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ORIGINAL PAPER

Corporate Social Innovation in Developing Countries

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Abstract
Although corporate social innovation studies in developing countries acknowledge the importance of firm resources and capabilities for attaining social goals, they overlook the way in which these interact with broader institutions to generate successful outcomes. We address this gap by exploring the relationship between firm resources-capabilities and institutions that is conducive to meeting both business and social interests in developing countries. By employing a fuzzy-set qualitative comparative analysis of corporate social innovation projects performed by joint ventures of Dutch SMEs and their local partners in developing countries, we show that firm resources and/or capabilities complement strong institutions in these countries. Corporate social innovation can also be facilitated by firm capabilities in running highly legitimate projects that substitute institutional voids in these economies, attesting to multiple paths that corporations can take to achieve social innovation.

Keywords Corporate social innovation · Developing countries · Institutional voids · Partnerships · fs/QCA

Introduction

Management scholars have long approached the role of corporations in addressing societal problems, including income inequity and illiteracy (Bansal, 2002; Bansal & Song, 2017; Margolis & Walsh, 2003). The mounting emphasis on the social aspects of corporate behavior and the need to integrate social concerns into business operations (Buckley et al., 2017; Candi et al., 2019; Martí, 2018) has led to the conceptualization of Corporate Social Innovation (CSI). Social innovation captures ideas, processes and consequences that offer new ways to address social needs (Mirvis et al., 2016). At the corporate level, social innovation (labeled as CSI) refers to "an initiative that aims to create both shareholder and social value with the potential to alter the structure of innovation systems, improve employee motivation, and change corporate identities and strategies to increase competitive advantage, while at the same time bringing solutions to societal needs" (Dionisio & de Vargas, 2020: (1). It differs from the concept of Corporate Social Responsibility (CSR) and extends beyond Creating Shared Value (CSV). CSR has emphasized philanthropic initiatives with the objective to address external pressures and improve the reputation of corporations (Dembek et al., 2016; Longoni & Cagliano, 2016; Russo Spena et al., 2017). Whereas CSV, which emphasizes mutual, positive economic and societal benefits relative to costs (Fearne et al., 2012), is restricted to policies and operating practices with a focus on economic success (Dionisio & de Vargas, 2020).

It is well acknowledged that strategic investments by corporations where assets and expertise are deployed through deep collaboration across functions within a firm and external parties to co-create something new that provides a sustainable solution to social needs are significant (Chelekis & Mudambi, 2010; De Silva et al., 2019). For example, Bocken and Geradts (2020) draw on the dynamic capabilities view to advance our understanding of the success and failure of sustainable business model innovations. They

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regard these capabilities as sensing (being aware of emerging sustainability issues), seizing (mobilizing resources to address emerging sustainability issues) and transforming (renewal of corporations' capabilities and implementing new sustainable business model concepts). Similarly, Babu et al. (2020), Lashitew et al. (2020) and Candi et al. (2019) highlight partnerships as pivotal to co-creating new innovation opportunities which can offer synergistic inputs, such as local knowledge, contacts and legitimacy, to achieve social impact. Despite these developments in the field, we still know little about the nature and the role of resources and capabilities in CSI (De Silva et al., 2019) and the way in which they interact with broader (in)formal institutions to yield successful CSI outcomes in developing countries.

Although CSI scholars recognize the impact of broader institutions on corporations' social innovation activities, they overlook the interdependency between firm resources-capabilities and (in)formal institutions and its implications for CSI consequences. They see firm capabilities as essential to successfully mitigate weak formal institutions—institutional voids (Khanna & Palepu, 1997)—in developing countries (Huq et al., 2016; Lashitew et al., 2020). This restricts the understanding of institutions to constraints on innovative activity through increasing transaction costs in inefficient markets (Doh et al., 2017; Miletkov et al., 2017). However, not all corporations are constrained by institutional voids (Saka-Helmhout et al., 2020). Corporations with internal capabilities can attain complementary resources from their institutional environments to enhance their learning and facilitate innovation in developing countries (McCarthy & Puffer, 2008).

In this paper, we expand the scope of CSI research in developing countries by investigating the interactions between firm resources-capabilities and (in)formal institutions. We unravel how firm resources-capabilities and institutions interact in complementary and substitutive ways as part of distinct resource configurations to facilitate successful CSI. By undertaking a Qualitative Comparative Analysis (QCA) of data collected from small and medium-sized enterprise (SME) managers in the Netherlands with joint ventures in developing countries, we shed light on the role of firm resources and capabilities and the broader institutional context in which these joint ventures are embedded. Our focus on CSI by joint ventures is consistent with the aims of CSI to "produce new sources of revenue and to generate a more socially relevant innovation system and corporate culture that can be a source of competitive advantage" to effectively capture the both economic and social value (Dionisio & de Vargas, 2020, p. 2).

Our study's contributions to the CSI literature are twofold. First, we develop a mid-range theory by exploring configurations of conditions that are conducive to CSI. We examine which firm resources and capabilities matter and under which institutional conditions. We also clarify the nature of the relationship between (in)formal institutions—i.e., state-enforced written rules as well as unwritten rules—(North, 1990), and firm resources and capabilities. The interaction between firm resources-capabilities and institutional influences is pivotal to our understanding of CSI as the appropriation of value from these resources and capabilities depends on the institutional contexts of firms. As Barasa et al. (2017) show, the widespread lack of effectively functioning institutions can pose a challenge to firms as they work to value their resources and capabilities. This addresses the shortcoming in the CSI literature on how firm resources-capabilities interact with (in)formal institutions, capturing a role beyond a mitigation of weak institutions in developing countries (Chiu, 2017; Huq et al., 2016; Lashitew et al., 2020).

Second, by integrating insights on capability-based and institutional influences on the social dimension of innovation in developing countries, we demonstrate that CSI is likely to be achieved through multiple combinations of firm resources-capabilities and (in)formal institutions. Our configurational analysis of CSI in developing countries is a departure from studies that adopt a linear, net-effects perspective. It captures the complexity of interactions among conditions (Fiss et al., 2013) to highlight several pathways (Rihoux & Ragin, 2008) to alleviate social problems. Rather than simply confirm a positive relationship between social responsibility and firm performance (e.g., Candi et al., 2019; Jamali & Karam, 2018), we demonstrate that specific constellations of resources-capabilities and (in)formal institutional conditions enable intended outcomes of CSI. In other words, firm resources-capabilities and institutions operate as bundles of interconnected structures to generate an organizational outcome (Oliver, 1997).

Our paper is organized as follows. The first section presents the literature on resources and capabilities that impact CSI. It also examines the role of (in)formal institutions and their complementary or substitutive relationship with resources and capabilities in generating CSI outcomes. The second section presents the data, sample used herein as well as our method. The third section discusses our fuzzy-set (fs) QCA findings. The fourth and final section concludes by elucidating theoretical and practical implications, as well as possible directions for future research.

Theoretical Background

Firm Resources-Capabilities and CSI

Drawing on the CSI literature, we focus on innovation that addresses the needs of both businesses and society by generating shared value for shareholders and stakeholders (Candi

et al., 2019; Dembek et al., 2016; Russo Spena et al., 2017). The theoretical underpinnings of CSI, albeit a recent development, are strategic alliances and value co-creation (Babu et al., 2020). Corporations are encouraged to form strategic alliances to capitalize on social opportunities. They may collaborate by establishing either a social alliance with a not-for-profit organization or an alliance with other commercial firms (Babu et al., 2020). The former has been widely studied by sustainability scholars investigating hybrid organizations (e.g., De Silva et al., 2019; Haigh & Hoffman, 2012; Michelini & Fiorentino, 2012). Hybrid organizations design their products, operating models and technologies from the ground up with the aim to create shared economic value (Doherty et al., 2014). Stakeholders participate in the definition and implementation of a corporation's social values (Dionisio & de Vargas, 2020). What is less well understood is the knowledge related to the formulation of the latter form of alliance—that with other businesses—and its impact on CSI, a gap which this empirical research intends to fill.

We aim to unpack the knowledge related to innovative partnerships between commercial firms in developing countries. The unique challenge of implementing CSI requires a set of distinct capabilities (Lashitew et al., 2020; Porter & Kramer, 2011). Such capabilities extend beyond typical *firm-specific resources* such as capital, as delineated by the resource-based view for the implementation of activities (Barney, 1991), to also include those that apply to the *governance of partnerships* and capture the creation of economic and social value through a relational framework (Lashitew et al., 2020; Quélin et al., 2019).

