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SOCIAL PROBLEM SCALE, PUBLIC INVESTMENT AND SOCIAL ENTREPRENEURSHIP ACTION

Structured abstract

Purpose. Social entrepreneurs engage in action because they want to solve social problems. Consequently, it is expected to see more social entrepreneurship in contexts with the most severe social problems. This paper argues that this is an oversimplification of the problemaction nexus in social entrepreneurship and that action does not necessarily correspond to the observed scale of social problems. Drawing on the theoretical framing of crescive conditions, it highlights that this relationship is affected by forms of public investment as institutions that distinctively promote engagement and public interest amongst social entrepreneurs. Thus, this paper assesses the relationship between varying levels of social problems and social entrepreneurship action, and how and to what extent public investment types — as more and less locally anchored crescive conditions - affect this relationship.

Design/methodology/approach. The hypotheses are tested with a series of random-effects regression models. The data stems from the Global Entrepreneurship Monitor's 2015 social entrepreneurship survey and Chile's 2015 National Socioeconomic Characterisation Survey. The authors combined both data sets and cross-matched individual-level data (action and investment) with commune-level data (social problem scale) resulting in unique contextualised observations for 1,124 social entrepreneurs.

Findings. Contrary to current understanding, this study finds that social entrepreneurship action is positively associated with low social problem scale. This means that high levels of deprivation do not immediately lead to action. It also finds that locally anchored forms of investment positively moderate this relationship, stimulating action in the most deprived contexts. On the contrary, centralised public investment leads to increased social entrepreneurial action in wealthier communities where it is arguably less needed.

Originality. The findings contribute to the literature on social entrepreneurship action in deprived contexts, social and public investment as well as policy-level discussion, and broader issues of entrepreneurship and social problems.

Keywords: Social entrepreneurship, multiple deprivation, public investment, social investment, entrepreneurial action.

Introduction

Social entrepreneurship involves entrepreneurs taking action to solve social problems in challenging contexts (Cohen and Winn, 2007). Although most entrepreneurs may be deterred from acting in such contexts (Austin, 2012; Grimes *et al.*, 2013), social entrepreneurs tend to engage more with social problems than the general entrepreneurship population. In this vein, prior research has highlighted that social entrepreneurship action is likely to be more prevalent across particular patterns of institutional conditions (Dorado and Ventresca, 2013; Hoogendorn, 2016; Littlewood and Holt, 2018), and can be shaped by a blend of formal and informal institutions (Lee *et al.*, 2020; Stephan *et al.*, 2015), as well as by conflicting institutional logics which alter relationships (Kosmynin, 2021) and judgments of actors operating at a micro-level (Kimmitt and Muñoz, 2018).

Whilst the intention to act may reflect the magnitude of the social problem at hand (Muñoz and Dimov, 2017), this may not be enough to trigger the entrepreneur into concrete action. Consequently, the current understanding of the institutional conditions that trigger social entrepreneurship action is somewhat incomplete. In response, research has highlighted how these different conditions can prompt social entrepreneurs to act in contexts of deprivation (Ghazali *et al.*, 2021), whilst emphasizing the importance of other enablers such as resource mobilization (Desa and Basu, 2013) that support action and the start-up process. This implies that social entrepreneurship action is determined not only by the scope and scale of the social problems encountered – normally operationalised as the level of deprivation in a particular context – but also by some level of local support for those actions.

To deal with this dual effect, this paper turns its attention to Dorado and Ventresca's (2013) notion of 'crescive conditions', which are institutional factors and processes that increase the likelihood of social entrepreneurial engagement. In the context of interest, crescive conditions involve the co-existence of deprived areas where social problems emerge and distinct public

support mechanisms critical to further foster social entrepreneurship engagement there; a role that is primarily played by alternative forms of public investment. This stems from the fact that public investment is normally allocated to solve social problems and the different types of public investment available to the social entrepreneur can distinctively influence the level of engagement and public interest amongst social entrepreneurs.

Thus, this paper sets out to test the relationship between varying social problem scales and social entrepreneurship action, and how and to what extent public investment types affect this relationship. It does so on a survey of 1,124 social entrepreneurs in Chile, against the deprivation levels of the communities in which they live and operate. To analyse these crescive conditions, this study focuses on two key forms of public investment in the promotion of socially oriented entrepreneurship in the country: a) locally anchored public investment materialized through local state banks and b) central government public investment materialized through nation-wide entrepreneurship programmes. Because such forms of public investment may be more or less closely 'anchored' to the contexts in which they operate (Mazzucato and Penna, 2016), they can distinctively strengthen or weaken the actions of social entrepreneurs (Muñoz and Kimmitt, 2019).

The analyses reveal that social entrepreneurship action is positively associated with low social problem scale, meaning that high levels of deprivation do not immediately lead to action thus challenging current understanding. Findings also reveal that this relationship is moderated by types of public investment, as institutions capable of increasing public awareness and modifying behaviour. Social entrepreneurs are more likely to act in deprived areas when public investment is anchored in those communities. The findings also reveal that public investment through government entrepreneurship programmes is more likely to stimulate social entrepreneurial action in wealthier areas, meaning that when the type of public investment does

pay particular attention to local circumstances, it is more likely to trigger action in more affluent communities.

This research makes two contributions to literature. First, it contributes theoretically to the discussion concerning social entrepreneurship action and institutions, as it further unpacks the institutional factors and processes that enable the likelihood of social entrepreneurial action. It shows that social entrepreneurs *do not* necessarily pursue contexts where the most social problems and 'incentives' exist. Locally anchored institutional mechanisms are needed in place to raise public awareness and guide action.

Second, it contributes to the entrepreneurial finance literature in which there is limited empirical evidence on how social ventures use different types of financing options to start (Short *et al.*, 2009), with most research focusing on large-scale deals and impact investing (Scarlata *et al.*, 2015). The examination of public investment offers novel insights into what happens within those missing spaces in entrepreneurial finance and offers a response to call for further research into resource mobilisation by social entrepreneurs (Stephan *et al.*, 2015).

Last, it contributes to a wider policy debate regarding the promotion of social entrepreneurial activity. Such debates are well established in the entrepreneurship literature given the relatively weak link between new ventures and macro-economic outcomes (Shane, 2009). Contrary to findings by Pathak and Muralidharan (2018), this paper identifies that entrepreneurship government programmes may encourage social entrepreneurship action in contexts where the need is far less apparent. If social entrepreneurship is regarded as an important tool for tackling social problems, then it raises the question as to which actors and investors are best placed to support ventures that attempt to tackle the most pervasive issues.

