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Abstract
This paper aims at investigating how multiple antecedents of multinational enterprises (MNEs) involvement in Corporate Social Irresponsibility (CSIR) act in unison and create complex situations that are difficult to capture with a linear logic. To this end, we use fuzzy set qualitative comparative analysis (fsQCA) and find five configurations of antecedents leading to high levels of CSIR occurrence: (1) The resource-constrained MNE - a highly internationalized MNE, operating in high corruption host markets, facing low performance volatility, with low slack resources, which does not adopt Corporate Social Responsibility (CSR) policies; (2) The disinterested MNE – a lowly internationalized MNE, operating in low corruption host markets, facing low performance volatility, with high slack resources, which does not adopt CSR policies; (3) The calculated family MNE - a lowly internationalized family MNE, operating in high corruption host markets, facing high performance volatility, with high slack resources, which does not adopt CSR policies; (4) The resource-constrained family MNE - a lowly internationalized family MNE, operating in high corruption host markets, facing high performance volatility, with low slack resources, which adopts CSR policies; (5) The overreacting, decoupling family MNE – a lowly internationalized family MNE, operating in low corruption host markets, facing high performance volatility, with high slack resources, which adopts CSR policies.

Keywords: Corporate Social Irresponsibility (CSIR); Family firms; Multinationals; Corporate Social Responsibility (CSR); Performance volatility; Qualitative Comparative Analysis (QCA)

JEL: F23, M14, K40
INTRODUCTION

Corporate Social Irresponsibility (CSIR) examines negative dimensions of business conduct, that is, negative business impacts on society. CSIR is a construct identifying business behaviours that have reportedly caused harm or disadvantage to an identifiable set of stakeholders (Armstrong, 1977; Strike, Gao, & Bansal, 2006), such as customers, employees, and the communities where the firm has operations. CSIR has recently attracted interest in the international business (IB) literature because of its strategic implications for the internationalization of multinational enterprises (MNEs) – involvement in CSIR damages reputation, a key firm-specific advantage (FSA) that sustains MNEs international expansion, and it causes exit from certain markets and severe financial damages (Kölbel, Busch, & Jancso, 2017; Wang & Li, 2019). Empirical evidence on CSIR and its antecedents, however, remains scant, and this is the research gap we address.

There is a rich body of work on Corporate Social Responsibility (CSR) - the set of voluntary measures that firms undertake in order to contribute positively to the environment and to society (Carroll, 2008; Rasche, Waddock, & McIntosh, 2013). However, CSR can signal an MNE’s intention to “do good”, but it can also be an instrumental mechanism to compensate for CSIR, or build a positive social reputation that will help alleviate any stakeholders’ reactions to future CSIR acts (Flammer, 2013; Godfrey, Merrill, & Hansen, 2009; Matejek & Gössling, 2014). Thus, it is important to go beyond CSR to study MNEs’ involvement in CSIR.

IB researchers studying business conduct focus on the effects of internationalization. Some authors argue that being more internationalized provides incentives for improving business conduct (Marano, Tashman, & Kostova, 2017) and therefore “avoiding doing harm”; others that internationalization makes it harder to avoid CSIR because it entails managing complex organizational structures (Strike et al., 2006). Several scholars argue that specific features of host

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1 In this paper, we do not consider CSIR and CSR as “opposite ends of a continuum” (Jones, Bowd, & Tench, 2009: 305). Rather, we believe that the failure to respect a negative duty (i.e., doing no harm) cannot be compensated by a positive duty or action in favour of the affected (or other) constituencies (i.e., doing good). Thus, following prior research (Fiaschi et al., 2017; Kang, Germann, & Grewal, 2016; Strike et al., 2006) we treat CSIR and CSR as two conceptually and empirically distinct constructs.
countries, such as the rule of law (Surroca, Tribo, & Zahra, 2013), speech and press freedom (Fiaschi, Giuliani, & Nieri, 2017), and corruption (Keig, Brouthers, & Marshall, 2015; Spencer & Gomez, 2011), define the consequences of CSIR, and hence shape the extent to which MNEs get involved in these behaviours. These arguments, however, do not shed light on the antecedents of CSIR events, such as the Cambridge Analytica-Facebook scandal in 2018, the Volkswagen’s violation in 2015 of the US Clean Air Act, and the ThyssenKrupp workers’ rights violation in 2007, that occurred in countries that have a strong rule of law, speech and press freedom, and low levels of corruption.

Older work by strategy and management scholars argues that CSIR stems from the prioritization of financial performance at all costs, either to recover from a period of recession and increasing indebtedness (Crane, 2013). More recent work, however, argues the opposite – firms that perform well may get involved in CSIR precisely to meet expected performance goals based on prior positive performance (Mishina, Dykes, Block, & Pollock, 2010). Another important antecedent of business conduct, and more broadly corporate governance, is ownership, though this feature has been examined mostly with regards to state-owned enterprises (Aguilera, Marano, & Haxhi, 2019). Far less attention has been given to the role of family ownership, in spite of its relevance, given that several of the world’s leading MNEs such as Ikea (furniture), Cargill (agribusiness), Ford and Peugeot (automotive), Lego and Hasbro (toys), Mars and Ferrero (confectionery), LVMH and Hermès (luxury goods), Walmart and Aldi (retail) are family firms.