In terms of *firm-specific resources*, we consider the financial commitment of firms to CSI. Partnerships tend to succeed when partner commitment is high (e.g., Das & Teng, 1998). Partner commitment includes the willingness of a partner to make both resource contributions and short-term sacrifices to attain long-term benefits (Gundlach et al., 1995). Such commitment is considered critical in partnerships where collaborators "have identified the specific benefits they expect to gain by coming together but remain relatively unclear about the exact processes necessary to achieve them" (Seelos & Mair, 2007, p. 48). Although such commitments are likely to be made by firms that engage in CSI as a pledge to work with partners even in times of uncertainty, their impact on the success of realizing CSI outcomes is not considered in CSI studies.

In terms of the *governance of partnerships*, we specifically explore: (i) informal governance, resting on learning through partnership experience; and (ii) formal governance, resting on the mode of partnership or the creation of a structure that enables firms to guide local partners to achieve the standards needed to deliver a certain social outcome (Kale et al., 2000; Quélin et al., 2019).

First, we build on the understanding that corporations can attain CSI if they have partnering experience together. Organizations derive critical information, know-how and capabilities from their strategic alliance networks (Khanna et al., 1998). These networks are a means by which partners access each other's complementary skills to develop new ways of making, selling, and distributing goods and services (Kale et al., 2000). The learning opportunities afforded by partnerships are shown to generate value for both the partnering firms and the third-party organizations (De Silva et al., 2019; Le Ber & Branzei, 2010). They are also demonstrated to shield corporations from the financial and market risks associated with operating in developing markets (Lashitew et al., 2020). A corporation with partnership experience is more likely to effectively identify activities that can help deliver social value. Such corporations can also be expected to manage resources better than those lacking such experience as uncertainty is reduced through the forging of inter-firm trust (Gulati, 1995). Partnership experience is especially crucial in developing countries where resources are scarce and counterparts cannot efficiently come together, largely on account of underdeveloped market factors and regulators, and the absence of limited information flows that would otherwise support and facilitate transactions (Khanna & Palepu, 1997).

Second, in the process of meeting social goals, we argue that corporations need to balance learning with protecting their capabilities from appropriation or exploitation by partners. There is a risk of losing core proprietary know-how to a partner, as partnerships may be fraught with opportunistic intent (Doz, 1988; Kale & Singh, 2009). A corporation exposes itself to coordination hazards, many of which are more likely to be found in institutionally weak developing countries. Such hazards can adversely affect CSI outcomes. Therefore, how a corporation constructs the partnership mode during the partnership design phase can significantly influence the achievement of social goals. Those with enhanced contractual design, enforcement and coordination capabilities may be more willing and able to manage their partnership to meet social goals. This is commonly understood to be delivered through equity ownership (Kale & Singh, 2009; Schreiner et al., 2009). Equity modes of partnerships (in which one partner has an equity stake in the other, or both partners create a new and independent venture in which both have a stake) can enable corporations to coordinate and manage partner interdependence and specify working procedures for task execution and how to adapt them to changing circumstances (Gulati et al., 2005). By owning equity, partners exhibit *ex ante* partnership engagement, facilitate the hierarchical supervision of daily operations, and can tackle unforeseen circumstances as they emerge (e.g., Reuer & Arino, 2007). They can also mitigate

partner opportunism and encourage greater inter-firm know-how transfer for CSI.

Consequently, we consider both informal governance (i.e., based on partnership experience resulting in trust) and formal governance (i.e., based on equity ownership) to be important in bringing about outcomes of CSI as "equity alone is insufficient to guarantee successful alliance governance and that these mechanisms might actually complement each other in driving alliance success" (Kale & Singh, 2009, p. 49).

In resource-constrained settings as those in developing economies, firm resources and capabilities may not be the only influences on CSI. The institutional context can be pivotal in firms' efforts to succeed in CSI as the role of firm resources and capabilities in value co-creation in social innovation is shaped by broader institutional arrangements (Lusch et al., 2016; Vargo & Lusch, 2017). This suggests that for corporations to deploy their resources and capabilities effectively for CSI outcomes, there is dependence on institutional contexts.

Institutions and CSI

CSI, as a co-creational process, is influenced by (in)formal institutions (Babu et al., 2020). Corporations depend on establishing strong relationships with (in)formal institutions to improve understanding of market opportunities, facilitating their contribution to society and developing competitive advantages (Herrera, 2015). Their social innovations rely on new forms of institutional arrangements, requiring external legitimation. The buy-in from important stakeholders helps avoid derailment of CSI efforts where institutional provisions are either unavailable or limited (Altuna et al., 2015; Lashitew et al., 2020).

Weak institutional environments with unstable rules of law, red-tape, corruption, and limited input availability and/or accessibility in product, capital and labor markets, i.e., those with institutional voids, expose corporations to a broader set of contractual hazards and hinder the effectiveness of partnerships (Doh et al., 2017; Khanna & Palepu, 2010; Rivera-Santos, et al., 2012). Partnerships in developing countries may be exposed to hazards of value appropriation by organized groups lobbying for price reductions and other changes that can impede corporate investments (Quélin et al., 2019). The more institutional voids there are in a country, the fewer are the rules pertaining to legitimacy, the greater are the constraints on sources of knowledge, and the lower are the incentives and resources (Lu et al., 2008). These, in turn, increase the cost of an entrepreneurial activity (Zhu et al., 2012). For example, precious resources may be spent on 'fire-fighting' rather than addressing social needs. These conditions suggest that for corporations to deliver viable projects that alleviate social problems, the impact of institutional voids needs to be mitigated.

Corporations can be expected to face challenges in establishing and maintaining the legitimacy of their activities, especially in developing countries where challenges to legitimacy are exacerbated by unequal economic relationships (e.g., Bucheli & Salvaj, 2018). In other words, host country stakeholders can lack the information and cognitive structures needed to understand, interpret and evaluate CSIs. In order to secure access to local resources, social innovators need to establish legitimacy of their initiatives (Verleye et al., 2018). Interorganizational endorsement—endorsement by prominent external organizations—is demonstrated to contribute to establishing legitimacy (e.g., Ito, 2018). However, this depends on the credibility of the evaluation of the initiative by a prominent organization, the credibility of the evaluation of a need for the initiative, and the referencing and use of an endorser's economic and/or social status. This referencing can be offered by organizations or individuals who 'have a standing and license, derived from the organization's legitimating account of itself, most commonly the [home] State' (Deephouse & Suchman, 2008, p. 55, brackets added). Upon initiatives being perceived as legitimate or publicly validated as capable of addressing social goals, corporations can more effectively exchange information, influence procedures, and garner endorsement for their proposed solutions.

Consequently, we include both institutional voids and legitimacy in our analysis and consider the combined effect of these institutions and firm resources-capabilities on CSI to do justice to the theoretically acknowledged interdependency between the two influences.

Empirical Analyses

Methodology

Given our understanding that CSI is achieved through interactions between firm resources-capabilities and (in)formal institutions, we use a configurational approach that is designed to capture the complexity of interactions among conditions (Fiss et al., 2013). This is justified by our intention to match theory and empirics (Fiss, 2007). More specifically, we conduct a fuzzy-set Qualitative Comparative Analysis (fs/QCA). In a QCA, the relationship between the conditions and the outcome is based on set membership (Fiss, 2007). The set membership in this paper varies between 'fully in' (assuming the value of 1) and 'fully out' (assuming the value of 0). QCA has some additional characteristics. First, QCA focuses on identifying necessary and sufficient conditions. A condition is necessary if it is always present when the outcome is observed. A condition

is sufficient if the outcome is observed when this condition is present. But other conditions can also result in this outcome (Rihoux & Ragin, 2008). Second, a core idea of QCA is that it is a combination of conditions that results in the outcome. This is also known as conjunctural causation. Third, there are different configurations that will result in the same outcome, which is known as equifinality.

Data Collection, Coding and Calibration

This research utilizes data from the *Private Sector Initiative Program (PSI) and the Program for Cooperation in Emerging Markets (PSOM)*, which is a predecessor of the PSI program, funded by the Dutch Ministry of Foreign Affairs and administered by Agentschap NL (formerly the agency of the Ministry of Economic Affairs for international business and cooperation). The primary objective of the PSOM-PSI programs was to stimulate private sector investments in innovative business in selected developing countries to also contribute to local social development. The program goals involved the formation of international joint ventures between business partners from the Netherlands and developing countries. The Ministry of Economic Affairs offered technical and financial advice and a periodic evaluation of the venture performance. Both partners had to meet several requirements to be admitted into the programs: (i) comply with the OECD guidelines for multinational enterprises regarding sustainability goals, in particular, with the International Labor Organization declaration on fundamental principles and rights at work and the UN convention on biodiversity. For example, the partners should declare that they do/will not practice child labor or forced labor in their companies and in the proposed project, (ii) aim to improve the local economy by developing the private sector through new technology transfer. As such, the new company should not compete directly with the products or services of local firms in the same market segment. In other words, PSI projects were expected to avoid market distortion, and (iii) provide evidence of their competence in dealing with risks such as the technical capability to handle automated machinery and new technology.