Literature review and hypotheses development

Social entrepreneurship has grown a subject of academic and practical importance in the last two decades (Canestrino *et al.*, 2020; Stephan *et al.*, 2016). It involves a process of using market-based practices to solve social and/or environmental problems (Grimes *et al.* 2013), often with communities who have previously been denied resources, opportunities and rights (George et *al.*, 2012). In this respect, a variety of scholars have identified social entrepreneurship as a crucial ingredient in transforming the lives of those in disadvantaged areas and reducing inequality between the rich and the poor (Dacin *et al.*, 2010; Moss *et al.*, 2011). Thus, the work of a social entrepreneur appears to be closely intertwined with the institutional conditions and deprivation of a particular community, stimulating their perceptions of social problems (Austin *et al.*, 2012).

However, the literature assumes a simple relationship here, raising the question as to what determines entrepreneurs to act in deprived contexts, where the social problems are the most apparent and severe. Entrepreneurs make sense of their ventures by drawing upon their assumptions regarding what may or may not constitute a social problem (Kimmitt and Muñoz, 2018) and co-create solutions with key stakeholders from the community (Corner and Ho, 2010; Kosmynin, 2021) whilst mobilizing resource bundles to craft their social mission (Desa and Basu, 2013). Thus, whilst research acknowledges that interpretations of social problems by entrepreneurs are highly contextual (Hu *et al.*, 2019), it is unclear whether entrepreneurial action is a response to the scale of social problems in the most deprived areas, where they may be most apparent. Or a more complex interplay between these institutional conditions and the resources mobilised.

In the following, the authors propose that where social entrepreneurship action takes place (i.e., the scale of social problems in a deprived area) is shaped by the nature of investment the entrepreneur accesses. While the intention to act might be triggered by the size of the social

problem, this is by itself insufficient to trigger action. As with any new business, resource mobilization can be critical to performance and innovation, particularly within emerging economy contexts (Bradley *et al.*, 2012). In their efforts to be competitive, social entrepreneurs also require access to finance to signal their competitiveness and balance their economic and social objectives (Muñoz and Kimmitt, 2019). Ultimately, social ventures require financial viability to survive. Yet, it is argued here that the source of investment is not trivial. Resource mobilization efforts through different types of investment distinctively moderate the relationship between the severity of the social circumstances experienced by social entrepreneurs and their actual engagement in actions. In this context, it is argued that government financial support is better positioned than some private investors to foster perceptions of an enabling environment for social entrepreneurship (Moore *et al.*, 2012).

The public financial support they can receive constitutes what Dorado and Ventresca (2013) describe as 'crescive conditions'. These are institutional conditions and processes that increase/decrease the likelihood of social entrepreneurial action. Departing from the heroic view of social entrepreneurs that often dominates the literature (e.g., Verduijn *et al.*, 2014), the perspective of crescive conditions draws our attention to factors that are relevant for the pursuit of collectively anchored social problems.

This crescive conditions perspective offers a counter to the "standard focus on social or economic aspirations as motive" (Dorado and Ventresca, 2013, p. 74) for action. In the literature, this is portrayed as ego-centric risks, rewards, and potential costs of action (Dwivedi and Weerawardena, 2018). Yet, crescive conditions highlight alternative factors that may elicit an entrepreneurial response to collectively anchored and entrenched social problems, where individual rewards may be less clear. In the following, the authors develop a set of hypotheses that assess the relationship between social problems and investment options which are theorised as the crescive conditions for social entrepreneurial action.

Social entrepreneurial action and social problems

Social entrepreneurship is a process involving the innovative use and combination of resources to pursue opportunities to catalyse social change and/or address social needs (Mair and Marti, 2006). At the heart of social entrepreneurship is therefore the presence of a distinct social problem and the process propelling the development of a solution (Austin *et al.*, 2012). To understand why particular individuals decide to pursue such ventures requires going beyond an understanding of mere social entrepreneurship intentions to considering the relationship between actions and the problems they are designed to solve.

The literature currently demonstrates that how entrepreneurs respond to social problems is shaped by the institutional environment (Sahasranamam and Nandakumar, 2020). Initial research considered the institutional context as the setting for institutional change whereby social entrepreneurs overhauled regulatory and normative structures (Mair and Marti, 2009). Heroic accounts of this nature are prevalent in the literature (e.g., Verduijn *et al.*, 2014) but subsequent research has shown a more nuanced and modest understanding. Stephan et al. (2015) explore how a configuration of formal and informal institutions across national contexts enables organisations to mobilise tangible and intangible resources. Estrin et al. (2013) similarly show the important role of the rule of law as a formal institution and the subsequent social capital that emerges through social entrepreneurship activity; Kibler et al. (2018) emphasize the importance of within-country institutional complementarities through a 'varieties of capitalism' lens.

Extant research suggests that social entrepreneurs vary in their actions based on their awareness and knowledge of their proximate environment and the extent of certain social problems (Muñoz and Dimov, 2017). Through our crescive conditions lens, Dorado and Ventresca (2013) discuss Foucaultian conditions against a functionalist view of social entrepreneurship action. In the former, problems are framed around institutional constraints.

Although a deprived community, with a seemingly larger volume and more problem severity, forms an ideal scenario for the emergence, or attraction, of social entrepreneurship, it is also where institutional support is the most lacking, creating high barriers to action (Mair and Noboa, 2006). Although such institutional conditions may create the space for social problems to emerge, the unsupportive socioeconomic environments make action more challenging because it is less likely to lead to feasible outcomes for the entrepreneur (Littlewood and Holt, 2018). Thus, contexts with the most acute social problems may be seemingly less likely to yield action.

In the latter, a 'functionalist' view demonstrates a counter perspective whereby social entrepreneurship action is determined by what entrepreneurs regard to be feasible. Entrepreneurs will ultimately decide to pursue opportunities for social value creation if they perceive relevant social problems to require entrepreneurial solutions (Kimmitt and Muñoz, 2018). The logic here is that change is possible and desirable even if it is incremental. Conceptions based on prior knowledge, awareness and ultimate recognition of general opportunities tend to overlook the nature and magnitude of the social issue at stake (Muñoz and Dimov, 2017). Thus, contexts with less severe social problems are more likely to yield action amongst social entrepreneurs because they are perceived to be more feasible. The above leads us to the following hypothesis:

H1. Social entrepreneurship action is positively associated with a low social problem scale.