Family firms have attracted growing interest in the IB literature (Arregle, Hitt, & Mari, 2019), with studies examining the geographic scope of these firms’ international expansion (Banalieva & Eddleston, 2011), their entry modes (Boellis, Mariotti, Minichilli, & Piscitello, 2016; Xu, Hitt, & Miller, 2019), and their strategy (Eddleston, Sarathy, & Banalieva, 2019; Hennart, Majocchi, & Forlani, 2019). Whether family firms are better corporate citizens, and hence feature lower involvement in CSIR, remains disputed (Labelle, Hafsi, Francoeur, & Amar, 2018). Scholars of the stewardship perspective argue that family firms have longer time horizons because they aim
to transmit wealth inter-generationally (Lumpkin & Brigham, 2011), and thus have incentives to
develop mutually beneficial relationships with stakeholders, and to be perceived as good corporate
citizens and legitimate actors in society (Ciravegna, Kano, Rattalino, & Verbeke, 2019). The Socio-
Emotional Wealth (SEW) perspective suggests that family firms should be more careful in avoiding
CSIR than non-family firms because owners identify with the firm (Cennamo, Berrone, Cruz, &
Gomez-Mejia, 2012). From a transaction cost economics (TCE) perspective, firms reliability vis a
vis external stakeholders is bounded by their ability and willingness to make good with their
commitments, such as commitments to behave responsibly in society (Verbeke & Greidanus,
2009). Several of the practices common in family firms, such as appointing heirs disregarding of
their skills and not linking their tenure to performance, increase the bounded reliability of the firm,
and hence also, the risk of accidental CSIR (Schulze, Lubatkin, Dino, & Buchholtz, 2001; Verbeke
& Kano, 2012).

The debate on the antecedents of CSIR remains inconclusive and compounded by existence
of competing theoretical arguments on the relationship between ownership, internationalization, and
business conduct. The antecedents of CSIR act in unison, creating unique, complex situations that
are difficult to capture with a linear logic (Palmer, Greenwood, & Smith-Crowe, 2016). In a host
markets with high levels of corruption, a family firm may get involved in CSIR only if the family
perceives that its SEW is under threat, for example because of erosion of financial resources that
threatens the family’s control of the firm. In this case, the firm may resort to bribes in order to cut
corners on safety to reduce costs. A non-family firm in the same situation may not necessarily
conduct itself in the same way, because it does not face SEW issues. On the contrary, a non-family
firm may respond to different pressures, getting involved in CSIR, for example, as a means to
achieve the performance expected by its managers and investors, even if such behaviour damages
its reputation in the long-term. For these reasons, we examine the antecedents of CSIR using fuzzy
set qualitative comparative analysis (fsQCA) – a method designed precisely to unravel complex
causality, address conflicting theoretical explanations, and examine the interactions between causal
antecedents and an outcome (Fiss, 2011; Gligor, Esmark, & Gölgeci, 2016; Misangyi, Greckhamer, Furnari, Fiss, Crilly, & Aguilera, 2017).

We build on the CSIR literature to develop our model, which analyzes the role of the following antecedents: internationalization, corruption of the host countries where firms operate, firm performance volatility, slack resources, and the adoption of CSR policies. We find five configurations of CSIR: I The resource-constrained MNE - a highly internationalized MNE, operating in high corruption host markets, facing low performance volatility, with low slack resources, which does not adopt CSR policies; II The disinterested MNE – a lowly internationalized MNE, operating in low corruption host markets, facing low performance volatility, with high slack resources, which does not adopt CSR policies; III The calculated family MNE - a lowly internationalized family MNE, operating in high corruption host markets, facing high performance volatility, with high slack resources, which does not adopt CSR policies; IV The resource-constrained family MNE - a lowly internationalized family MNE, operating in high corruption host markets, facing high performance volatility, with low slack resources, which adopts CSR policies; V The overreacting, decoupling family MNE – a lowly internationalized family MNE, operating in low corruption host markets, facing high performance volatility, with high slack resources, which adopts CSR policies.

Our study contributes to literature by exploring the ways in which internationalization, family ownership, and other antecedents shape MNEs’ involvement in CSIR. We shed light on the causal antecedents of CSIR – an understudied, and yet highly strategic phenomena for IB. We address the scarcity of empirical evidence on CSIR and its drivers by studying through a combinatorial logic, which allows capturing us to reconcile diverging theoretical perspectives. Our second contribution is to the incipient IB literature on family firms. We go beyond the binary debate depicting these firms in either a positive or negative light, uncovering the conditions under which family MNEs they get involved in CSIR. Our results show that family MNEs involved in CSIR are not highly internationalized, and facing performance volatility, in combination with other factors,
for example, having slack resources and operating in high corruption host countries. Non-family MNEs get involved in high levels of CSIR in different situations, but not when going through performance volatility, which suggests that family firms indeed react differently to financial risk. Finally, we show that internationalization has important, and yet different, effects for family and non-family MNEs. The three configurations of family MNEs involvement in CSIR depict lowly internationalized firms, whereas highly internationalized non-family MNEs get involved in CSIR if also operating in corrupt host markets.

The rest of the paper is structured as follows. First, we outline the literature on CSIR in order to highlight the causal conditions to be included in the empirical analysis. Then, we set out the context for the study which we investigate using fsQCA. We conclude by discussing the implications for research and practices.

THEORETICAL BACKGROUND

MNEs, Internationalization, Host Country Corruption, and CSIR

The relationship between the internationalization of MNEs and their negative impacts on society has been a hot topic since the 1970s, with increasing media coverage of MNEs’ responsibility in a broad array of accidents, such as failures to address product safety concerns causing harm to consumers like the infant formula scandal in which Nestlé was involved at the end of the 1970s, the use of child labor in “sweat shops” such as the case of Nike in Pakistan in the 1990s, and the release of toxic emission producing severe consequences for the subsequent generations of local residents like is the case of Union Carbide Limited scandal in Bhopal. We are concerned here with CSIR - activities which, as reported by external, neutral sources, had harmful effects on some societal stakeholders (Armstrong & Green, 2013; Strike et al., 2006).

CSIR has important strategic implications. According to internalization theory reputation is a strategic FSA, which MNEs invest in, and deploy across borders (Narula & Verbeke, 2015). CSIR damages reputation, undermining a firm’s internationalization and competitiveness vis a vis its
rivals (Wang & Li, 2019). This suggests that the more an MNE seeks to expand internationally, the more it should be concerned with avoiding CSIR.

