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# Fostering an environment for social entrepreneurship: a comparative analysis across economic development levels

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## Abstract

Social entrepreneurship has been lauded for its positive contributions to global economic and social development goals. Yet, how and in what ways varying institutional environments and economic development levels have spurred social entrepreneurial ventures remains a highly debated concept. It remains unclear whether (or not) social ventures are most likely to emerge within developing nations with weak and ineffective institutional structures or from developed nations with more established and supportive institutional mechanisms. Therefore, this study responds to this debate and provides comparative evidence on how varying national economic development levels constrain or enable social entrepreneurship behavior. The study combines data from the Global Entrepreneurship Monitor, the World Development Indicators, the Index of Economic Freedom, and the World Governance Indicators to develop a multi-level mixed-effects model. It uses a sample of 124,642 individuals from 59 (9 factor-, 27 efficiency-, and 23 innovation-driven) countries. The results indicate a positive association with informal institutional mechanisms influencing global social venture formation. However, disparate observations on how some formal institutional factors influence social venture across economic development levels were observed, raising essential questions about formal institutional support mechanisms' influence.

**Keywords** Economic development · Institutions · Social entrepreneurship · Social value creation

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## 1 Introduction

Social entrepreneurship has become a dominant discourse within academic and broader social agendas (Dwivedi and Weerawardena 2018; Kraus et al. 2014; Saebi et al. 2019; Scartozzi et al. 2025), especially in light of the numerous ailments facing modern societies and the lack of governmental capacity to provide holistic responses (Mair and Marti 2009; Short et al. 2009). Social entrepreneurs have raced to design multiple forms of commendable and self-sustaining business models to alleviate the suffering of disadvantaged communities and serve the market (McMullen and Bergman 2017). Champions of the moral marketplace (Georgallis and Lee 2020), social entrepreneurs have garnered the global appreciation of their beneficiaries, the scholarly community, and local governments as their products (Short et al. 2009), services (Weerawardena and Sullivan Mort 2006), business models (Mair and Marti 2009), and market solutions (Desa and Basu 2013) attend to social demands and strive to provide financial value to their stakeholders (Shepherd et al. 2019). Yet, while this noble phenomenon continues to grow in our collective admiration, recent evidence suggests that social entrepreneurs are at risk and often fail to self-sustain (Renko 2013) to develop effective products (Zahra et al. 2009) or to provide adequate services (Robinson 2006). Often met with disappointing return figures for a sustainable business model, an observable pattern amongst social entrepreneurial ventures is that they become more financially reliant on philanthropic and governmental contributions as they evolve (Davis et al. 2021; Renko 2013; Weerawardena et al. 2010). Worryingly, social missions might change or drift due to challenges and may ultimately forego societal benefits to maintain economic goals (Grimes et al. 2019; Shepard et al. 2019; Davis et al. 2021).

Social ventures have unique challenges that diverge from traditional entrepreneurial ventures (Ferreira et al. 2019; Kraus et al. 2014; Vega and Kidwell 2007; Yujuico 2008). There is a growing body of evidence to suggest they encounter significant barriers to market entry and growth, such as varying levels of scope and scale (Zahra et al. 2009), scarce resources (Bruton et al. 2013; Desa and Basu 2013), legitimation issues (Robinson 2006; Sud et al. 2009; Khanin et al. 2022), and the institutional environment conditions (Dacin et al. 2011; Aparicio et al. 2024). Additionally, the diversity in their motivations and in the range of impacts they aim to achieve has led to the development of complex typologies and business models (Davis et al. 2021; Mair and Noboa 2006; Davis et al. 2021; Zahra et al. 2009). Furthermore, addressing the fragilities of socio-economic issues across global contexts while promoting innovation efforts is exacerbated by insufficient input factors (i.e., resources and support) to facilitate such endeavors (Acs et al. 2014; Griffiths et al. 2013). Understanding how antecedents and constructs influence social entrepreneurship requires further conceptualization.

Social entrepreneurs must be able to access and mobilize various resources to generate ideas, products, services, or ventures (Lumpkin and Dess 1996; Ferreira et al. 2019). At the same time, social entrepreneurs must *also* perceive new opportunities from the market to offer new solutions for social-related issues (Bruton et al. 2013). Yet, social demands are heterogeneous on a national and global scale, and so too are the ways how social entrepreneurs attend to these demands (Baumol 2011; Zahra et

al. 2009), and their capacity to navigate and leverage resources within varying environmental contexts (i.e., Levie and Autio 2011; Stephan et al. 2015).