Social entrepreneurship action and locally anchored public investment

In between social entrepreneurs and the problems they aim to solve is the 'crescive space', which refers to specific factors relevant to the surrounding context that may enable or inhibit motivations and decision-making processes (Dorado and Ventresca, 2013). Deep social problems may trigger some entrepreneurial intent but could also be regarded as unfeasible, yet they can constitute a key focal point for others interested in investing in finding solutions

(Bugg-Levine and Emerson, 2011; Brest and Born, 2013). Higher deprivation can constitute an attractive context for like-minded individuals and public officials; they will most likely allocate resources or invest in those entrepreneurs (and their enterprises) with a social mission willing to and capable of addressing problems in disadvantaged localities. Unlike informal networks of likeminded individuals and public officials who are interested in addressing public and merit good failures (Fiorito and Kollintzas, 2004), formal investment (e.g. private investors and commercial banks) are focused on those firms most likely lead to profit maximization, which in consequence ends up marginalizing both the social entrepreneurs and the communities who may benefit the most from socially oriented investment and entrepreneurial action (Moore et al., 2012). As such, it is less likely that deep social problems will motivate traditional investors to allocate resources since the perceived opportunities are not sufficiently valuable if judged on economic merits alone.

Given that traditional formal investment is unlikely in deprived areas where social entrepreneurs may operate, it may require a different type of investment approach to stimulate social entrepreneurship action. One form of investor that is noteworthy in its alternative approach is local state banks – a type of financial institution overseen by the state that largely performs the function of most commercial banks. However, they tend to offer a different approach to public investment because they have a more holistic purpose, focusing on financing socially profitable endeavours and working in a localized manner, in contexts such as rural areas which may be unattractive to commercial banks (Yeyati *et al.*, 2007). In this crescive space, local state banks, therefore, are viewed as a type of institution which can "effectively promote the much-needed capital development of the economy in a smart, inclusive and sustainable direction" (Mazzucato and Penna, 2016, p.320).

In this paper, the authors consider local state banks to be a form of anchor institution. Cantor *et al.* (2013) define these locally embedded institutions as "place-based organisations

that persist in communities over generations, serving as social glue, economic engines, or both" (p.20). A large body of research that uses this concept is conducted on universities as a form of anchor institution, but their role is also relevant for hospitals, local government, other infrastructure services and the role of civil society organisations. Anchor institutions represent organisations within a given local context that form the basis for the development of a community and civic engagement (Ehlenz, 2018).

Given their status of being anchored within local community contexts, local state banks perform the role in the 'crescive space' of increasing the likelihood of stimulating entrepreneurial action within communities with entrenched social problems. This can be explained by Dorado and Ventresca's (2013) notion of 'dissonant loyalty' whereby action can be stimulated when a sense of collective membership and shared identity is advanced by several parties because of a lack of acceptance with the status quo (Kimmitt and Muñoz, 2018). Because of the collective interest from social entrepreneurs and local state banks who serve as 'social glue', deep social problems are more likely to be perceived as being feasible to solve.

In summary, although commercial banks may be unlikely to operate in deprived contexts because they are at higher risk and offer prospects for low profitability (e.g., such as in rural areas), local state banks are more likely to operate in deprived places where socially oriented endeavours take precedence, developing collective interest and shared identity with social entrepreneurs. The authors propose that this is because local state banks represent a form of 'anchor institution' which is embedded within the various locales they operate and represent a vital cog for the community's socio-economic development, what is labelled as a 'locally anchored public investment'. Given this prominent role, the authors propose that within more deprived areas where social problems are greater in scale, locally anchored investment as offered by local state banks is likely to play a role in enabling the actions of social entrepreneurs. This leads us to hypothesize the following:

H2a: In contexts with higher social problem scale, locally anchored public investment positively moderates the relationship between social problem scale and social entrepreneurship action.

Put differently, it can be expected that the effect of locally anchored investment on social entrepreneurship action to be stronger in contexts where social problems are deeper and deprivation higher. In communities with fewer social problems, it is likely that local state banks remain important in developing shared identity and loyalty to local community actors but may be less interested in social change (Marois and Güngen, 2016). But because 'dissonant loyalty' requires a collective belief between local state banks and social entrepreneurs about the need to challenge the status quo, they are likely much less relevant in stimulating high levels of social entrepreneurship action. This leads us to hypothesize the following:

H2b: In contexts with lower social problem scale, locally anchored public investment negatively moderates the relationship between social problem scale and social entrepreneurship action.

Social entrepreneurship action and central government public investment

Public investment directly from central governments also sits within the 'crescive space' as a condition that may stimulate social entrepreneurship action depending on the context (Hockerts, 2015; Mair and Noboa, 2006). Centralized institutions, as state-sponsored incentives, can indeed affect the individual-level decision-making of social entrepreneurs towards acting (Muñoz and Kibler, 2016). Prior research demonstrates that how social entrepreneurs access this type of finance can enable their competitive advantage by actually improving their financial capabilities (Kimmitt and Muñoz, 2018). Although others have questioned the sustainability of organisations that rely on central government investment which is, more often than not, grant-based (Salvado, 2011).

The role of government in venture investment has typically had mixed results. Karsai (2018) highlights how, in the domain of venture capital, government programmes tend to be less effective when they are either too large or too small and narrow. In the former, government

initiatives are too unwieldy and complex to operate well but in the latter, they can overwhelm firms in local markets (Lerner, 2010). Similarly, research has shown some evidence of how government support of ventures can be stifling to their innovative aims (Bruton *et al.*, 2002). Lee (2018) demonstrates how government-backed programmes tend not to elicit growth at the regional level contrary to their aims. This is consistent with most critiques of entrepreneurship policy, which may have a misguided view of the potential contribution of start-ups to the economy (Shane, 2009).

In the domain of social entrepreneurship, governments tend to support social ventures through seed funding or grant programmes (Austin *et al.*, 2012). Although some evidence highlights larger-scale funding such as Social Impact Bonds and/or impact investing (Jamieson *et al.*, 2020; Scarlata and Alemany, 2010), most funding options tend to be at the level of grants, donations or seed investment. However, Tjornbo and Westley (2012) identify that such government-led programmes may stimulate new ideas at a local level, but they are typically poorly uncoordinated, bureaucratic and lack an understanding of local realities of social problems (Kimmitt and Muñoz, 2018).

Consequently, entrepreneurial action exists within the context in which government attempts to support such endeavours (Gilbert *et al.*, 2004). However, research has identified that the impact of such programmes may be negligible to growth ambitions (Grilli and Murtinu, 2014). This can occur for several reasons, from political interests to bureaucratic inefficiencies as well as the fragmented running of programmes that favour entrepreneurs only within particular regions such as more prosperous urban areas (Amorós *et al.*, 2013). Given the self-interest which may determine such policy design, it is likely that government support for (social) entrepreneurship may be fragmented across contexts (Arshed *et al.*, 2014).