Scholars of the neo-institutional theory argue that a firm’s “license to operate” depends on the extent to which it is accepted as a legitimate actor by external societal actors (Morrison, 2014; Suchman, 1995). Involvement in CSIR damages a firm’s legitimacy because it breaks the “social contract” according to which the firm should not cause harm through its activities. If societal actors, such as Non-Governmental Organizations (NGOs) and trade unions, start seeing the firm as illegitimate, they can take actions against it, for example by pressuring the government to sanction it or expel it from the country (Demuijnck & Fasterling, 2016; Kölbel et al., 2017). Hence, neo-institutional theory also suggests that highly internationalized MNEs seeking legitimacy at the global level, should be the most concerned with avoiding involvement in CSIR (Ordeix-Rigo & Duarte, 2009).

MNEs, however, being led by humans, are only boundedly reliable – in some instances they fail to make good to their commitments not only out of opportunistic intent, in this case seeking higher profits through CSIR activities, but also out of bad judgement, such as underestimating the resources needed to prevent CSIR (Verbeke & Greidanus, 2009). International expansion increases the challenges of preventing accidental involvement in CSIR events because it entails navigating diverse regulatory frameworks and orchestrating complex international organizational structures (Kostova, Roth, & Dacin, 2008). Thus, international expansion creates incentives for refraining from CSIR whilst also making it harder to do so. Indeed, as suggested by Strike and colleagues (2006: 852) “MNEs may act irresponsibly, not out of malice or ill will, but because they have to stretch their resources and capabilities in order to coordinate and monitor subsidiaries”. In this vein, the involvement in CSIR may be the result of the incapacity of the headquarters to monitor and control subsidiaries’ operations in distant countries, especially in very culturally and institutionally distant ones.
Some authors argue that MNEs exploit internationalization as a means to reduce the costs associated with CSIR, for example moving abroad their most risky activities (Surroca et al., 2013). Surroca et al. (2013) do not refer, per se, to the level of internationalization of the MNE, but rather the nature of the host countries where firms invest. In a similar vein, Keig et al. (2015) show that involvement in CSIR is higher for MNEs with operations in host markets affected by high levels of corruption, intended as “abuse of entrusted power for personal gain”\(^2\). Their findings are in line with prior work showing that corruption is linked with less stringent enforcement of environmental regulation (Morse, 2006). Indeed, as suggested by Campbell (2007: 951) claims that “in the absence of institutional constraints in the environment that mitigate such behavior, firms will have interests and incentives that may cause them to behave in socially irresponsible ways”.

Neo-institutional theory scholars argue that MNEs adapt to host markets’ institutional contexts in a mimetic fashion (Meyer & Rowan, 1977): an MNE operating in host markets where corruption is endemic may engage in similar corrupt practices to those of other firms (Spencer & Gomez, 2011), such as bribing government agencies so that they do not enforce environmental and safety regulations, which in turn increases the risk of CSIR (Cuervo-Cazurra, 2016). Internalization theory, being anchored in transaction cost economics, does not assume firms to engage in mimetic behaviour but suggests a similar outcome because corruption lowers the opportunity cost of CSIR. Through bribes, a firm can attempt covering its involvement in CSIR and reduce the likelihood of being sanctioned for it. Thus, MNEs may get involved in CSIR in high corruption because they calculate that the benefits of CSIR are higher than its costs. Both neo-institutional theory and internalization theory suggest that being highly internationalized creates incentives for limiting CSIR, yet, exposure to high corruption host markets can counter these incentives. Ample anecdotal evidence highlighted above of sweatshops, illegal land seizures, and pollution perpetrated by advanced economy MNEs in developing countries seem to support this idea.

\(^2\) [https://www.transparency.org/whoweare/organisation/faqs_on_corruption/#defineCorruption](https://www.transparency.org/whoweare/organisation/faqs_on_corruption/#defineCorruption), last accessed October 1\(^{st}\) 2019.
In sum, the relationship between internationalization and CSIR remains unclear (Wang & Li, 2019), and complicated by effects of exposure to different host market contexts (Fiaschi et al., 2017; Keig et al., 2015; Surroca et al., 2013), and the interaction of the latter with other causal antecedents, such as ownership and performance (Greve, Palmer, & Pozner, 2010).

**Family Ownership and CSIR**

Ownership influences the style of management of firms, their strategic priorities, and their relationship with stakeholders, including involvement in CSIR, though the effects of family ownership remain understudied (Aguilera et al., 2019). Scholars of family firms emphasize that these businesses engage differently with their stakeholders that non-family firms (Cui, Ding, Liu, & Wu, 2018; Richards, Zellweger, & Gond, 2017). Family firms have longer time horizons than non-family firms (Miller & Le Breton-Miller, 2005), and a higher preoccupation with maintaining the “license to operate” that assures business survival (Ciravegna et al., 2019). Reputation is also more important for family firms, for often business and family reputation are inter-twined (Deephouse & Jaskiewicz, 2013; Gao, Zuzul, Jones, & Khanna, 2017).