The dataset was based on information offered by the partners on a structured form designed by the Agentschap NL staff. Between 2010 and 2013, one of the authors was invited, in her capacity as a researcher, to provide suggestions for improvement by Agentschap NL. This provided access to a unique dataset that included information on 205 projects developed by international joint ventures formed between 2006 and 2011 in 44 countries. 55% of the 205 projects were in agriculture and agro-processing, and 40% were distributed across different types of industry. As the Dutch government had plans to change the rules applied to PSOM-PSI policies in 2013, we limited our sample to those projects developed between 2006 and 2011 to ensure that data on PSOM-PSI were comparable in terms of project performance.

The changes in the Agentschap NL program—the transition from the PSOM to PSI required a greater emphasis on the projects' economic feasibility and shared risks between the Agency and the participating firms—had several implications for our data collection and analysis. It set limitations on the type and regularity of the data obtained, which had implications for the number of missing data and the continuity of information over the years of analysis. Nonetheless, the dataset is suitable and relevant for our research purpose as it contains a broad range of information on the different projects such as project description, its innovative aspects, challenges faced, description of the partners and type of joint venture, as well as project outcomes such as jobs created. Despite the time lapse since the data collection, the issues covered by the dataset such as institutional obstacles experienced by and the resources and capabilities available at the disposal of firms are still relevant today as businesses increasingly find themselves confronting social problems due to the shifting expectations of various stakeholders (Esen & Maden-Eyiusta, 2019).

The first selection for this paper was to include only the projects that were finalized by deleting all interrupted projects. We focused only on the finalized projects as an unsuccessful finalized project in this study implies that the project is not successful in terms of CSI. Although an interrupted project can be considered unsuccessful, the factors contributing to its failure can be beyond the conditions highlighted in this study. Therefore, these projects are not comparable in the light of our study's aim. The interrupted projects also often had crucial information missing. Compernolle et al. (2016) showed in their evaluation of the programs that the financial profiles of finalized and interrupted PSI projects hardly differ. They only differ (at the 0.05 significance level) in the applicant's balance and equity ratio. We therefore do not expect a strong bias introduced by this selection step. This first selection reduced the dataset to 114 projects. The second selection ensured that only CSI projects were included. Even though the focus of the two programs was on social innovation, we had to confirm that the included projects aligned with the definition of CSI. Based on the information in the 'project description', the 'innovative aspects', the 'company info' and the 'business plan', two of the researchers coded all projects to determine if the project could be considered a CSI project. Projects that only focused on costs and/or cost reductions, such as the exporting of freesia flowers to the UK from Ethiopia that were previously produced in the Netherlands, and not included the creation of new jobs or social elements were coded as not being a CSI project. Others could be considered innovations with social goals.

For example, some of the projects aimed to introduce a seed production system. Others focused on the production of renewable energy. Two researchers coded the projects independently and disagreements were discussed and resolved. 74 out of the 114 projects fitted the definition of a CSI project. For some of these projects, we had missing values for several conditions. The final dataset without any missing values included 44 projects. These projects were located in 25 countries ranging from East Europe through Africa to Far East Asia with a fairly even distribution. Similar to the overall dataset, most projects were in agriculture. Table 1 provides an overview of the number of projects per host country and sector. The home country of the firms was the Netherlands for all projects. The average funding received by the projects was €531,268.

The next step was to calibrate set membership. Since we used fuzzy-set QCA, set membership could vary between 0 and 1. We aimed to calibrate the data based on theoretical knowledge (Schneider & Wagemann, 2012). This was, however, not always possible. Similar to earlier work (c.f. Chappin et al., 2015), we based calibration on the combination of theoretical insights with empirical data (Ragin, 2000). Below we explain the coding and calibration for the different conditions.

Table 1 Overview of corporate social innovation projects per host country and sector

Host country	Number of projects	Sector	Number of projects
Bangladesh	3	Agriculture	24
Bosnia-Herzegovina	2	Energy/environment	5
Cape Verde	2	Industry	7
China	3	Transport/infrastructure	3
Colombia	1	Tourism	2
Ecuador	2	Other	3
Egypt	2		
Ethiopia	6		
Gambia	2		
Ghana	2		
India	2		
Indonesia	1		
Kenya	1		
Madagascar	1		
Mali	1		
Morocco	1		
Pakistan	2		
Rwanda	1		
South Africa	1		
Sudan	1		
Surinam	1		
Tanzania	2		
Thailand	2		
Uganda	1		
Vietnam	1		

The home country is the Netherlands

Outcome Condition

Our outcome condition is *Successful Corporate Social Innovation*. In the CSI literature, it is acknowledged that CSI aims to create both economic and social value (Dionisio & de Vargas, 2020). Therefore, our outcome condition includes both an economic and a social dimension. The economic dimension is captured by the use of the expected Internal Rate of Return (IRR), which a typical assessment of the profit and risk associated with a project (Link & Siegel, 2009). The average IRR of the projects was about 14%. Since there is no prior theoretical knowledge on what serves as low or high IRR on CSI projects, we used this average as a cut-off value. Projects with an IRR of up to 14% were considered as having a low economic outcome. Projects with an IRR of more than 14% were considered as having a high economic outcome.

The social dimension can refer to multiple social outcomes. Bund et al. (2013, p. 47) distinguish seven social innovation fields: education, health & care, employment, housing, social capital & networks, political participation, and environment. For the specific context of our study, mainly education and employment are relevant. This latter field also includes income. Therefore, we included the following social outcomes: increase in income (employment), direct jobs created (employment), and trained labor (education). An increase in income was captured by a project resulting in an increase of income above the country average. In other words, projects generating an increase of income above the country average were considered as offering beneficiaries a high income, whereas projects without this increase were considered as offering beneficiaries a low income.

Since the partner companies differed in firm size, we used the following relative measure to be able to compare the creation of jobs by projects: the number of jobs created over firm size of the partner in the developing country. When this value was 1 or larger, the number of jobs created was at least the same as the number of jobs in the partner company in the developing country, and we considered this as the creation of high number of jobs. If the value was less than 1, the project was considered to generate low number of jobs.

We also used a relative measure for trained labor to enable a comparison of projects: the number of trained staff over direct jobs created. When this value was 1 or larger, the number of people trained was at least the same as the number of jobs created, and we considered this as high number of trained labor.

When the economic and all three social outcomes were high, the project was considered to have full-membership (value of 1); projects with either a high economic outcome and two high social outcomes or with a low economic outcome and three high social outcomes were considered to be more in than out and assigned a set membership of 0.66; projects with a high economic outcome and one high social outcome or with a low economic outcome and two high social outcomes were considered to be more out than in and assigned a set membership of 0.33. When the economic outcome was low and none or only one social outcome was high, the project was considered to have non-membership (0).

Causal Conditions for Successful CSI

Our causal conditions include firm resources-capabilities and institutions. Given that the projects are located in countries with different levels of economic development, we also considered the potential influence of the level of development of the host country by drawing on the World Bank's classification in our QCA model.

Resources-capabilities include firm-specific resources and governance of partnerships. For *firm-specific resources*, we determined the financial commitment of firms by looking at the resource contributions (Gundlach et al., 1995) of the partners in relation to the overall project funding. Partnerships with financially committed firms are likely to be successful in realizing CSI outcomes. More specifically, we measured the funding received over total of own contributions. Projects with a value greater than 1 received more funding than the contribution of the firms themselves. These projects could be seen as having a low financial commitment. Hence, they were considered as a non-member and assigned a 0. If the funding received was equal to the firm's own contribution, then we considered this as the cross over point and assigned it a value of 0.5. Projects that received less funding than the firm's own contribution were considered to have a high financial commitment (full-membership) and were assigned a 1.

The *governance of partnerships* was split into: (i) informal governance and (ii) formal governance (Lashitew et al., 2020; Quélin et al., 2019). For the former, two different conditions were included: previous partnership experience and time spent together on the current project.

In order to determine previous partnership experience, the two coders looked at the company information. This information led to the conclusion that the project partners either had been collaborating before or there was a legal relationship between the partners (e.g., a mother-daughter structure). When this was the case, the project was coded as having previous partnership experience (full-membership = 1). When the project partners were just introduced to each other or they were acquaintances, the project was considered as not having previous partnership experience (non-membership = 0). Both coders coded this independently, and disagreements were discussed and resolved. Since company information was not available for all projects, we had missing values. We aimed to reduce the number of missing values by checking other columns for information on previous experience. For some projects, this information could be found in the project description.