Thus, in contrast to locally anchored public investment, government investment is likely to perform a very different role to the anchor institutions previously discussed. Whilst an

anchor institution is an organisation that embeds itself within a place, providing the glue for the social and economic fabric, public investment through central government channels is likely to be more distant. In the crescive space, Dorado and Ventresca (2013) discuss the notion of 'increased public awareness' as a condition that can stimulate entrepreneurial action. When a particular social problem enters the public zeitgeist, actors are more likely to respond because it can be socially costly to ignore the issue. However, there is frequently an insufficient overlap between the problems that receive public attention and those that are most intractable at a local level. As Stephan et al. (2015) highlight, government activism has a central role in supporting social entrepreneurship emergence with policy narratives driving attention and resources to areas easier to understand and communicate. This means that one may observe social entrepreneurs acting in response to social problems that garner public attention but may not be the most entrenched when looking beyond policy narratives. This leads to the following hypothesis:

H3a: In contexts with higher social problem scale, central government public investment negatively moderates the relationship between social problem scale and social entrepreneurship action.

In contrast, in less deprived areas, where the scale of social problems is less severe, one may expect to see increased social entrepreneurship action through central government investment. Entrepreneurial actions in less complex environments typically require simple solutions to social problems (Kimmitt and Muñoz, 2018), and is more likely to yield government support. Because of the 'increased public awareness' brought about by public institutions into certain issues, it perpetuates the incongruence between policy direction and real public needs (Dorado and Ventresca, 2013). But because awareness is increased it becomes socially costly for the problem to be disregarded for social entrepreneurs and the attached social status associated with becoming a social entrepreneur is attractive for this population of actors. This leads us to the following hypothesis:

H3a: In contexts with lower social problem scale, central government public investment positively moderates the relationship between social problem scale and social entrepreneurship action.

Methodology

Sample and data

The data stem from two cross-matched sources of data, combining social entrepreneurship action and local deprivation. Individual-level data stems from the 2015 Global Entrepreneurship Monitor's (GEM) adult population survey (APS). Overall, the GEM survey is representative of the Chilean entrepreneurial population, with comparable data, comprising more than 6,600 observations across all 15 regions and 239 communes. The 2015 version of the GEM survey, published on 2016, contains a special section aimed at capturing and assessing social entrepreneurship activity in the country in 2015. The research design allowed the team to cover almost 70 per cent of the country-level universe. With a focus on action, the authors discarded respondents in an 'intention-only' stage and retained only those taking decisive actions to start a new business. The final sample consists of 1,124 entrepreneurs. 30% of them self-declared as being engaged in social entrepreneurial activity, defined as "any kind of activity, organisation or initiative that has a particular social, environmental or community objective. This might include providing services or training to socially deprived or disabled persons, activities aimed at reducing pollution or food-waste, organizing self-help groups for community action, etc" (Bosma et al., 2016, p.9). This definition and distinction were included and made in the 2015 GEM-APS, to develop country-level special topic reports for this activity only (Bosma et al., 2016). Alongside distinguishing traditional from social entrepreneurs, this section included further 16 specific questions about state financing needs, investment (public, private and bootstrapping), employment and volunteering, years of trading and area of operation.

The authors cross-matched individual-level data from the GEM-APS with commune-level data from the 2015 National Socioeconomic Characterization Survey (CASEN), run by Chile's Ministry of Social Development. CASEN is a household survey measuring multiple deprivation in the country in 2014. Data collection for CASEN is conducted every two or three years since the conditions assessed change slowly and represent long-term structural issues. The CASEN survey assesses multiple deprivation. Therefore, it investigates income poverty and 15 other areas such as education, health, employment, social security, housing, environment, social networks, and social cohesion. Data for the 2015 CASEN was collected in 2014 from 83,887 households in 324 communes across all 15 regions, with a total of 266,968 participants. Income poverty at the individual level was 11.7% and 10.4% at the household level. However, when the other dimensions are factored in, multidimensional poverty grows to 20.1% (BCN, 2016). The CASEN then aggreates household and individual-level data using a syntethic model and reports multidimensional poverty at the commune level¹, which is what it is used in this study. As per the scope of GEM, our cross-matching covered 239 of the 324 communes. The distribution of participants is representative of the population distribution in the country.

Measures

Dependent variable. This study is focused on social entrepreneurship action (SEA). Entrepreneurial action involves substantive activities taken by an individual or a group to start a new venture. Unlike intention, these are observable behaviours underlying experimenting, information scoping, opportunity shaping, and opportunity enactment (van Gelderen et al.,

¹ Further methodological details can be found in the CASEN methodological guide (page 7) http://observatorio.ministeriodesarrollosocial.gob.cl/storage/docs/casen/2015/Metodologia de estimacion de pobreza a nivel comunal con datos de Casen 2015.pdf

2018). As such, this study focuses on individuals who are currently involved in social entrepreneurial activity and have taken concrete actions to help start this venture.

To identify social entrepreneurial activity, the GEM survey asks the participants two questions. First: Are you currently trying to start or lead, alone or with others, some kind of activity, organisation or initiative that has a social/environmental objective or attends to the needs of a particular community? This would include providing services or training to socially marginalised or disabled people, carrying out activities to tackle pollution/pollution reduction, food waste, organisation of self-help groups, social action groups, etc.

Immediately after, the participants are asked: *In the last twelve months, have you taken any action to help start up this activity, organisation, or initiative, such as finding equipment, location, organising a start-up team, working on a business plan, starting to save money, or any other activity that helps start up an organisation?* This combination of questions allowed the team to distinguish entrepreneurial action from entrepreneurial intention and SEA from the actions within the general entrepreneurial population – those who do not declare to have a social mission. A dichotomous score was created within the entrepreneurial population, with 1 for SEA and 0 if the entrepreneurial action taken is non-social.

Independent variables. The independent variables comprise social problem scale, locally anchored public investment, and central government public investment. Since income poverty alone can not explain the magnitude of social problems, the assessment is grounded in the notion of multiple deprivation. Thus, to operationalise social problem scale the study leveraged CASEN's methodology for the assessment of multi-dimensional poverty to create a new latent variable, comprised by five dimensions reflecting social problems: i. income poverty, ii. educational attainment, iii. health status, iv. housing conditions and v. domestic violence. To increase the accuracy of assessment of the new latent variable, the authors used prinicipal components analysis (Battiston et al., 2013, Hair et al., 1989) to create a weighted index using

principal component loadings, shown in Table 1. This is in line with current practice (see e.g. Barreneche García, 2014; Miroshnychenko *et al.*, 2021). The calculated KMO index is 0.7, deemed satisfactory for the social problem scale measure (Kaiser, 1974). The resulting index is a continuous variable for each local area (community) that describes the level of deprivation, with a mean value of -0.63 and a standard deviation of 1.09. The higher the local deprivation index, the higher the scale of the social problem in the area.