Other scholars take a more negative view of family ownership. Family firms tend to focus primarily on the norms of behaviour established by the controlling family, which can entail lower concerns over acts that have harmful effects on external stakeholders, such as CSIR (Kellermanns, Eddleston, & Zellweger, 2012; Morck & Yeung, 2004). Family firms are also typically less transparent, more suspicious of outsiders, and prone to “amoral familism”, that is, the prioritization of the family as their central stakeholder at the expense of others (Mitchell, Agle, Chrisman, & Spence, 2011; Schulze et al., 2001; Zientara, 2017). Some researchers contradicts these ideas, finding that family firms are more involved in activities aimed at improving their social or environmental impact (Berrone, Cruz, Gomez-Mejia, & Larraza-Kintana, 2010; Bingham, Dyer, Smith, & Adams, 2011). Empirical evidence remains mixed (Labelle et al., 2018), and mostly limited to small domestic firms (Gómez-Mejía, Takács Haynes, Núñez-Nickel, Jacobson, & Moyano-Fuentes, 2007).
Scholars of the SEW perspective explain these mixed empirical results by arguing that family firms’ “can be socially responsible and irresponsible at the same time” (Cruz, Larraza-Kintana, Garcés-Galdeano, & Berrone, 2014: 1295). Concerns with reputation should incentivize family owners to refrain from CSIR (Gao et al., 2017), but only to the extent that they are not facing threats to their SEW (Cruz et al., 2014). Thus, the critical question is not whether family firms are more or less involved in CSIR, but rather under which combination of antecedents family firms get involved in CSIR conduct (Campopiano & De Massis, 2015; Kabbach de Castro, Aguilera, & Crespi-Cladera, 2017; Labelle et al., 2018). We build on the findings of these studies and examine the effects of family ownership in conjunction with other firm-level antecedents identified by the literature on CSIR.

**Performance Volatility and Resource Slack**

Earlier work on CSIR focused on firm-level variables that could lead firms to engage in conduct that has negative societal impacts, particularly variables capturing the performance and resources of the firm. The main tenet of this stream of research is that firms get involved in CSIR when they are in dire straits – CSIR is thus considered as a consequence of attempts to recover performance and deal with resource constraints (Crane, 2013; Xu, Zhou, & Du, 2018). Drawing from this literature, we examine two firm-level antecedents – performance volatility and slack resources. As with the other antecedents we discuss, there are competing theoretical arguments.

Resource slack is the availability of extra resources that can be leveraged for strategic adaptation, including absorbing periods of negative performance and external shocks (Bourgeois, 1981), and the implications of CSIR involvement. There is evidence that slack resources shape firm conduct, not just for family firms, and in particular investments in social and environmental activities (Arora & Dharwadkar, 2011; Symeou, Zyglidopoulos, & Gardberg, 2019). Firms that do not have slack resources may cut their investments in safety and accident prevention, resulting in higher involvement in CSIR (Martin, Cullen, & Johnson, 2007). Yet, firms with slack resources have the means to deal with the costs of CSIR, and hence may be less concerned with its
consequences, thus they may get involved in it estimating that they can pay their way out of it (Clinard & Yeager, 1980).

Performance volatility and the absence of slack resources can threaten a firm’s reputation, signalling its vulnerability and resource constraints as a business. Firms may compensate to these negative signals by investing extra effort in avoiding CSIR, so that they maintain their legitimacy vis a vis stakeholders (Flammer, 2013). The opposite logic has also been argued – firms that have a strong reputation as part of their FSA have more to loose from CSIR, and hence should be concerned about avoiding it, disregarding of their resource slack (Wang & Li, 2019). Family ownership further complicates this causal relationship. Slack resources in a family firm provide a safety net against the need to raise capital from external investors, which could threaten SEW (Berrone et al., 2010). Hence, a family firm that doesn’t have slack resources might resort to desperate measures as far as they allow protecting its SEW (Cruz et al., 2014), including involvement in CSIR. Non-family firms are not concerned with SEW, and thus having or not having slack resources has only economic, not socio-emotional (as per the SE of SEW) implications. We thus include these antecedents, studying them in combination with others discussed in the prior sections.

**Adoption of CSR policies**

Most of the literature examining business conduct focuses on CSR policies and related activities, which MNEs carry out to acquire legitimacy with stakeholders at home and abroad (Crilly, Ni, & Jiang, 2016; Marano et al., 2017). Prior research on the relationship between the adoption of CSR policies and involvement in CSIR suggests that companies may engage in and communicate about their CSR activities to compensate for prior harmful behaviour (Kotchen & Moon, 2012; Muller & Kraussl, 2011), or to build a positive reputation that will help alleviate any potentially negative reactions in the case the future harmful conduct (Flammer, 2013; Godfrey et al., 2009; Matejek & Gössling, 2014). Thus, the level of engagement in CSR can be part of a genuine commitment towards society, and hence be associated with lower CSIR, or be a way to
compensate for, or distract from, CSIR involvement. Empirical evidence on the relationship between CSR, internationalization, and CSIR, however, remains scarce (Riera & Iborra, 2017), and the role of family ownership has not yet been examined in this context.

Some scholars argue that family firms may prioritize the objectives of the family, their central and dominating stakeholder, even if it may damage other stakeholders (Kellermanns et al., 2012). Others researchers point that family firms are more actively engaged with social responsibility (Bingham et al., 2011) and environmental practices (Berrone et al., 2010), because the family identifies with the business and thus is keen to invest in activities that boost the firm’s reputation (Gao et al., 2017). A further issue is that family legitimize themselves with stakeholders differently from non-family firms, engaging in direct relationships instead of adopting standardized formal practices, such as CSR (Richards et al., 2017). Whether involvement in CSR in family firms performs a decoupling function, covering involvement in CSIR, or whether the opposite applies, and how these interact with internationalization and host country corruption, has not been studied yet. In the next sections we outline our method and the sample characteristics, then discuss the results and our contributions.