Time spent together on the current project to build relational experience was measured by looking at the project duration. The cut-off values for the calibration have been derived abductively. The literature on organizational culture underscores a minimum of 3 years to change culture (e.g., Wilhelm, 1992). As new project ideas require partners to adjust to a sustainable business model (De Silva et al., 2019), we deduce that partners are likely to require at least 3 years for any social innovation outcome to be realized. But this theoretical justification is not strong enough. We, therefore, also looked at the distribution of the data to determine what serves as limited or extensive relational experience in CSI projects. The average duration of the projects was 1212 days and the median was 1095 days (= 3 years). For the calibration, we therefore used the value of 3 years (1095 days) as the cross over point. The 25th (977 days) and the 75th percentile (1452 days) served as the breakpoints for fully out (0.05) and fully in (0.95), respectively.

For the mode of partnership (formal governance), we assessed the type of joint venture. The mitigation of partner opportunism and the encouragement of inter-firm know-how transfer for CSI is likely to hold more for majority than for shared and minority stake partnerships (where the majority stake is held by the partner from a developed country) in developing host countries. In order to determine this, we compared the share of the applicant with those of its collaborators. If the share of the applicant was more than 50%, i.e., a majority JV, then the project was considered to have full-membership (value of 1). If the share was equal (so 50%) we considered this as the cross over point and assigned this a value of 0.5. If the share was less than 50%, i.e., a minority JV, then the project was assigned a 0.

Institutional conditions consisted of *institutional voids* and *legitimacy*. Institutional voids can be experienced at different levels, such as political and legal systems, and product, labor and capital markets (Khanna & Palepu, 2010). In order to determine if institutional voids were experienced on a project, the two coders extracted data from project progress and lessons learnt. Based on this information, the following dimensions were assessed:

- Product market void (e.g., problems with the infrastructure or shortage of raw materials)

- Labor market void (e.g., limited skilled labor or shortage of people)
- Capital market void (e.g., investment difficulties)
- Regulatory & contract enforcement voids (e.g., bureaucracy)

Both coders coded this independently and disagreements were discussed and resolved. The minimum number of voids was zero, whereas the maximum would be four. In our sample we did not observe projects with four voids. The maximum value was three. Projects with three (or four) voids were considered to have full-membership (1); projects with two voids were considered to be more in than out and assigned a set membership of 0.66; projects with one void were considered to be more out than in and assigned a set membership of 0.33. When zero voids were experienced in a project, the project was assigned a non-membership (0).

In order to determine if the project was considered *legitimate*, we looked at embassy advice. A positive embassy advice signaled that the project may be perceived as legitimate. It served as a seal of consent for the activities of a firm in a developing economy (e.g., Bucheli & Salvaj, 2018). The two coders looked at the specific advice of the embassy. Where advice was fully positive, the project was considered to have a full-membership and was assigned a 1; if the advice was negative or not fully positive, the project was considered to have a non-membership and was assigned a 0. Both coders coded this independently, and disagreements were discussed and resolved.

In order to ensure that the deletion of interrupted projects did not result in a selection bias of only legitimate projects, we also checked the embassy advice for interrupted projects and compared this with the 74 finalized projects. This showed a very similar picture for the percentage of projects receiving a positive advice: 73% of the finalized projects vs. 71% of the interrupted projects received a positive advice. Slightly more finalized projects received a negative advice compared to the set of interrupted projects, 12% vs. 5%, respectively. On the other hand, we also observed more missing values for the interrupted projects, 23% vs. 15% in the case of the finalized projects. An explanation for these differences could be that some of these interrupted projects were already stopped before the advice was provided. All in all, this shows that our set is not biased toward projects with a positive advice, i.e., those considered legitimate.

In order to control for the fact that projects are located in different countries, we also included the *level of development of the host country* of the project. This was determined by the GNI per capita using the Atlas method of the World Bank. For each project, we collected the GNI per capita of the host country for the starting year of the project from Macrotrends (2020). We used the thresholds from the World Bank (2020) linked to the respective project commencement year to determine if a country should be classified as a low-income country. Most of the countries that were not classified as a low-income country were categorized as lower middle-income countries. Projects in a low-income country in the commencement year were assigned a 0 (non-membership), the rest were assigned a 1 (full-membership).

An overview of the conditions, measures and calibration as well as the descriptives (before the calibration) can be found in Tables 2 and 3.

Analysis

For the analyses, we used the software 'fs/QCA 3.0'. The first step was the test of necessary conditions where the score for a condition to be consistent should be 0.9 or above (Ragin 2006). The results in Table 4 show (with all scores < 0.9) that none of the conditions independently appear to be necessary for successful CSI. These results support the need to conduct a configurational analysis.

The second step was to identify configurations of conditions that are sufficient for successful CSI. We used the truth-table algorithm to achieve this. The truth-table provides all logically possible combinations of conditions (Rihoux & Ragin, 2008) and the number of cases that are observed for each of the combinations. Based on this truth-table, one aims to identify the configurations resulting in the outcome condition. In order to reduce the table, we used a frequency cut-off of 1 and a consistency threshold of 0.8 (see Fiss, 2011). For the intermediate solution, we relied on theoretical expectations: Financial commitment, Previous partnership experience, Time spent together on current project, Mode of partnership: majority share, Legitimacy and Level of development of the host country should be present, whereas Institutional voids should be absent for successful CSI.

Results

Table 5 provides an overview of the results and shows the intermediate solutions. We used the notation as suggested by Ragin and Fiss (2008). A full circle indicates the presence of a condition, whereas a crossed-out circle (⊗) indicates the absence. Large circles represent core conditions (part of the parsimonious and intermediate solutions), whereas small circles indicate peripheral conditions (part of the intermediate solutions). A core condition signals a strong relation, and a peripheral condition signals a weaker relation. If a cell is empty, one should interpret this as 'don't care', i.e., the condition can be present or absent.

The analyses revealed six configurations explaining successful CSI. The solution consistency is 0.867, which is above the threshold of 0.8, and the coverage is 0.526.

Table 2 Overview of conditions, measures, and calibration

Conditions	Measure	Calibration
Successful corporate social innovation	*Economic dimension* Projects with IRR > 14% = high economic outcome; Projects with IRR ≤ 14% is low economic outcome *Social dimensions* Income: increase in income above country average; if yes → high income; if no → low income Direct job creation: #direct jobs created/firm size recipient; if ≥ 1 → high job creation; if < 1 → low job creation Trained labor: #trained staff/#direct jobs created; if ≥ 1 → high trained labor; if < 1 → low trained labor	Outcome including income: [economic outcome high and 3 social innovation dimension high] = 1 [economic outcome high and 2 social innovation dimensions high] or [economic outcome low and 3 social innovation dimensions high] = 0.67 [economic outcome high and 1 social innovation dimension high] or [economic outcome low and 2 social innovation dimensions high] = 0.33 [economic outcome low and 0 or 1 social innovation dimensions high] = 0 *Robustness check* [economic outcome high and 2 social innovation dimensions high] = 1 [economic outcome high and 1 social innovation dimension high] or [economic outcome low and 2 social innovation dimensions high] = 0.67 [economic outcome high and 0 social innovation dimension] or [economic outcome low and 1 social innovation dimension high] = 0.33 [economic outcome low and 0 social innovation dimensions high] = 0
Firm-specific resources	Financial commitment: funding received versus total of own contributions	Own contributions > funding received → financial commitment = 1; Own contributions = funding received → financial commitment = 0.5; Own contributions < funding received → financial commitment = 0
Governance of partnerships	*Durable relational capabilities*	
	Previous partnership experience: project partners have been collaborating before or there is legal relationship between the partners	Previous partnership experience present = 1; Previous partnership experience not present = 0
	Time spent together: duration of the project	Fully in (0.95); cross over (0.5) and fully out (0.05): Based on 75%, 50%, and 25% percentiles = 1452; 1,095 (3 years); 977 days
	Mode of partnership	
	Type of joint venture	Share of the applicant > 50% → 1; Share of the applicant = 50% → 0.5; share of the applicant < 50% → 0
Institutions	Institutional voids: # of voids present: Product market void; Labor market void; Capital market void; Regulatory & contract enforcement voids	3 (or 4) institutional voids = 1; 2 institutional voids = 0.67; 1 institutional void = 0.33; 0 institutional voids = 0
	Legitimacy: embassy advice	Fully positive embassy advice → legitimacy high = 1; else legitimacy low = 0
Level of development of the host country	GNI per capita for the commencement year of the project	Based on threshold for the respective project commencement year in a low-income country = 0; rest are 1

Table 3 Descriptive statistics

Conditions		Min	Max	Mean	SD	Median
Outcome	Economic dimension	0.02	0.52	0.14	0.11	0.11
	Social dimension: income	0	1	0.89	0.32	1.0
	Social dimension: job creation	0	92*	5.57	16.51	1.07
	Social dimension: trained labor	0.23	15.85	1.40	2.33	1.00
Casual	Financial commitment	0.53	1.74	1.19	0.29	1.00
	Previous partnership experience	0	1	0.50	0.51	0.50
	Time spent together before calibration	730	2147	1212	345	1095
	Mode of partnership: share home country	0	1	0.49	0.19	0.5
	Institutional voids (number)	0	3	1.25	0.94	1
	Legitimacy	0	1	0.84	0.37	1
	Level of development host country	0	1	0.41	0.50	0