--- Insert Table 1 about here---

This assessment of local multiple deprivation is consistent with recent views in the entrepreneurship literature that measure poverty through an understanding of the multiple factors that produce it (Chliova *et al.*, 2015; Kimmitt *et al.*, 2020). This means that whilst income is an important indicator of deprivation, it should be seen in the context of other crucial factors that are instrumental to the opportunities available for betterment in a particular community (Kimmitt and Muñoz, 2017). Consequently, our measure of *social problem scale* is both internally and theoretically consistent.

To capture *public investment types*, this study focuses on the following question, asked social entrepreneurs in the GEM survey: *Have you received money* — *loans or ownership investments* — *from any of the following to start this activity, organisation, or initiative?* In the survery, there are two main sources of public investment available to social entrepreneurs in the country: the Economic Development Agency and Local State Banks. This includes both repayable and non-repayable finance since both commercial and social returns are considered. While both are public institutions operating nationally, decision-making within the Economic Development Agency is highly centralised and most entrepreneurship programmes are run at the national level. At the time our data were collected, the agency had three social entrepreneurship programmes available: i. flexible social entrepreneurship seed funding, ii. social innovation prototypes, and iii. social innovation challenges. The latter was launched in

a stage-wise fashion, region by region, but the programme itself, amount of funding available and assessment criteria utilised was the same for all participants.

State bank support, on the other hand, is place-sensitive in terms of geography and social sectors, which the authors deemed as locally anchored. Its services (accounts, loans, investment, savings, etc.) are available in communes with both high and low social problem scale. However, through the *Neighbourhood Savings Branch* service, it can reach areas where traditional banking, finance and investment do not operate in. This service has 25,400 micro branches in operation, with national coverage. In 134, mostly poor, communes the *Neighbourhood Savings Branch* is the only banking service available. It is worth noting that the support social entrepreneurs receive from traditional banks and financial institutions in the country is very low. They rank 14 out of 15 in terms of support for social entrepreneurs and only 7% of social entrepreneurs in Chile have received loans or investment from them (Muñoz *et al.*, 2016). Conversely, the State Bank offers tailored support to socially oriented microenterprises.

Accordingly, this study captures *Locally anchored Public Investment* by looking at whether the social entrepreneur has received investment from banks or other financial institutions. Likewise, *Central Government Public Investment* is captured by looking at whether the social entrepreneur has received investment from the government in the form of programmes, donations, or grants. Both variables are reported at an individual level.

Control variables. The analysis includes several control variables. In terms of demographics, it controls for age and gender. The latter was included in the regression model as a dummy with males coded as 1. It also controls for work status and income. For the former, it uses a dummy that takes the value of 1 if the respondent is working full time, part-time or self-employed. For income, it captures respondents with income in the higher 33% percentile, which was coded as 1 in the dummy. The final three controls are entrepreneurship-specific,

looking at entrepreneurial networks (if the participant knows other entrepreneurs), self-efficacy and fear of failure. Although it is not part of the theoretical model, informal investment constitutes an important source of funding in the country for early-stage social ventures. To deal with potential alternative explanations, the authors conducted a robustness check with informal investment.

Data analysis and results

The hypotheses were tested with a series of random-effects regression models with data using commune-level as a grouping variable. Table 2 shows descriptive statistics and correlations for all the variables included in this analysis. Table 3 reports separately the sample into two groups — social and non-social entrepreneurs — showing mean values for each variable. Also, the sample is divided according to the scale of social problem, grouping in percentiles of deprivation in line with CASEN's delineation. Overall, no significant differences are observed in the social and demographic characteristics of the entrepreneurs. However, funding has a more heterogeneous behaviour, with government funding playing a central role in supporting entrepreneurship. Interestingly, central government funding decreases for more deprived areas, overall, whilst funding from banks and financial institutions is comparatively higher for social entrepreneurs living and operating in more deprived areas. Also, in comparative terms, government funding for social entrepreneurship is significantly higher in wealthy communes. To reduce multicollinearity concerns, the authors conducted pooled OLS tests (Table 4). For the models, all variance inflation factor (VIF) values (max. 2.9) are below the critical threshold (O'Brien, 2007; Hair *et al.*, 2010).

--- Insert Tables, 2, 3 and 4 about here---

Estimation results

Table 5 shows the estimation results for SEA. Model 1 presents the main estimation, and the following two models present interaction effects between social problem scale and the two

alternative sources of funding: Local Bank Funding (column 2) and Government Funding (column 3).

--- Insert Table 5 about here---

In line with the first hypothesis, analyses reveal that social entrepreneurship action is positively associated with a low social problem scale. This result calls into question the assumption that social problems, seen here through the lens of multiple deprivation, are by themselves capable of triggering social entrepreneurship action. They might inspire individuals to think about solutions, but this does not translate into decisive entrepreneurial behaviour. In line with the theorization, this suggests that engagement in action is likely to be determined by what social entrepreneurs regard to be feasible.

Models 2 and 3 show that *locally anchored public investment* and *central government* public investment do indeed have differential impacts on *social entrepreneurship action* when interacting with the *scale of social problems* in a community. Model 2 shows that the effect of *locally anchored public investment* is positive and significant only in associations with the level of deprivation. Most notably, they show that as the scale of social problem increases, the impact of *locally anchored public investment* enhances the likelihood of *social entrepreneurship action*.

For example, if the community is more deprived (95th percentile) the impact of *locally* anchored public investment (local state banks) on the dependent variable (SEA) is strong (β =0.887, p<0.1); whereas if the commune is wealthy (5th percentile) the impact of *locally* anchored public investment is negative in the likelihood of social entrepreneurship action (β =-1.731, p<0.1). Our results support H2a and H2b.

In terms of the effect of central government public investment, Model 1 shows it has a positive and significant effect (β =0.732, p<0.01) on the likelihood of starting a social venture. However, as seen in Model 3, as the scale of social problem increases, the positive impact of

government entrepreneurship programmes decreases. In other words, the poorer the community, the lower the effect of *central government public investment* on social entrepreneurial action. Perhaps more interesting, and worryingly, is that the positive effect of central government public investment reinforces the likelihood of social entrepreneurial action in wealthier communities. Thus, the evidence supports H3a and H3b. This finding extends Kachlami et al. (2018), who found that municipalities with higher income also experience higher rates of social venture formation, as it sheds light on the role of a key intervening factor (i.e., government investment) in propelling social entrepreneurial action where, arguably, it is needed less. Figure 1 summarises these interaction effects.