**METHOD**

**Sample**

We investigate a sample of 135 large, publicly listed firms selected from the Forbes Global 2000 rankings across 27 sectors. We adopted a stratified random sampling approach with equal allocation by randomly selecting five firms in each of the selected sectors from the Forbes list. This sample included firms from the United States and Canada (52%), Europe (40%) and Asia (Japan and South Korea) (8%). We selected large public corporations because they are more powerful and visible than smaller firms, they have a potentially significant impact on society, and higher likelihood of wrongful conduct being reported extensively in the press and by Non-Governmental Organizations (NGO). Our analysis covers the period 2003–2012, and relies on an unbalanced panel of 997 firm-year observations.
Outcome: CSIR

The outcome we investigate in this paper is CSIR which we operationalize as firms’ involvement in human rights infringement. In line with previous studies (Ruggie, 2008), we define human rights infringements referring to the 1948 Universal Declaration of Human Rights and subsequent covenants and treaties. The focus on universal human rights as form of irresponsible business acts is justified by the global scope of the dataset, which set the need to identify a global institutional framework for what could be considered “irresponsible”, thus leaving very little leeway for ad hoc interpretations of CSIR (Wettstein, Giuliani, Santangelo, & Stahl, 2019). It covers a very wide spectrum of negative business behaviour, spanning from civil and political rights to socio-economic and cultural rights. It thus covers issues such as labor rights (e.g. child labor, labor discrimination, union busting, among others), violations of local indigenous communities’ rights to land and to life, violations of right to health of communities or consumers, women’s rights, children’s rights, among others.

For each company in our dataset we have retrieved the data on their irresponsible acts through the Business and Human Rights Resource Centre (BHRRC), which is widely used by international law scholars (Ruggie, 2008 among others) being the main independent source of information about the impact of business operations on the universally defined human rights. BHRRC researchers collect daily business and human rights news and reports from web and other sources, and publish on the website any news or report with a focus on the impact of companies on human rights, verifying a minimum credibility criterion in order to exclude blind attacks on companies (Avery, 2009). For each firm in our sample, we analyzed the documents providing evidence of occurrences of negative human rights impacts. In particular, we downloaded and scrutinized more than two thousand documents, and we identified the irresponsible acts involving the firms in our sample.

We codified the information on individual irresponsible acts into a dataset including a description and the year(s) in which it occurred (specifying the year in which it is known to have
started, ceased, and the year in which it was first reported or denounced). After we created the
dataset, a business and human rights expert verified that our coding of controversies was accurate.
Although we collected data on CSIR until 2014, we decided to limit the analysis to 2012 given an
estimated two-year time lag in reporting of the irresponsible act since when it has occurred. In
bulding our dataset, we do not include events where the abuse manifestly is unrelated to firm-level
decision making, nor events causing damages to the natural environment or animals, unless the
evidence proves there to be a connection of the latter with some form of human rights infringement.

According to prior IB research, in measuring firms’ involvement in CSIR we should
consider at least three caveats. First, accounting for the scale of firms’ operation may be important
because bigger firms may have more chances to be involved in irresponsible acts simply because of
their size, not because they are necessarily more evil than smaller firms (Strike et al., 2006). Second, some sectors, such as extractive industries, are by their very nature more bound to generate
harmful impacts than others. Third, time.

To account for these issues, we follow Fiaschi, Giuliani, Nieri and Salvati (2019) and use a
M-quantile regression approach which provides a corporate wrongdoing index that ranges from 0 to
1, with 0 and 1 respectively indicating lower and upper boundaries of involvement in CSIR. We use
this methodology to condition the number of irresponsible acts in which each firm has been
involved in, during each year, to size, industry and time. We measure companies’ Size as the log of
the number of employees in each year (source Datastream). Additionally, we take into account
industry characteristics, by grouping firms according to the extent to which a given industry is more
or less likely involved in wrongful conduct (Dougherty & Olsen, 2014; Giuliani & Macchi, 2014;
Wright, 2008): the reference group (Industry dummy I) includes firms in the extractive (oil, mining
and steel), tobacco, energy and water industries, the second group (Industry dummy II) includes
retail, banking, insurance, optical, footwear and textile, chemicals and pharmaceuticals, and the
third group (Industry dummy III) includes cosmetics, pulp and paper, aerospace, automotive, tires,
heavy industry, telecommunications (TLC), food and beverages, electricity, electronics, computer
services and software, real estate, tourism, health care, advertising, appliance. Finally, we consider
*Time dummies* in order to take into account the time trend in the reporting activities of CSIR.

Therefore, our outcome variable *CSIR* is an index ranging from 0 to 1, whereby 1 is the
maximum intensity of involvement in irresponsible acts, conditioned to *Size, Industry dummies* and
*Time dummies*, whereas 0 is the minimum intensity of involvement in CSIR in the years examined
hereby.

**Causal Antecedents**

According to the theoretical framework and the literature on CSIR (Baucus, 1994; Greve et al.,
2010; Palmer, 2012), we include in the analysis six causal antecedents.

**Host markets level of corruption.** To measure the quality of institutions of host markets, we
identify the countries where the firms have operations through their foreign direct investments
(FDI), using FDIMarkets data on greenfield and brownfield FDI, and Zephyr (Bureau van Dijk) and
SDC Platinum (Thomson Reuters) data on mergers and acquisitions. We measure the host markets’
control of corruption relying on the World Governance Indicators developed by the World bank.
The variable *Host markets level of corruption* for firm *i* is then defined as the average of the control
of corruption of the host markets where the firm has operations.

**Internationalization.** We operationalize internationalization as the number of countries
where the firm has invested up to year *t*, based on FDIMarkets (for greenfield and brownfield
investments), Zephyr and SDC Platinum data (for mergers and acquisitions investments).

**Slack resources.** We measure firm’s slack resources as the log of the ratio between total
debt and equity. We retrieved these data from Datastream.

**Performance volatility.** We measure firm’s performance volatility on the basis of firm’s
Return on Equity (ROE) volatility at time *t* (i.e. based on annual fluctuations in the ROE around its
trend value, calculated using non-parametric estimation). We retrieved these data from Datastream.