*There was one project with a score of infinite. We left it out of the calculation

Table 4 Analysis of necessary conditions for successful corporate social innovation

Causal conditions	Consistency	Coverage
Financial commitment	0.53	0.62
~Financial commitment	0.62	0.55
Previous partnership experience	0.51	0.52
~Previous partnership experience	0.49	0.50
Time spent together	0.64	0.66
~Time spent together	0.54	0.54
Mode of partnership: majority share	0.61	0.64
~Mode of partnership: majority share	0.57	0.56
Institutional voids	0.59	0.73
~Institutional voids	0.74	0.65
Legitimacy	0.84	0.50
~Legitimacy	0.16	0.52
Level of development host country	0.48	0.59
~Level of development host country	0.52	0.45

~Indicates the negation of the condition

Configurations Displaying Complementary Effects

There are four configurations (1–4) where we observe a complementary relationship between firm resources-capabilities and effective formal institutions (absence of voids). The first two configurations reveal that projects achieve CSI successfully when effective institutions are complemented by time spent together when they are located in host countries of relatively higher levels of economic development (configuration 1) or when the time spent together is combined with previous partnership experience and a majority partnership (configuration 2). In both configurations (1 and 2), this association is independent of the financial commitment and legitimacy. In configurations 3 and 4, effective institutions are complemented by financial commitment, previous partnership experience and legitimacy in combination with the location being a host country of relatively higher levels of economic development (configuration 3) or with a majority partnership (configuration 4). This association is

Table 5 Results of the analysis for successful corporate social innovation

Configuration	1	2	3	4	5	6
Financial commitment			●	●	⊗	⊗
Previous partnership experience		●	●	●	●	●
Time spent together	●	●			●	
Mode of partnership: majority share		●		●		●
Institutional voids	⊗	⊗	⊗	⊗	●	●
Legitimacy			●	●	●	●
Level of development host country	●		●			
Raw coverage	0.172	0.141	0.090	0.097	0.121	0.104
Unique coverage	0.153	0.060	0.049	0.026	0.060	0.045
Consistency	0.923	1	0.752	0.868	0.891	0.932
Solution coverage	0.526					
Solution consistency	0.867					

independent of the time spent together. The first configuration is, for instance, observed in a successful project in South Africa in which partners established a joint venture to produce organic compost. They did not experience any institutional voids. The partners had not worked together before, but the project lasted 3.5 years enabling the partners to build relational experience.

These four configurations show that governance capabilities complement effective institutions for a successful CSI. Therefore, we propose the following:

P1a Corporate social innovation can be facilitated by informal governance that *complements* effective institutions in either economically more advanced developing countries or in combination with formal governance.

P1b Corporate social innovation can be facilitated by resources and informal governance of *highly legitimate* projects that *complement* effective institutions in either economically more advanced developing countries or in combination with formal governance.

Configurations Displaying Substitutive Effects

There are also two configurations (5 and 6) where we observe a substitutive relationship between firm capabilities and institutional voids. Projects with a low level of financial commitment achieve CSI successfully where voids are substituted by high legitimacy and previous experience in combination with either long time spent on the current project (configuration 5) or a majority partnership (configuration 6). This association is independent of the level of development of the host country. The latter is observed in a project that entails reestablishing safe and clean drinking water to people residing in the north of Rwanda. The funding received was one and a half times what was contributed by the partners themselves. The partners experienced institutional voids in product markets and the regulatory structure. However, the project was supported by the Dutch embassy, drew on relational capital built through previous experience and was governed by a majority partnership held by the Dutch partner.

These two configurations suggest that projects rely on embassy advice and (in)formal governance capabilities to deliver on CSI goals where the local institutions are weak and partners' financial commitment to the project is relatively low. Therefore, we propose the following:

P2 Corporate social innovation can be facilitated by informal and formal governance of *highly legitimate* projects that *substitute* weak institutions in developing countries when financial commitment is low.

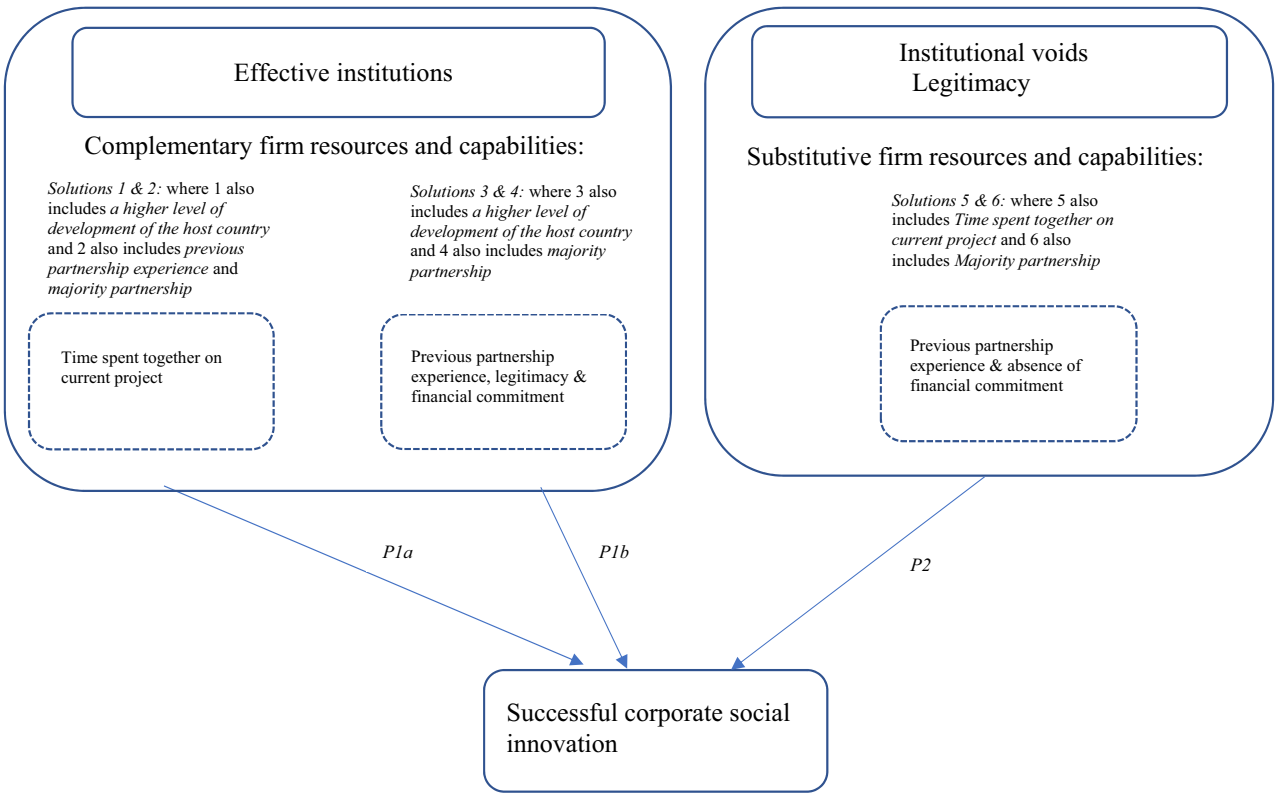

Fig. 1 Configurations of resource and capability bundles influencing successful corporate social innovation

Drawing on the propositions, we summarize in Fig. 1 how resources and capabilities can complement or substitute formal institutions to realize corporate social innovation.

Robustness Check

We checked for the sensitivity of results by conducting a robustness check. We changed the calibration of our outcome condition. Instead of using three social outcome dimensions, we used two dimensions by excluding income above country average. One reason for doing this was the low variation in this dimension. Majority of the projects resulted in an increase of income. We used the following calibration. When the economic and the two social outcomes were high, the project was considered to have full-membership (value of 1); projects with either a high economic outcome and one high social outcome or with a low economic outcome and two high social outcomes were considered to be more in than out and assigned a set membership of 0.66; projects with a high economic outcome and the absence of high social outcomes or with a low economic outcome and one high social outcome were considered to be more out than in and assigned a set membership of 0.33. When the economic outcome and the two social outcomes were low, the project was considered to have non-membership (0).

The results of the analysis with the new calibration are presented in Table 6. The top row shows if the configuration is similar to one of the configurations in the original analysis. All configurations are identical. This confirms the robustness of our results.

