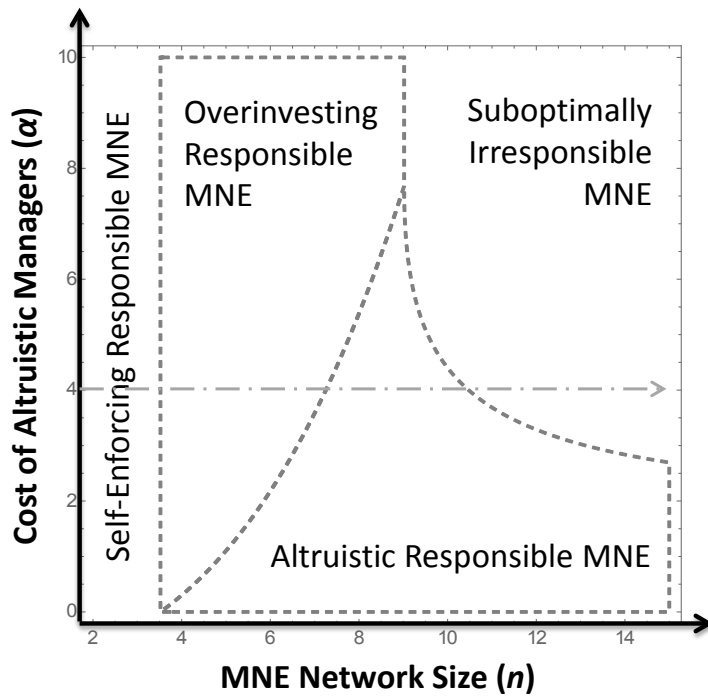
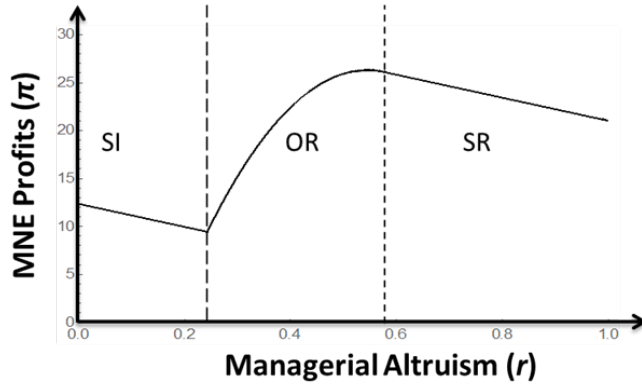


Figure 4b: MNE profits as a function of the extent of altruism of the subsidiaries' managers



SI = Suboptimally Irresponsible MNE
 OR = Overinvesting Responsible MNE
 SR = Self-Enforcing Responsible MNE

Parameter values: $x = 0.25$, $\beta = 0.1$, $d = 0.1$, $\Delta = 1$, $\lambda = 0.1$, $b = 1$ in both Figures, and in Figure 4b, $\alpha = 1$, $n = 12$. These values ensure that social brand building is attractive, but that there is a coordination problem to deal with.