**CSR reporting.** It is a dummy variable that takes the value 1 if the firm publish on its
website a CSR report in the form of a separate report or as a section in its annual report. We
scrutinized the documents to avoid including reports that contained no information of value. CSR reports constitute an increasingly popular means of keeping stakeholders informed about MNEs’ social and environmental activities (Hooghiemstra, 2000; Tschopp & Huefner, 2015). These reports are sometimes criticised for allowing firms to show only the good side of their activities (Rasche, Morsing, & Moon, 2017) in a bid to gain and maintain external legitimacy (Tashman, Marano, & Kostova, 2019).

**Family firms.** It is a dummy variable that takes the value 1 if the firm is family owned at time $t$, and 0 otherwise. We assign value 1 both in case the family has the full control over the firm, or it is the largest shareholder. We retrieve the data from NGR database. Table 1 shows the descriptive statistics of our variables and the correlation matrix.

[Table 1 about here]

**Data Analysis: fsQCA**

To investigate our research question, we use fsQCA, a method particularly appropriate when causation is complex, different conditions may produce identical results, and there are different theoretical explanations for the same phenomenon (Fiss, 2007; Grandori & Furnari, 2008; Misangyi et al., 2017). FsQCA uses set-theoretic logic to identify the causal conditions associated with an outcome and enables to study how multiple causal attributes combine into distinct configurations to produce an outcome of interest, and assess whether multiple configurations are linked to the same outcome (Crilly, 2011).

Following established practice in fsQCA studies (Fiss, Marx, & Cambré, 2013), we first calibrate the six antecedents using three values, in order to transform conventional variables into fuzzy membership scores ranging from 0 to 1 and identify meaningful grouping of cases (Ragin, 2008). In this paper, we follow prior research (Ragin, 2000, 2008) and use a three-level scale where 0 represents full non-membership of a set, 1 represents complete membership of a set, 0.5 represents the point of ‘maximum ambiguity’, or the score that defines a boundary between being ‘in’ or ‘out’ of a set. Since cases with fuzzy set membership scores of 0.5 cause difficulties when
intersecting fuzzy set, we add a constant of 0.001 to all the variables with fuzzy set membership scores smaller than 1 (Fiss, 2011). For each calibration, we use the direct method of calibration on the fsQCA software to transform the measures into set membership (Fiss, 2011; Ragin, 2008). Table 2 shows the calibration and score membership for each antecedent.

| Table 2 about here |

The second step of fsQCA involves the construction of the truth table to identify the combinations of causal conditions associated with the outcome. This is the list of all logically possible combinations. Since we are considering six causal conditions, the truth table produces $2^6$ combinations. Given that not all the possible combinations are covered by the firms considered, and in order to identify those that are relevant, we delete those that are not associated with any firms in the dataset. Then, since we are considering a big sample of firms, we set the frequency threshold to four, which allow us to retain more than 98% of the cases. We specify the threshold for the consistency which measures the degree to which a combination of causal conditions is reliably associated with the outcome (Ragin, 2008), in our case, the intensity of CSIR. An efficient consistency threshold may range from 0.75 to 0.95 (Ragin, 2006). One approach is to choose a threshold that corresponds to a gap observed in the distribution of consistency scores (Schneider et al., 2010). Therefore, we apply a threshold of 0.93.

Finally, the fsQCA software produces three solutions (Fiss, 2011): a complex solution (i.e. it produces the most complicated results), an intermediate solution (i.e. it reports results that are a compromise between inclusions of no or any logical reminder in the counterfactual analysis), and a parsimonious solution (i.e. it produces the most concise result since if a causal condition is considered as redundant it is eliminated from the configuration leading to the occurrence of the outcome). Following Fiss (2011), in the interpretation of the results we consider both the intermediate and parsimonious solutions in order to identify the core (those identified by both the solutions) and peripheral (those that appear in only the intermediate solution) causal conditions that contribute to the outcome.
RESULTS

We found five configurations of antecedents linked to CSIR instances in large public listed MNEs from advanced countries. Table 3 shows these configurations together with consistency and coverage scores. The former measures how well the solution corresponds to the data (Ragin, 2006), and it is calculated for each configuration separately and for the solution as a whole. This measure can range from 0 to 1, which implies a perfect consistency between theoretical consistency and the data. Solution coverage measures the empirical importance of the solution as a whole (Ragin, 2006). The configurations’ coverage is composed of raw and unique coverage: the former is the extent to which each configuration can explain the outcome, the latter is a measure of the share of the outcome explained by a given configuration.

In line with prior research (e.g. Greckhamer, Furnari, Fiss, & Aguilera, 2018; Mellewigt, Hoetker, & Lütkewitte, 2018; Verga Matos, Romão, Miranda Sarmento, & Abaladas, 2019), we report the core conditions in the parsimonious solutions as well as the peripheral conditions that feature intermediate solutions for transparency reasons, while we do not rely on this distinction in the theoretical interpretation since it is relevant only in the case the core conditions are considered more important than peripheral conditions theoretically (Dwivedi, Joshi, & Misangyi, 2018; Misangyi et al., 2017). Therefore, we denote this distinction for transparency, but do not distinguish between the conditions in our theoretical interpretations.

Configurations for MNEs Involvement in CSIR

Three of the five configurations of high involvement in CSIR (III, IV, and V) represent family firms that are suffering from high performance volatility, in line with the argument that these businesses are more concerned with protecting their SEW than with the harm they may cause to external stakeholders (Kellermans et al., 2012). Interestingly, the two configurations of high CSIR representing non-family firms (I and II) do not feature high performance volatility, again corroborating the idea that ownership shapes how firms react to specific performance situations (Cruz et al., 2014). In four cases, the MNEs are not highly internationalized, suggesting that
internationalization may indeed push firms to attempt preventing CSIR, and particularly in the case of family firms, though this effect is intertwined with exposure to more or less corrupt host countries and the interaction with the other antecedents, discussed below.