Discussion

Despite the mounting emphasis on the need to integrate social concerns into corporate operations through strategic alliances and value co-creation (Babu et al., 2020; Candi et al., 2019) and the recognition of the influence of (in)formal institutions on these relationships (Chiu, 2017; Lashitew et al., 2020), the CSI literature has not examined the interdependency between firm resources-capabilities and institutions and its implications for CSI outcomes. Building on the theoretical underpinnings of CSI (Babu et al., 2020; Candi et al., 2019; Dionisio & de Vargas, 2020), we shed light on the configurations of conditions that facilitate successful CSI. Using the fuzzy-set QCA method and a unique database of CSI projects completed by developing country joint ventures of Dutch SMEs and their developing country-based corporate partner, we reveal how firms differ in the resources and capabilities they deploy to complement or substitute (in) formal institutions to integrate social causes into their core operations.

Our findings demonstrate that firm resources-capabilities not only *substitute* weak institutions but also *complement* more developed institutions in the presence of resources, informal and/or formal governance capabilities to support CSI. The emphasis in CSI studies has been on the constraining effects of institutions in developing countries (Altuna et al., 2015; Lashitew et al., 2020). Institutional voids expose corporations to contractual hazards and impede the effectiveness of partnerships (Khanna & Palepu, 2010; Quélin et al., 2019). In such settings, firm resources-capabilities become a requisite for combining and creating knowledge for shared value through alliances with other commercial firms or social alliances with not-for-profit organizations (Babu et al., 2020; Dembek et al., 2016; Longoni & Cagliano, 2016). The assets and expertise of corporations that are deployed

Table 6 Results of robustness check: alternative calibration outcome condition (without income)

Configuration	1(=1)*	2(=2)	3(=3)	4(=4)	5(=5)	6(=6)
Financial commitment			●	●	⊗	⊗
Previous partnership experience		●	●	●	●	●
Time spent together	●	●			●	
Mode of partnership: majority share		●		●		●
Institutional voids	⊗	⊗	⊗	⊗	●	●
Legitimacy			●	●	●	●
Level of development host country	●		●			
Raw coverage	0.170	0.133	0.084	0.092	0.128	0.099
Unique coverage	0.151	0.058	0.046	0.025	0.070	0.043
Consistency	0.964	1	0.752	0.868	1	0.932
Solution coverage	0.518					
Solution consistency	0.903					

*The numbers between brackets correspond to the numbers in Table 5

through inter- and intra-firm collaborations are shaped by these interactions to offer innovative initiatives that are both economically viable and socially inclusive (Bocken & Geradts, 2020; De Silva et al., 2019). Corporations can create a more favorable task environment for partnerships by addressing voids in the regulatory context through, for example, their joint venture partners' local connections and associated project-specific assistances or guarantees (e.g., tax reduction for a certain period of time), by enforcing reliable contractual monitoring, and by enhancing the credibility of their activities (Kwak et al., 2009). We observe this, in our findings, in informal and formal governance capabilities and project legitimacy filling the gap exposed by institutional voids when the financial commitment to the project is low. Unfortunately, the focus on the constraining effects of institutions has impaired scholars' efforts to explore alternative interactions between firm resources-capabilities and institutions in developing countries in CSI (cf. Saka-Helmhout et al., 2020).

Our results show that firm resources and capabilities can also *complement* institutions that are perceived as effective in driving CSI. It is interesting to note that high financial commitment appears in two configurations including effective institutions and is indifferent in the other two configurations displaying complementarity. In addition, projects that receive high financial commitment and rely on informal and/or formal governance require a seal of consent for (legitimation of) their corporate activities (Bucheli & Salvaj, 2018). In this respect, our study challenges previous insights on the role of a stable institutional environment in facilitating corporate investment where risks of opportunistic behavior and uncertainties are lower (Asongu et al., 2018; Quélin et al., 2019). A partner may not necessarily find it easier to commit financially to a project to deliver on its anticipated social goals in such settings (cf. Das & Teng, 1998; Gundlach et al., 1995). What appears to be more crucial is the presence of (in)formal governance capabilities. As Babu et al. (2020) argue, such capabilities are essential for the co-creation of value in CSI.

Theoretical Implications

First, our findings advance our understanding of CSI in developing countries by exploring which firm resources and capabilities contingent on (in)effective institutions lead to such innovations. While previous studies on CSI have acknowledged the role of firm capabilities—in particular partnerships (e.g., De Silva et al., 2019; Haigh & Hoffman, 2012; Michelini & Fiorentino, 2012)—and institutional barriers (e.g., Lashitew et al., 2020), they have not captured the interaction between the two and the enabling role of institutions in successfully achieving CSI. Our study is among the first to emphasize the role of firm resources and capabilities in augmenting the supportive role of effective institutional environments that can enhance the credibility of mutual engagements and contractual commitments for successful CSI.

Second, we contribute to the CSI literature by adopting a configurational approach. The heterogeneity in the interaction between firm resources-capabilities and institutions necessitates an approach (Crilly et al., 2012; Fainshmidt et al., 2020; Misangyi & Acharya, 2014) to examine the *joint* influence of these conditions on CSI. As firm resources and capabilities are enabled or hindered by the institutional environment in which they are embedded (Oliver, 1997) and the success of CSI is influenced by institutional conditions (Candi et al., 2019; Lashitew et al., 2020), corporations are expected to adopt different strategies, deploying various resources and capabilities, to achieve social goals. Hence, a configurational approach to analyzing interconnected structures and capabilities is essential to understanding what drives CSI. Our configurational approach unravels multiple paths that corporations can follow to align their CSI efforts with a given institutional setting to be successful.

Managerial and Policy Implications

Society expects international corporations to balance corporate purpose with local realities and social needs to achieve both business and social goals. However, the relationship between corporations and social innovation in developing countries is underspecified (Dioniso & de Vargas, 2020). Our findings shed light on the way CSI works in joint ventures and in developing countries. They show the multiple ways in which CSI can be achieved in institutionally weak and strong settings. Developing countries are known for their challenging institutional environments. We suggest a range of capabilities and project legitimacy for managers to successfully navigate institutional voids, emphasizing the need to draw on partnership experience and formal partnership. Interestingly, in institutionally strong settings, partners that do not necessarily exert strong financial commitment to the joint venture are also able to successfully achieve CSI in developing countries if they spend sufficient time with their partners on the project where the host country is characterized by higher levels of national income or they rely on partnership experience and majority equity mode of monitoring the partnership. In conclusion, managers need to pursue strategies for CSI that best fit with their resources-capabilities and institutional settings.

Policy makers are equally likely to benefit from our study's findings. Given the criticism of dominant business models and their narrow economic outlook on social development, and the critical need of developing countries for solving social problems (van der Have & Rubalcaba, 2016), our study offers 'recipes' for CSI that can aid in policy

formulation in stimulating particular modes of joint ventures and endorsing social initiatives to address grand challenges. Policy makers can incentivize CSI as groundwork for broader systemic socio-economic transition. It may be argued that developing countries should ensure that they offer stable regulatory environments and market inputs for effective transactions by corporations (Brunetti et al., 1998). We should, however, note that CSI cannot be achieved with support from relatively reliable institutions alone. Corporations need to be encouraged to develop and deploy informal and formal governance capabilities and gain project legitimacy where there is low credibility of rules, discretionary bureaucracies, and limited factors of production.

Limitations and Future Research

There are important ways in which future research can expand the findings of our study. First, some of our operationalizations can be enriched. For instance, our operationalization of CSI can include other dimensions, such as female empowerment, that increase social value (e.g., Sanginga et al., 2008). Gender equality is reported to contribute to lower poverty, faster economic growth, stronger governance, and a higher living standard (Wodon & de la Brière, 2018). Given the overlap with our direct jobs created measure, we could not use percentage of jobs created for females. Consequently, the assessment of CSI outcomes in terms of gender would be an invaluable addition to the measures employed in this study. In addition, we adopt an ordinal measure based on reported descriptions of challenges faced in each CSI project to capture institutional voids. We urge future researchers to develop more direct measures of institutional voids such as the length of time it takes corporations to have consignments released from ports or the frequency with which regulations changes.

Second, there may be conditions other than the firm resources-capabilities and institutions included in our study that explain CSI. This is also suggested by the relative low coverages of the model and configurations. The focus on previous experience and majority partnership constitutes a subset of corporate capabilities. Alliance studies show that activities associated with *transferring knowledge* across organizational boundaries (Schilke & Goerzen, 2010) and the ability to *manage conflicts* in a way that achieves win–win situations help corporations create and capture value from partnerships (Kale et al., 2000). Furthermore, *status in the partner's network* has been shown to have positive impact on the focal firm's alliance post-formation non-financial outcomes (Schreiner et al., 2009). The use of these more refined conditions can contribute to the evolving literature on firm capability-based drivers of CSI.