---Insert Figure 1 about here---

Robustness checks

The authors conducted three robustness checks. The first check assesses the effects of informal investment, shown in Table 5. The analysis reveals a positive relationship between informal investment and SEA (Column 1), which is expected given its relevance for early-stage social ventures. However, this does not depend on the scale of the social problem within a community (Column 4). The second check involves a multilevel analysis to confirm the robustness of the results (Table 6). The same estimations presented in Table 5 were replicated, taking now into consideration two levels of analysis: individual-level variables and social problem scale as a variable at the community level. The estimations show the same relationships and magnitude as the logit random effect estimations, which confirms the robustness of the results.

---Insert Table 6 about here---

Finally, in terms of controls, checks show that within an entrepreneurial population, male, older and high-income individuals are more likely to engage in SEA, which is in line with current literature (Loarne-Lemaire *et al.*, 2017; Teasdale *et al.*, 2011). Relationships are positive and

significant across specifications, yet not linked to the social problem scale. Effects of fear of failure and knowing other entrepreneurs is not significant among the entrepreneurial population.

Discussion

This paper explores the relationship between the scale of social problems, social entrepreneurship action and the moderating effect of alternative types of public investment. Through an empirical analysis of social entrepreneurship in Chile, the authors demonstrate that the relationship between social problem scale and social entrepreneurship is more complex than currently considered by the literature (e.g. Zahra *et al.*, 2009). Specifically, the authors tested the 'crescive conditions' (Dorado and Ventresca, 2013) that help understand the institutional circumstances and processes that elicit entrepreneurial action. The findings are somewhat counterintuitive to some of the heroic perceptions of social entrepreneurs, which assume a close relationship between the scale of social problems and social entrepreneurial action.

Most notably, our initial arguments draws attention to how the crescive conditions of social entrepreneurship make feasibility more relevant, meaning that social entrepreneurs do not necessarily act in contexts where there are seemingly the most widespread and severe social issues. This finding points to a more complex set of relationships that help better understand what encourages some social entrepreneurs to operate in the most challenging, deprived contexts when others prefer to operate in less deprived areas.

To understand this, it was theorized that the actions of social entrepreneurs in the 'crescive space' are shaped by the presence of different forms of public investment, which have varying levels of anchorage within deprived communities. Given local knowledge, embeddedness, and values of state banks to deprived areas, they are more likely to finance social entrepreneurs

whose endeavours are to support those communities. Thus, the link between social entrepreneurship and social problem scale only seems to exist when those entrepreneurs are supported by financiers who similarly understand the deprivation and challenges of the local context. The relevance of local knowledge and embeddedness is furthermore emphasised when considering the effects of the central government as investors where it is more likely for them to stimulate action in more affluent contexts, having a weaker effect in deprived areas. Through 'increased public awareness', government investment, through centralised entrepreneurship programmes, might be tilting the scale in favour of those who most likely needed the least.

Theoretical contributions

The contributions of the paper are two-fold. First, it contributes theoretically to the discussion concerning social entrepreneurship action and institutions. Social entrepreneurship action is presumed to emerge from societal problems such as unemployment or access to education (Zahra and Wright, 2016). In this context, institutional conditions are viewed as important antecedent conditions to social entrepreneurship (Canestrino *et al.*, 2020; Sahasranamam and Nandakumar, 2020). Whilst these factors may not produce the conditions for financially viable commercial ventures, they are laden with moral or social incentives (McMullen, 2011; Stirzaker *et al.*, 2021) that prompt social entrepreneurship action.

This paper corroborates that the relationship between social entrepreneurs and social problems is indeed more complex than previously thought. Leveraging 'crescive conditions' (Dorado and Ventresca, 2013), this paper helps to unpack the institutional factors and processes that enable the likelihood of social entrepreneurial action. Because of the focus on social entrepreneurship action, rather than recognition/intention, the authors can demonstrate that when problems are acted upon and the uncertainty of that process experienced, there are important heterogeneities as to the contexts in which social entrepreneurs look to intervene.

Consequently, the study shows that social entrepreneurs *do not* necessarily pursue contexts where the most social problems and 'incentives' (i.e., high levels of deprivation) exist.

This argument aligns with the view that a more contextualised understanding of social entrepreneurship action is needed (Hu *et al.*, 2019; Kimmitt and Muñoz, 2018). The paper strengthens this further by emphasising the central role of problem scale, which can be acted upon or where inertia may exist. To elaborate this further, this paper showcases how the presence of different forms of public investment encourage or discourage social entrepreneurs to act in environments with varying levels of social problem scale, offering a more nuanced understanding of the role of government in promoting social entrepreneurship (Estrin *et al.*, 2013). Because public investment can come in many forms, state banks and centralised funding programmes, here the authors theorise that their levels of 'anchoring' within and across communities form the basis for encouraging social entrepreneurship action. This paper demonstrates that this is indeed the case.

Second, and related to the above, this study contributes to the literature on entrepreneurial finance and resource mobilisation. Here, there is a limited amount of research evidence regarding how social ventures finance their start-up activities (Short *et al.*, 2009) and the interaction between investment and entrepreneurial action more broadly (Warhuus *et al.*, 2021). Prior research has looked at forms of social finance, such as venture philanthropy, and their related impact on social venture performance (Scarlata *et al.*, 2015). Also, the financing of entrepreneurs in disadvantaged areas (Rouse and Jayawarna, 2006). This paper adds to that literature by showing the effects of public entities as social financiers who seek social/environmental outcomes or returns on their investments, as well as financial returns in the case of locally anchored state banks (Moore *et al.*, 2012).

Thus, the paper responds to calls for more research into public financing programmes for social entrepreneurship (Vanderhoven *et al.*, 2020). The results suggest a need to look more

closely at the diverse array of investment types and financial resources social entrepreneurs draw from and how it shapes the ventures they pursue. This research brings to the fore the idea that varying levels of institutional conditions precipitate a particular likelihood of investment. Whilst locally anchored investment encourages social entrepreneurship in the most deprived communities, more centrally organised investment encourages action in relatively affluent areas. Beyond typical social investor approaches which serve to solve wicked problems (Di Lorenzo and Scarlata 2019), social financing from public sources may both perpetuate these (central government public investment) or help to reduce it (locally anchored public investment). This offers an institutional understanding of the processes associated with resource mobilisation in social entrepreneurship (Desa and Basu, 2013) as called for by Stephan et al. (2015).