**Configuration I:** The resource-constrained MNE - a highly internationalized MNE, operating in high corruption host markets, facing low performance volatility, with low slack resources, which does not adopt CSR policies. This configuration shows an MNE that might struggle to manage its high levels of internationalization (Strike et al., 2006), and is stretching its resources (Crane, 2013), as showed by low levels of slack, failing to prevent CSIR from occurring. The firm might not be concerned with its conduct vis a vis society, and hence not adoption of CSR policies, and that it is attempting to take advantage of high corruption host markets in order to get away with CSIR, possibly to recover resources needed to manage its internationalization.

**Configuration II:** The disinterested MNE – a lowly internationalized MNE, operating in low corruption host markets, facing low performance volatility, with high slack resources, which does not adopt CSR policies. This non-family MNE is facing neither performance volatility nor resource constraints, and it is operating in markets where the opportunity cost of CSIR is high. Thus, involvement in CSIR could stem in this case from disinterest in the societal impact of the business, as signalled by the non-adoptation of CSR policies, combined with awareness of ample resources that can be leveraged to manage the costs of CSIR. This configuration is in line with Zavyalova, Pfarrer, Reger, & Shapiro (2012), and suggests that reputational FSAs may not be of the same importance for all MNEs. It is possible that, depending on the firm and the industry, some MNEs are less affected by the erosion of their reputation than others. This configuration could point that the least internationalized MNEs may be less subject to the pressure of international stakeholders, even when operating in low corruption host markets, or that slack resources can address any reputational issue caused by CSIR – after all, firms such as Nestle and BP have recovered from the scandals that tinted their reputation.
**Configuration III:** *The calculated family MNE* - a lowly internationalized family MNE, operating in high corruption host markets, facing high performance volatility, with high slack resources, which does not adopt CSR policies. This configuration shows a family owned MNE that may have reacted to performance volatility in order to defend the family’s SEW by reducing investment in all non-core activities (Cruz et al., 2014), including CSIR prevention, calculating that CSIR consequences could be managed in high corruption host countries, especially when having slack resources. Being lowly internationalized does not prevent involvement in CSIR. On the contrary, it is possible that the firm’s low international foothold reduces pressures by international stakeholders to “do no harm”. Being a family firm, this MNE may also sustain its legitimacy with some stakeholders through different mechanisms than CSR, typically direct relationships, betting that these may alleviate the effects of its involvement in CSIR.

**Configuration IV:** *The resource-constrained family MNE* - a lowly internationalized family MNE, operating in high corruption host markets, facing high performance volatility, with low slack resources, which adopts CSR policies. This configuration shows a family MNE which, similarly to Configuration III, reacts to a situation that may threaten its SEW through CSIR behavior that may have positive effects on its resources and performance (Crane, 2013). Here, the threat to SEW is more acute because the firm faces performance volatility whilst also not having slack resources. The firm may adopt CSR policies as part of a decoupling strategy - to send positive signals to distract from, or compensate for, its engagement in CSIR, carried out in the context of high corruption host markets, where the opportunity cost of CSIR is lower.

**Configuration V:** *The overreacting, decoupling family MNE* – a lowly internationalized family MNE, operating in low corruption host markets, facing high performance volatility, with high slack resources, which adopts CSR policies. This configuration represents a family MNE that, similarly to Configuration III, reacts to performance volatility by reducing all activities oriented towards external stakeholders, resulting in CSIR. The firm has slack resources and adopts CSR policies, both of which can help alleviating the negative effects of CSIR. However, unlike
Configuration III, the firm operates in low corruption host markets, and hence it may be underestimating the effects of CSIR. This is a case where the prioritization of family objectives may have negative effects in the long run, such as reducing the firm’s legitimacy with stakeholders, and eroding reputation, an FSA that could support its international expansion.

[Table 3 about here]

**Configurations linked to low CSIR**

To complement the analysis of the configurations linked to high CSIR, and following the suggestions of prior fsQCA research (Hubbard, 2015), we also examine the configurations linked to the opposite outcome—that is, low CSIR. This is important because fsQCA allows capturing asymmetric causality: the configurations linked to low CSIR do not have to be, and often are not, the symmetric opposite of those linked to high CSIR, and this is a better representation of reality than the symmetric causality implicit in linear regression studies (Ordanini, Parasuraman, & Rubera, 2014). Complex causal relationships, such as those of organizational antecedents linked to CSIR, tend to be asymmetric and, thus, best captured by methods that allow for unpacking of this asymmetric causality. The “low CSIR” model tests which configurations of antecedents are equifinally linked to firms that achieve “low CSIR,” intended as the opposite of “high CSIR” within the study’s empirical context. The results are summarized in Table 4.

**Configuration Ib:** The highly internationalized non-family firm, operating in low corruption host countries, with high slack resources, which does not adopt CSR policies.

**Configuration IIb:** The highly internationalized non-family firm, with high performance volatility, and high slack resources, which does not adopt CSR policies.

**Configuration IIIb:** The highly internationalized family firm, operating in high corruption host countries, with high performance volatility, and high slack resources, which adopts CSR policies.

All of the configurations of MNEs that feature low levels of CSIR represent highly internationalized MNEs, again suggesting that international expansion may create incentives for
avoiding CSIR, as a mechanism for strengthening reputation and legitimacy with stakeholders in multiple locations (Marano & Kostova, 2016). All the configurations also show high levels of slack resources, in line with the idea that firms may get involved in CSIR when they are facing resource constraints (Xu et al., 2018). It is possible that being able to leverage slack resources helps managing the complexity of highly internationalized operations.

[Table 4 about here]

DISCUSSION AND CONCLUSIONS

Under economic distress, family firms react more dramatically than non-family firms: they retreat from non-core activities and focus on business survival, which is a priority for their central stakeholder, the family (Chrisman & Patel, 2012). SEW scholars point that these reactions are linked to the prioritization of two SEW objectives: preserving family control and ensuring business survival (Cruz et al., 2014). Maintaining control of the firm is a primary SEW objective because often the business has emotional value for the family, and because of intertwined identities. The preservation of the business, besides emotional reasons, is linked with transgenerational wealth transmission - owning families tend to invest a high share of the wealth in the family business, which can be lost in case of business failure (Berrone et al., 2010).