Third, the generalizability of our findings can be improved. Our sampled corporations are all Dutch SMEs working with local firms in developing countries, participating in the same funding program. Research shows that social innovation is not a top priority for large multinational corporations (e.g., Babu et al., 2020). They do not generate a significant revenue from CSI projects. In addition, government funding programs are largely geared toward promoting SME innovation, including those with social goals (e.g., Jenson, 2015). Given that SME involvement and funding programs are not idiosyncratic to the Netherlands, we would expect developing country joint ventures of SMEs from other countries to display similar interdependencies between firm resources-capabilities and institutions. It would be interesting for future researchers to conduct a similar study in other countries. Furthermore, we restrict ourselves to projects performed by corporations alone. Public–private partnerships (PPPs) that are commonly used to overcome resource constraints and to leverage the capabilities and resources of private partners may not display similar pathways. PPPs tend to have largely nonmarket objectives and are subject to political influence, hence they pose bigger risks to private actors (Quélin et al., 2019). Future research can investigate, in a comparative analysis, which organizational forms and ownership—pure forms or partnerships with private scope—offer specific configurations of resources-capabilities and (in) formal institutions for successful CSI. This would help distinguish even more strongly firm-specific drivers and the extent to which corporations can have social impact alone or in collaboration with the public sector.

Conclusion

Our study focuses attention on how firm resources-capabilities and (in)formal institutions jointly create the conditions for CSI. Based on detailed case analyses of innovation projects with social aims in 25 developing countries involving joint ventures of Dutch and local corporations, our findings show firm resources and capabilities to complement or substitute (in)formal institutions to facilitate CSI. We theorize that not all CSIs depend on a confluence of firm capabilities which enables agentic and structural mechanisms that mitigate contractual hazards, i.e., a substitute relationship with institutional voids. Corporations can also realize social goals when their capabilities complement relatively reliable institutions in developing countries. The main implication of our study is that corporations can potentially attain social goals in developing countries through collaborative efforts with private partners. This is crucial to note for those aspiring to understand and solve persistent 'grand challenges' such as the

widely adopted Sustainable Development Goals of the United Nations (George et al., 2016).

Declarations

Conflict of interest The authors whose names are listed above certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

References

Altuna, N., Contri, A. M., Dell'Era, C., Frattini, F., & Maccarrone, P. (2015). Managing social innovation in for-profit organizations: The case of Intesa Sanpaolo. *European Journal of Innovation Management, 18*, 258–280.

Asongu, S. A., Nwachukwu, J. C., & Orim, S. M. (2018). Mobile phones, institutional quality and entrepreneurship in Sub-Saharan Africa. *Technological Forecasting and Social Change, 131*, 183–203.

Babu, M. M., Dey, B. L., Rahman, M., Roy, S. K., Alwi, S. F. S., & Kamal, M. M. (2020). Value co-creation through social innovation: A study of sustainable strategic alliance in telecommunication and financial services sectors in Bangladesh. *Industrial Marketing Management, 89*, 13–27.

Bansal, P. (2002). The corporate challenges of sustainable development. *Academy of Management Perspectives, 16*, 122–131.

Bansal, P., & Song, H.-C. (2017). Similar but not the same: Differentiating corporate sustainability from corporate responsibility. *Academy of Management Annals, 11*, 105–149.

Barasa, L., Knoben, J., Vermeulen, P., Kimuyu, P., & Kinyanjui, B. (2017). Institutions, resources and innovation in East Africa: A firm level approach. *Research Policy, 46*, 280–291.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*, 99–120.

Bocken, N. M. P., & Geradts, H. J. (2020). Barriers and drivers to sustainable business model innovation: Organization design and dynamic capabilities. *Long Range Planning, 53*, 101950.

Brunetti, A., Kisunko, G., & Weder, B. (1998). Credibility of rules and economic growth: Evidence from a worldwide survey of the private sector. *The World Bank Economic Review, 12*, 353–384.

Bucheli, M., & Salvaj, E. (2018). Political connections, the liability of foreignness, and legitimacy: A business historical analysis of multinationals' strategies in Chile. *Global Strategy Journal, 8*, 399–420.

Buckley, P. J., Doh, J. P., & Benischke, M. (2017). Towards a renaissance in international business research? Big questions, grand challenges, and the future of IB scholarship. *Journal of International Business Studies, 48*, 1045–1064.

Bund, E., Hubrich, D.-K., Schmitz, B., Mildenberger, G., & Krlev, G. (2013). *Blueprint of social innovation metrics—contributions to an understanding of opportunities and challenges of social innovation measurement.* A deliverable of the project: The theoretical, empirical and policy foundations for building social innovation in Europe (TEPSIE), European Commission—7th Framework Programme, Brussels: European Commission, DG Research.

Candi, M., Melia, M., & Colurcio, M. (2019). Two birds with one stone: The quest for addressing both business goals and social needs with innovation. *Journal of Business Ethics, 160*, 1019–1033.

Chappin, M. M. H., Cambré, B., Vermeulen, P., & Lozano, R. (2015). Internalizing sustainable practices: A configurational approach on sustainable forest management of the Dutch wood trade and timber industry. *Journal of Cleaner Production, 107*, 760–774.

Chelekis, J., & Mudambi, S. M. (2010). MNCs and micro-entrepreneurship in emerging economies: The case of Avon in the Amazon. *Journal of International Management, 16*, 412–424.

Chiu, T. K. (2017). Factors influencing microfinance engagements by formal financial institutions. *Journal of Business Ethics, 143*, 565–587.

Compernolle P., de Jong, P., van Manen, B., Molenaar, K., Reijnen, K., Vonk J., & Zuyderduyn, M. (2016). Evaluation PSOM/PSI 1999–2014. *APE Report* number 1377. Retrieved from www.ape.nl/en.

Crilly, D., Zollo, M., & Hansen, M. (2012). Faking it or muddling through? Understanding decoupling in response to stakeholder pressures. *Academy of Management Journal, 55*, 1429–1448.

Das, T. K., & Teng, B.-S. (1998). Between trust and control: Developing confidence in partner cooperation in alliances. *Academy of Management Review, 23*, 491–512.

De Silva, M., Al-Tabbaa, O., & Khan, Z. (2019). Business model innovation by international social purpose organizations: The role of dynamic capabilities. *Journal of Business Research* in press.

Deephouse, D. L., & Suchman, M. (2008). Legitimacy in organizational institutionalism. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *The Sage Handbook of Organizational Institutionalism* (pp. 49–77). London Sage Publications.

Dembek, K., Singh, P., & Bhakoo, V. (2016). Literature review of shared value: A theoretical concept or a management buzzword? *Journal of Business Ethics, 137*, 231–267.

Dionisio, M., & de Vargas, E. R. (2020). Corporate social innovation: A systematic literature review. *International Business Review, 29*, 101641.

Doh, J., Rodrigues, S., Saka-Helmhout, A., & Makhija, M. (2017). International business responses to institutional voids. *Journal of International Business Studies, 48*, 293–307.

Doherty, B., Haugh, H., & Lyon, F. (2014). Social enterprises as hybrid organizations: A review and research agenda. *International Journal of Management Reviews, 16*, 417–436.

Doz, Y. L. (1988). Technology partnerships between larger and smaller firms: some critical issues. In F. J. Contractor & P. Lorange (Eds.), *Cooperative Strategies in International Business* (pp. 317–338). D.C. Heath.

Esen, A., & Maden-Eyiusta, C. (2019). Delineating the concept of corporate social innovation: Toward a multidimensional model. *International Journal of Entrepreneurship and Innovation Management, 23*, 23–45.

Fainshmidt, S., Witt, M. A., Aguilera, R. V., & Verbeke, A. (2020). The contribution of qualitative comparative analysis (QCA) to international business research. *Journal of International Business Studies, 51*, 455–466.

Fearne, A., Martinez, M. G., & Dent, B. (2012). Dimensions of sustainable value chains: Implications for value chain analysis. *Supply Chain Management: An International Journal, 17*, 575–581.

Fiss, P. C. (2007). A set-theoretic approach to organizational configurations. *Academy of Management Review, 32*, 1180–1198.

Fiss, P. C. (2011). Building better causal theories: A fuzzy set approach to typologies in organization research. *Academy of Management Journal, 54*, 393–420.

Fiss, P. C., Cambré, B., & Marx, A. (2013). *Configurational theory and methods in organizational research (Research in the sociology of organizations)* (Vol. 38). Bingley: Emerald Group Publishing Limited.

George, G., Howard-Grenville, J., Joshi, A., & Tihanyi, L. (2016). Understanding and tackling societal grand challenges through management research. *Academy of Management Journal, 56*, 1880–1895.

Gulati, R. (1995). Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. *Academy of Management Journal, 38*, 85–112.

Gulati, R., Lawrence, P. R., & Puranam, P. (2005). Adaptation in vertical relationships: Beyond incentive conflict. *Strategic Management Journal, 26*, 415–440.

Gundlach, G., Achrol, R., & Mentzer, J. (1995). The structure of commitment in exchange. *Journal of Marketing, 59*, 78–92.