Social and practical implications

This study's findings have several practical and social implications. Despite the promises of social entrepreneurship as a solution to serious social problems (Pathak and Muralidharan, 2018), our findings show that central government programmes, lacking attention to local circumstances, had exacerbated the gap by focusing and financing social ventures in contexts where social problems are the least pervasive. Such programmes, likely unintendedly, has prioritised entrepreneurs from wealthy areas who can e.g., write a business plan, do financial forecasting, engage with international suppliers, and so on, perpetuating the elusive rebalancing of society. Chile offers an interesting and recent example in this regard. In October 2019, a protest over increased metro fares in Chile's capital, Santiago, led to spontaneous and sustained protests over the high level of social problems and cost of living in the country. This crisis was decades in the making (Pibble, 2019), seen as the consequence of a series of reforms unfolding

for over 30 years, which led to rising cost of living, income poverty and over-privatization of social services.

Entrepreneurs and small businesses, particularly from deprived areas, were the most affected by it. In response, the Chilean government launched a rescue package, which included US\$16.5 MM in flexible loans and subsidies. This initiative was deemed as insufficient and problematic because the government wanted to repair the entrepreneurial infrastructure using the same historical entrepreneurship policies, since a significant portion of the public investment portfolio has been allocated to entrepreneurs who would have access to seed investment or venture capital anyway (Muñoz *et al.*, 2020b). The findings in this study talk to this situation, which is unlikely to happen only in Chile.

More generally, these implications are important for contexts outside of Chile. Importantly, our findings demonstrate the importance of the broader political economy to the vary effects of funders and social entrepreneurship action (Muñoz *et al.*, 2020a). Whilst in our context, much faith is placed in the power of the market to solve a range of issues. In contexts where there are fewer social problems and the state has a stronger role (e.g., Sweden/Finland) we may see reverse effects where well-organised state funding initiatives are neatly targeted at certain issues. However, we may see other effects from state funders such as programmes that are poorly designed for scaling (Vanderhoven *et al.*, 2020).

The findings suggest a somewhat cautionary tale regarding the involvement of centrally allocated funding in the promotion of social entrepreneurship. At a policy level, social enterprise has been identified as an opportunistic tool for policymakers to allow them to claim wide-ranging social benefits from particular initiatives (Teasdale, 2012) whilst also reducing taxpayer burden on the state (Nicholls and Teasdale, 2017). This suggests that the observations made in this study are somewhat similar whereby central government resources are not necessarily allocated to ventures operating in deprived environments because the challenges

may be deep-rooted and structural in nature. Therefore, it may be difficult to foresee small entrepreneurial initiatives as having a role to play in such contexts.

Limitations and future research

Inevitably, there are limitations to this study. First, and as noted previously, this study is limited as it draws from the singular setting of Chile. Whilst this provides insight into a context of notable social entrepreneurship activity and action, it does suggest that other institutional contexts may differ. Whilst this is a limitation it opens possibilities for future research that examines other institutional factors stimulating social entrepreneurship. The authors encourage future research to investigate, through cross-national studies, the relationship between social entrepreneurship actions and social problem scale. Bringing together the previous discussion, future research could draw from theoretical frameworks such as varieties of capitalism which highlights the varying levels of a country's market coordination i.e., liberal vs. coordinated (Kibler *et al.*, 2018). Because this perspective suggests that market organisation produces various levels of income distribution, it could be an important framework for taking the initial ideas from this paper forward.

This study is also limited by the forms of investment examined. These were selected because they are the main sources of funding for social ventures in Chile. However, elsewhere, social ventures may have access to alternative sources of finance that may accentuate or limit the relationships examined here. In addition, although informal funding had no bearing on the context of operation in this paper, one may see a more heterogenous role across national contexts and various social problem issues. Future research would benefit from looking more closely at how informal, social, and other forms of public investment push or pull entrepreneurs to pursue ventures in deprived contexts. It would similarly be interesting to examine social ventures in contexts where there is little to no access to this type of funding, exploring how

they gather the necessary resources to start and encourage financially focused investors to back their initiatives. Overall, there is much scope for future research to understand the power investors have in their efforts and how they direct (or not) their efforts.

Conclusions

Contrary to current understanding, this study reveals that social entrepreneurship action is positively associated with a low social problem scale, meaning that high levels of deprivation do not immediately lead to action. Leveraging the notion of 'crescive conditions', it also shows that locally anchored forms of investment positively moderate this relationship, stimulating action in the most deprived contexts. On the contrary, centralised public investment leads to increased social entrepreneurial action in wealthier communities where it is arguably less needed. Findings have important implications for theory and practice. It expands the understanding of how social entrepreneurship actions link with broader social problems and institutional conditions, in particular the pivotal role of investment. Findings also shed light on the role and (unintended) effects of different types of public investment, where policymakers might end up in the "Folly of rewarding A, while hoping of B" (Kerr, 1995).

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Tables and figures

Table 1. Details of measure: PCA results and adequacy

Local Deprivation Items	Description	Principal component loadings	KMO
Poverty	% of the population in poverty	0,34778	0,7025
Educational attainment	% of population in public schools	0,16015	
Health status	% of population in FONASA A	0,33473	
Housing conditions	% of population in critical overcrowded housing	0,14281	
Domestic violence	% of complaints for domestic violence	0,34431	

^{*} PCA: principal components analysis; KMO: Kayser-Meyer-Ohlkin

 Table 2. Descriptive Statistics and Correlations

	Variable	Mean	Std.Dev.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1)	Social entrep	0,38	0,484	1											
(2)	Age	42,46	14,583	-0,0115	1										
(3)	Gender	0,55	0,498	0,0095	0.0844*	1									
(4)	Work status	0,87	0,332	-0,0115	0,0412	-0,0147	1								
(5)	Income	0,72	0,447	-0,0234	-0.0784*	-0,0132	0.1033*	1							
(6)	Self Efficacy	0,81	0,394	-0.2055*	0.0934*	-0,0322	0.2282*	0.1054*	1						
(7)	Know other entrep	0,58	0,494	0,0312	-0.0938*	0.0827*	0.0594*	0.1162*	0,0205	1					
(8)	Fear of failure	0,24	0,429	0,0135	0,0136	-0.0720*	0,0328	0.1053*	0.1079*	0.1077*	1				
(9)	Informal funding	0,02	0,145	0,0003	0,0356	0.0453*	-0,0285	-0.0495*	-0,0175	-0.1924*	-0,0411	1			
(10)	Local bank funding	0,03	0,180	0,0282	0.1075*	-0.0659*	0,0434	-0,0402	0,0058	0,0004	-0,0479	0,0378	1		
(11)	Government funding	0,35	0,476	-0.0594*	0,0182	-0,0147	0,0247	0,0215	-0,0105	-0,0081	-0,0458	0,0567	0.1043*	1	
(12)	Local Deprivation	-0,63	1,009	0,0293	0.1458*	-0,0547	-0.0639*	-0.0864*	-0.1114*	-0,0200	0,0534	0,0303	0,0539	0.1620*	1

Note.