Empirical evidence shows that family firms facing negative performance periods reduce activities oriented towards external stakeholders, such as social and environmental projects (Cruz et al., 2014; Gómez-Mejía et al., 2007), which could potentially increase the risk of CSIR, though such causal link has not yet been studied.

Our study contributes to literature by exploring the ways in which internationalization, family ownership, and other antecedents shape MNEs’ involvement in CSIR. We shed light on the causal antecedents of CSIR – an understudied, and yet highly strategic phenomena for IB. We address the scarcity of empirical evidence on CSIR and its drivers by studying through a combinatorial logic, which allows capturing us to reconcile diverging theoretical perspectives.
Our second contribution is to the incipient IB literature on family firms. We go beyond the binary debate depicting these firms in either a positive or negative light, uncovering the conditions under which family MNEs they get involved in CSIR. Our results show that family MNEs involved in CSIR are not highly internationalized, and facing performance volatility, in combination with other factors, for example, having slack resources and operating in high corruption host countries. Non-family MNEs get involved in high levels of CSIR in different situations, but not when going through performance volatility, which suggests that family firms indeed react differently to financial risk.

Finally, we show that internationalization has important, and yet different, effects for family and non-family MNEs. The three configurations of family MNEs involvement in CSIR depict lowly internationalized firms, whereas highly internationalized non-family MNEs get involved in CSIR if also operating in corrupt host markets.

REFERENCES


2167.


Jones, B., Bowd, R., & Tench, R. 2009. Corporate irresponsibility and corporate social


Marano, V., & Kostova, T. 2016. Unpacking the institutional complexity in adoption of CSR


Tashman, P., Marano, V., & Kostova, T. 2019. Walking the walk or talking the talk? Corporate social responsibility decoupling in emerging market multinationals. *Journal of International


Xu, K., Hitt, M. A., & Miller, S. R. 2019. The ownership structure contingency in the sequential international entry mode decision process: Family owners and institutional investors in family-


### TABLES

**Table 1. Descriptive statistics and correlation matrix**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>S.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<tr>
<td>1  CSIR</td>
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<td></td>
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<tr>
<td>2  Host country level of corruption</td>
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<td>-0.06</td>
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<td></td>
<td></td>
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<tr>
<td>3  Internationalization</td>
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<td>12.61</td>
<td>0.27</td>
<td>-0.02</td>
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<td></td>
<td></td>
<td></td>
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<td>4  Performance volatility</td>
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<td>31.85</td>
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<td>0.06</td>
<td>-0.07</td>
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<td>5  Slack resources</td>
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<td>6  CSR report</td>
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<td>7  Family firm</td>
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<td>-0.07</td>
<td>-0.07</td>
<td>0.04</td>
<td>0.09</td>
<td>0.11</td>
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Table 2. Calibration and fuzzy set score membership

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Fuzzy set value</th>
<th>Membership score</th>
<th>Criteria for calibration</th>
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</thead>
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<tr>
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<td>-0.65</td>
<td>Values of the 75\textsuperscript{th}, 50\textsuperscript{th} and 25\textsuperscript{th} percentile of the distribution of the variable computed for all the countries covered by the World Bank Survey</td>
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<td>0.5</td>
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<td>Values of the 75\textsuperscript{th}, 50\textsuperscript{th} and 25\textsuperscript{th} percentile of the variable distribution</td>
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<td>Performance volatility</td>
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<td>2.45</td>
<td>Values of the 75\textsuperscript{th}, 50\textsuperscript{th} and 25\textsuperscript{th} percentile of the variable distribution</td>
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<td>Values of the 75\textsuperscript{th}, 50\textsuperscript{th} and 25\textsuperscript{th} percentile of the variable distribution</td>
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Table 3. Configurations of causal conditions leading to high levels of CSIR

<table>
<thead>
<tr>
<th>Causal conditions</th>
<th>Configurations for high levels of CSIR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
</tr>
<tr>
<td>Host countries’ corruption</td>
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</tr>
<tr>
<td>Internationalization</td>
<td>●</td>
</tr>
<tr>
<td>Performance volatility</td>
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<td>CSR report</td>
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</tr>
<tr>
<td>Family firm</td>
<td>〇</td>
</tr>
</tbody>
</table>

|                      |   |   |   |   |   |
| Raw coverage         | 0.03 | 0.03 | 0.02 | 0.01 | 0.03 |
| Unique coverage      | 0.03 | 0.03 | 0.03 | 0.01 | 0.03 |
| Consistency          | 0.94 | 0.96 | 0.94 | 1.00 | 0.93 |

Note: ● core causal condition (present); ✗ peripheral causal condition (present); 〇 core causal condition (absent); ✗ peripheral causal condition (absent). This format of presenting the result from the fsQCA is based on Fiss (2007). Each column represents a combination of causal conditions (i.e. a configuration), leading to high intensity of CSIR.
Table 4. Configurations of causal conditions leading to low levels of CSIR

<table>
<thead>
<tr>
<th>Causal conditions</th>
<th>Configurations for low levels of CSIR</th>
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<tr>
<td></td>
<td>Ib</td>
<td>IIb</td>
<td>IIIb</td>
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<td>Consistency</td>
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Solution coverage: 0.08
Solution consistency: 0.88

Note: ● core causal condition (present); ◐ peripheral causal condition (present); ☓ core causal condition (absent); ⊘ peripheral causal condition (absent). This format of presenting the result from the fsQCA is based on Fiss (2007). Each column represents a combination of causal conditions (i.e. a configuration), leading to low intensity of CSIR.