Despite the evidence that social entrepreneurship is a global phenomenon that spans varying contexts, the influence of micro and macro environmental factors on social entrepreneurial ventures still needs further research (Aparicio et al. 2024; Spanuth and Urbano 2024). For example, further evidence about how different configurations of the institutional context may change and influence social entrepreneurship is needed. Furthermore, there is an academic debate about whether supporting institutional mechanisms and elements foster social entrepreneurship, or on the contrary, weak and adverse institutional contexts create the conditions for social entrepreneurship behavior (Hoogendoorn 2016; Stephan et al. 2015). Previous studies have highlighted the effect of institutional environments on social entrepreneurship in either developed countries (Anokhin et al. 2023; Audretsch and Kariv 2025), developing countries (Deng et al. 2020; Moritz et al. 2024), or across international evidence (Hechavarría and Brieger 2022; Hechavarría et al. 2023; Hoogendoorn 2016; Stephan et al. 2015). Nevertheless, there remains a significant knowledge gap regarding these factors' specific manifestations and operations in various economic development stages.

Analyzing both developed and developing (or factor-, efficiency-, and innovation-driven) economic contexts has been common in studies approaching traditional (or commercial) entrepreneurship [see, for example, Aparicio et al. (2021), Valliere and Peterson (2009), and Wong et al. (2005)]. Incorporating these kinds of analyses into the social entrepreneurship sphere would enable us to contribute substantially to the field by offering insights into those institutional mechanisms that either facilitate or impede social entrepreneurship in different economic settings. This is especially true given entrepreneurs' significant differences in social value creation when comparing factor-driven, efficiency-driven, and innovation-driven economies (Aparicio et al. 2024; Lepoutre et al. 2013). According to Kelley et al. (2016), while 66% of individuals in factor- and efficiency-driven economies expect social benefits from entrepreneurial activity, only 53% see entrepreneurship as a positive activity tackling societal issues. Extant research suggests that institutional factors like business regulations and government performance (such as the rule of law and government support) (Anokhin et al. 2023; Spanuth and Urbano 2024), as well as informal institutions such as the national identity (Aparicio et al. 2024; Hechavarría et al. 2023) interact with social entrepreneurship initiatives. Yet, the evidence remains disparate when it comes to the institutional comparison across groups of countries, giving the opportunity to analyze further the challenges and opportunities encountered at each stage of development. In this virtue, authors have called for more comparative studies about country-level institutional conditions and their noticeable influence on social entrepreneurship behavior (Aparicio et al. 2024; Estrin et al. 2013b; Lepoutre et al. 2013). As a result, this study investigates whether social entrepreneurship thrives more in developed economies with more *supportive* institutional environments or less developed economies where significant market gaps and *weak* institutional conditions prompt more varied opportunities to meet social demands. To this end, institutional economics offers an appropriate framework to analyze how varying contexts influence individuals' preference to become social entrepreneurs.

Building on an institutional framework, our empirical strategy relies on multilevel mixed-effects models, which are utilized on a sample of 124,642 individuals from 59 (9 factor-, 27 efficiency-, and 23 innovation-driven) countries, with information from the Global Entrepreneurship Monitor, the World Development Indicators, the Index of Economic Freedom, and the World Governance Indicators to develop. Our findings highlight a positive association with informal institutional mechanisms influencing global social venture formation. Moreover, we show disparate observations on how some formal institutional factors influence social ventures across economic development areas, raising essential questions about formal institutional support mechanisms' influence.

We contribute to the literature about institutions and social entrepreneurship in the following manner. First, the results evidence that the influence of those mechanisms that constitute the institutional context upon social entrepreneurship behavior is not homogenous across levels of development. Second, this study offers insights into the institutional support perspective examining different institutional dimensions across development levels (Levie and Autio 2011; Lepoutre et al. 2013; Stephan et al. 2015). Our study offers comparative evidence that builds on and complements studies about ongoing tensions in the debate of supportive and unsupportive institutional structures (Aparicio et al. 2024; Hechavarría et al. 2023). For example, legal stability (strong rule of law) only influences social entrepreneurship behavior in lower development (factor-driven) economies. Effective business regulation is positively related to social entrepreneurship behavior only in efficiency and innovation-driven economies (at higher levels of development). Third, informal institutional support does not influence homogenously social entrepreneurship behavior across levels of development. However, least-developed economies showed that informal elements, i.e., national shared universalism, are negatively related to social entrepreneurship behavior. In contrast, this informal normative element (Kraatz et al. 2020) positively relates to social entrepreneurship behavior in the most developed group of countries. Additionally, a deeper understanding of these dynamics provides valuable guidance to policymakers and practitioners on tailoring institutional support to effectively promote social entrepreneurial activities across varying economic development stages, ultimately fostering sustainable social impact and economic growth. Comparing three groups of economies extends our knowledge about how social entrepreneurship varies in different contextual environments.