Haigh, N., & Hoffman, A. J. (2012). Hybrid organizations: The next chapter in sustainable business. *Organizational Dynamics, 41*, 126–134.

Herrera, M. E. B. (2015). Creating competitive advantage by institutionalizing corporate social innovation. *Journal of Business Research, 68*, 1468–1474.

Huq, F., Chowdhury, I. N., & Klassen, R. D. (2016). Social management capabilities of multinational buying firms and their emerging market suppliers: An exploratory study of the clothing industry. *Journal of Operations Management, 46*, 19–37.

Ito, Y. (2018). Interorganizational business development utilizing legitimacy for resources mobilization in large firms: Successful and unsuccessful cases. *Industrial Marketing Management, 75*, 80–89.

Jamali, D., & Karam, C. (2018). Corporate social responsibility in developing countries as an emerging field of study. *International Journal of Management Reviews, 20*, 32–61.

Jenson, J. (2015). Social innovation: redesigning the welfare diamond. In A. Nicholls, J. Simon, & M. Gabriel (Eds.), *New Frontiers in Social Innovation Research* (pp. 89–106). Palgrave Macmillan.

Kale, P., & Singh, H. (2009). Managing strategic alliances: What do we know now, and where do we go from here? *Academy of Management Perspectives, 23*(3), 45–62.

Kale, P., Singh, H., & Perlmutter, H. (2000). Learning and protection of proprietary assets in strategic alliances: Building relational capital. *Strategic Management Journal, 21*, 217–237.

Khanna, T., Gulati, R., & Nohria, N. (1998). The dynamics of learning alliances: Competition, cooperation and relative scope. *Strategic Management Journal, 19*, 193–210.

Khanna, T., & Palepu, K. (1997). Why focused strategies may be wrong for emerging markets. *Harvard Business Review, 75*, 41–51.

Khanna, T., & Palepu, K. (2010). *Winning in Emerging markets: A roadmap for strategy and execution*. Harvard Business Press.

Kwak, Y. H., Chih, Y., & Ibbs, C. W. (2009). Towards a comprehensive understanding of public-private partnerships for infrastructure development. *California Management Review, 51*, 51–78.

Lashitew, A. A., Bals, L., & Tulder, R. V. (2020). Inclusive business at the base of the pyramid: The role of embeddedness for enabling social innovations. *Journal of Business Ethics, 162*, 421–448.

Le Ber, M. J., & Branzei, O. (2010). (Re)forming strategic cross-sector partnerships: Relational processes of social innovation. *Business & Society, 49*, 140–172.

Link, A. N., & Siegel, D. S. (2009). Evaluating the social returns to innovation: an application to university technology transfer. In G. D. Libecap (Ed.), *Measuring the social value of innovation: A Link in the University Technology Transfer and Entrepreneurship Equation (Advances in the Study of Entrepreneurship, Innovation and Economic Growth)* (Vol. 19, pp. 171–187). Bingley: Emerald Group Publishing Limited.

Longoni, A., & Cagliano, R. (2016). Sustainable innovativeness and the triple bottom line: The role of organizational time perspective. *Journal of Business Ethics, 151*, 1097–1120.

Lu, Y., Tsang, E. W. K., & Peng, M. W. (2008). Knowledge management and innovation strategy in the Asia Pacific: Toward an institution-based view. *Asia Pacific Journal of Management, 25*, 361–374.

Lusch, R. F., Vargo, S. L., & Gustafsson, A. (2016). Fostering a trans-disciplinary perspectives of service ecosystems. *Journal of Business Research, 69*, 2957–2963.

Macrotrends. (2020). *GNI Per Capita by Country*. Retrieved from https://www.macrotrends.net/countries/ranking/gni-per-capita.

Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: Rethinking social initiatives by business. *Administrative Science Quarterly, 48*, 268–305.

Martí, I. (2018). Transformational business models, grand challenges, and social impact. *Journal of Business Ethics, 152*, 965–976.

McCarthy, D. J., & Puffer, S. M. (2008). Interpreting the ethicality of corporate governance decisions in Russia: Utilizing integrative social contracts theory to evaluate the relevance of agency theory norms. *Academy of Management Review, 3*, 11–31.

Michelini, L., & Fiorentino, D. (2012). New business models for creating shared value. *Social Responsibility Journal, 8*, 561–577.

Miletkov, M., Poulsen, A., & Wintoki, M. B. (2017). Foreign independent directors and the quality of legal institutions. *Journal of International Business Studies*, *48*, 267–292.

Mirvis, P., Herrera, M. E. B., Googins, B., & Albareda, L. (2016). Corporate social innovation: How firms learn to innovate for the greater good. *Journal of Business Research, 69*, 5014–5021.

Misangyi, V. F., & Acharya, A. G. (2014). Substitutes or complements? A configurational examination of corporate governance mechanisms. *Academy of Management Journal, 57*, 1681–1705.

North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.

Oliver, C. (1997). Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal, 18*, 697–713.

Porter, M. E., & Kramer, M. R. (2011). The big idea: Creating shared value. *Harvard Business Review, 89*, 2–17.

Quélin, B. V., Cabral, S., Lazzarini, S., & Kivleniece, I. (2019). The private scope in public-private collaborations: An institutional and capability-based perspective. *Organization Science, 30*, 831–846.

Ragin, C. C. (2000). *Fuzzy-set social science*. University of Chicago Press.

Ragin, C. C., & Fiss, P. C. (2008). Net effects analysis versus configurational analysis: an empirical demonstration. In C. C. Ragin (Ed.), *Redesigning social inquiry: Fuzzy sets and beyond* (pp. 190–212). University of Chicago Press.

Reuer, J., & Arino, A. (2007). Strategic alliance contracts: Dimensions and determinants of contractual complexity. *Strategic Management Journal, 28*, 313–330.

Rihoux, B., & Ragin, C. C. (2008). *Configurational comparative methods: Qualitative Comparative Analysis (QCA) and related techniques (Applied Social Research Methods Series)* (Vol. 51). Los Angeles: Sage.

Rivera-Santos, M., Rufin, C., & Kolk, A. (2012). Bridging the institutional divide: Partnerships in subsistence markets. *Journal of Business Research, 65*, 1721–1727.

Russo Spena, T., Colurcio, M., & Melia, M. (2017). Framing the new social-service innovation mindset. In T. Russo Spena, C. Mele, & M. Nuutinen (Eds.), *Perspectives and experiences* (pp. 205–235). Cham: Springer.

Saka-Helmhout, A., Chappin, M., & Vermeulen, P. (2020). Multiple paths to firm innovation in sub-Saharan Africa: How informal institutions matter. *Organization Studies, 41*, 1551–1575.

Sanginga, P. C., Abenakyo, A., Kamugisha, R., Martin, A., & Muzira, R. (2008). Tracking outcomes of social and institutional innovations in natural resource management. In P. C. Sanginga, A. Waters-Bayer, S. Kaaria, J. Njuki, & C. Wettasinha (Eds.), *Innovation Africa: Enriching farmers' livelihoods* (pp. 220–236). Earts-can of Taylor & Francis: Abingdon.

Schilke, O., & Goerzen, A. (2010). Alliance management capability: An investigation of the construct and its measurement. *Journal of Management, 36*, 1192–1219.

Schneider, C. Q., & Wagemann, C. (2012). *Set-theoretic methods for the social sciences: A guide to qualitative comparative analysis*. Cambridge University Press.

Schreiner, M., Kale, P., & Corsten, D. (2009). What really is alliance management capability and how does it impact alliance outcomes and success? *Strategic Management Journal, 30*, 1395–1419.

Seelos, C., & Mair, J. (2007). Profitable business models and market creation in the context of deep poverty: A strategic view. *Academy of Management Perspectives, 21*, 49–63.

Van der Have, R. P., & Rubalcaba, L. (2016). Social innovation research: An emerging area of innovation studies? *Research Policy, 45*, 1923–1935.

Vargo, S. L., & Lusch, R. F. (2017). Service-dominant logic 2025. *International Journal of Research in Marketing, 34*, 46–67.

Verleye, K., Perks, H., Gruber, T., & Voets, J. (2018). The long and winding road: Building legitimacy for complex social innovation in networks. *Journal of Product Innovation Management, 36*, 695–720.

Wilhelm, W. (1992). Changing corporate culture—or corporate behavior? How to change your company. *Academy of Management Perspectives, 6*, 72–77.

Wodon, Q. T., & de la Brière, B. (2018). *Unrealized potential: The high cost of gender inequality in earnings. The cost of gender inequality*. World Bank.

World Bank. (2020). *historical classification by income WorldBank*. Retrieved from https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.

Zhu, Y., Wittman, X., & Peng, M. W. (2012). Institution-based barriers to innovation in SMEs in China. *Asia Pacific Journal of Management, 29*, 1131–1142.