*Represents statistical

significances at p<0.005 *Represents statistical significances at p<0.005

Table 3. Mean values for critical variables

		Local Deprivation				
	Variable	less deprived	median deprivation	more deprived		
	Age	43	44	44		
	Gender	0,52	0,59	0,58		
	Work Status	0,82	0,84	0,85		
Social	Income	0,82	0,80	0,73		
Entrepreneurship Action	Self Efficacy	0,70	0,77	0,78		
	Know other entrep	0,47	0,60	0,62		
	Fear of Failure	0,25	0,28	0,26		
	Informal funding	0,05	0,03	0,04		
	Local Bank funding	0,04	0,04	0,03		
	Government funding	0,47	0,42	0,41		

		Local Deprivation				
	Variable	less deprived	median deprivation	more deprived		
	Age	42	41	42		
	Gender	0,55	0,55	0,50		
	Work Status	0,91	0,89	0,89		
Non Social	Income	0,86	0,73	0,56		
Entrepreneurship	Self Efficacy	0,80	0,84	0,84		
Action	Know other entrep	0,55	0,58	0,57		
	Fear of Failure	0,21	0,25	0,22		
	Informal funding	0,00	0,01	0,01		
	Local bank funding	0,06	0,03	0,01		
	Government funding	0,28	0,27	0,32		

Table 4. Multicollinearity Test on Variables

Variable	VIFa	Toleranceb
Income	1,14	0,8763
Gender	1,07	0,9314
Government funding	1,06	0,9440
Local Deprivation (LD)	1,06	0,9447
Self Efficacy	1,06	0,9471
Work Status	1,05	0,9488
Know other entrep	1,05	0,9505
Local bank funding	1,05	0,9560
Fear of failure	1,03	0,9694
Age	1,02	0,9770
Informal funding	1,02	0,9813

Note. aVIF values greater tha 10 indicate reasons for concern due to collinearity among variables.

bTolerance values less tha 0.1 indicate collinearity among variables. Our values do not suffer from collinearity.

Table 5. Estimation Results

	column 1	column 2	column3	column 4
VARIABLES	SEA	SEA	SEA	SEA
Age	0.0172***	0.0168***	0.0178***	0.0172***
	(0.00453)	(0.00454)	(0.00455)	(0.00453)
Gender	0.313**	0.315**	0.305**	0.314**
	(0.132)	(0.132)	(0.132)	(0.132)
Work Status	-0.514**	-0.509**	-0.521**	-0.518**
	(0.203)	(0.203)	(0.203)	(0.203)
Income	0.625***	0.621***	0.629***	0.626***
	(0.157)	(0.157)	(0.157)	(0.157)
Self Efficacy	-0.327*	-0.316*	-0.318*	-0.322*
	(0.173)	(0.173)	(0.173)	(0.173)
Know other entrep	-0.0413	-0.0499	-0.0401	-0.0394
	(0.134)	(0.134)	(0.134)	(0.134)
Fear of Failure	0.215	0.201	0.227	0.213
	(0.154)	(0.155)	(0.155)	(0.155)
Informal funding	1.639***	1.621***	1.672***	1.510***
	(0.526)	(0.528)	(0.527)	(0.542)
Local bank funding	-0.311	0.779	-0.366	-0.314
	(0.384)	(0.722)	(0.386)	(0.385)
Government funding	0.732***	0.738***	0.588***	0.734***
	(0.136)	(0.136)	(0.159)	(0.136)
Local Deprivation (LD)	0.0805	0.0628	0.167**	0.0876
	(0.0661)	(0.0667)	(0.0830)	(0.0667)
LD X Local bank_Fund		1.083*		
		(0.603)		
LD X Gov_Fund			-0.231*	
			(0.134)	
LD X Informal_Fund				-0.320
				(0.417)
Constant	-1.159***	-1.157***	-1.128***	-1.159***
	(0.314)	(0.314)	(0.315)	(0.314)
Observations	1,124	1,124	1,124	1,124

Standard errors in parentheses

Dependent variable takes value 1 if social entrepreneurial activity $% \left(1\right) =\left(1\right) +\left(1\right) =\left(1\right) +\left(1\right)$

^{***} p<0.01, ** p<0.05, * p<0.1

Table 6. Estimation Results Multilevel estimation method

	column 1	column 2	column3
VARIABLES	SEA	SEA	SEA
Age	0.0172***	0.0168***	0.0178***
	(0.00456)	(0.00457)	(0.00458)
Gender	0.311**	0.313**	0.303**
	(0.132)	(0.133)	(0.133)
Work Status	-0.527**	-0.520**	-0.535***
	(0.205)	(0.206)	(0.206)
Income	0.626***	0.622***	0.632***
	(0.158)	(0.158)	(0.158)
Self Efficacy	-0.326*	-0.315*	-0.317*
	(0.174)	(0.174)	(0.174)
Know other entrep	-0.0448	-0.0528	-0.0440
	(0.135)	(0.135)	(0.135)
Fear of Failure	0.213	0.200	0.225
	(0.155)	(0.156)	(0.156)
Informal funding	-0.305	0.779	-0.360
	(0.387)	(0.726)	(0.389)
Local bank funding	0.737***	0.743***	0.590***
	(0.137)	(0.137)	(0.160)
Government funding	1.633***	1.615***	1.665***
	(0.527)	(0.528)	(0.528)
Local Deprivation (LD)	0.0826	0.0655	0.172**
	(0.0690)	(0.0693)	(0.0869)
LD X Local Bank_Fund		1.077*	
		(0.607)	
LD X Gov_Fund			-0.236*
			(0.137)
Constant	-1.157***	-1.156***	-1.125***
	(0.317)	(0.317)	(0.319)
Observations	1,124	1,124	1,124
Number of groups	187	187	187

Standard errors in parentheses

Dependent variable takes value 1 if social entrepreneurial activity and 0 if nonsocial entrepreneurial activity

Multilevel estimation Level1: individual level observations, Level 2: community level observations

^{***} p<0.01, ** p<0.05, * p<0.1

Figure 1. Interaction effects