## 2 Background and hypotheses

### 2.1 Social entrepreneurship across economic development levels

This study builds on previous calls to provide evidence of differences in social entrepreneurship across development levels, particularly regarding the institutional context (Estrin et al. 2013b; Lepoutre et al. 2013). The economic development stage allows comparisons to highlight how context influences social entrepreneurship behavior (Estrin et al. 2013b; Hoogendoorn 2016; Lepoutre et al. 2013). However, the economic development and social entrepreneurship analysis suggests that pas-

sive and neglectful environments likely trigger social entrepreneurship behavior (Mair and Marti 2009). Given its positive impacts and benefits for less developed economies (Bruton et al. 2013; Robinson 2006). Within institutionally fragile environments, a higher volume of social problems presents a more significant opportunity for impactful social entrepreneurship (Dacin et al. 2011), and venture formation is stimulated as a response to uncertainty and institutional voids (Robinson 2006; Stephan et al. 2015). Furthermore, an ineffective alignment or weaknesses of the environmental context plays a role in enabling and supporting solutions to create an effective venture to attend to social demands (Dacin et al. 2010; Estrin et al. 2013b; Mair et al. 2012). Social entrepreneurs from developed economies have also increasingly flourished due to declining welfare systems and paternalistic approaches. For instance, previous literature has claimed that supportive environments (such as those with well-developed institutional mechanisms) motivate social entrepreneurship engagement and increase their likelihood of survival (Bosma et al. 2016; Estrin et al. 2013a, b; Foo et al. 2020).

Economies in the lower stages of economic development are typically considered "factor-driven economies" (Stephan et al. 2015, 324). In factor-driven economies, social entrepreneurship relies primarily on bricolage (Bals et al. 2023; Busch and Barkema 2021) and venturing creatively with (scarce) resources at hand (Di Domenico et al. 2010; Janssen et al. 2018). While this limits the scope and scale of the social entrepreneur's activities (Desa and Basu 2013; Davis et al. 2021; Zahra et al. 2009), it focuses the missions of these firms to attending to social demands and basic needs that are not satisfied by public provision (McMullen and Bergman 2017). Within these economies, social entrepreneurship is most likely to focus on providing health and education services, i.e., access to water and sanitation and support to rural areas (Bosma and Levie 2010; Smallbone et al. 2022).

Moreover, countries with an intermediate level of economic development are driven by efficiency in production (Bosma and Levie 2010; Schwab et al. 2002). Compared to factor-driven economies, this stage of development involves countries with higher levels of income per capita, higher development in their public infrastructure, and market diversification (Smallbone et al. 2022). The institutional context is yet more developed (Khanna and Palepu 2010), but some elements and functions may still be weak and inefficient (Bosma and Levie 2010). These economies are primarily focused on developing investment to improve the production efficiency of goods and services, which implies more articulation and openness with foreign technologies and international markets. Social ventures in these economies focus on education needs (i.e., training and attainment) to support innovation readiness and skills across sectors (Schwab et al. 2002). Nevertheless, they present higher levels of stability and certainty with a more robust macroeconomic infrastructure than factor-driven economies.

Lastly, innovation and technology enhancements drive economies in the most advanced stage of development. Government participation in social sectors through supportive programs and mechanisms is more visible in these innovation-driven economies (Lepoutre et al. 2013; OECD/European Commission 2013), as there are explicit provisions, policies, and structures for basic survival conditions (Lepoutre et al. 2013). As innovation-driven economies present higher income per capita and bet-

ter social conditions, higher technological advancement goals of the nation shift the focus of social entrepreneurs to address social inclusion issues and attending to the needs of vulnerable populations (Bosma and Levie 2010; Saebi et al. 2019). research has posed that formal institutional support is vital for social entrepreneurship behavior to flourish (Hoogendoorn 2016).

Varying institutional contexts present conditions and elements that influence social entrepreneurship market participation in varying ways across the globe and in resolving complex social problems (Dorado and Ventresca 2013). Highlighting the variations between economies and stimulus contributes to the debate on whether contextual conditions act as protagonists for social needs (Saebi et al. 2019; Short et al. 2009). Nevertheless, the strength of formal and informal institutional contexts on social venture emergence and operations has been under-explored and requires further empirical examination.

### 2.2 Social entrepreneurship and institutional theory

Institutional economics theory provides a framework to analyze how contextual and business environment elements influence behaviors (North 1990, 2005). The central premise of the institutional literature is that elements of social structures influence or constrain productive behavior (North 1990). Conforming to institutional environments legitimates organizations within their social environment and helps them survive and grow (Scott 2008). Several institutional factors influence this legitimization but are generally categorized into formal or informal mechanisms. Formal mechanisms are conveyed through rules and regulations (i.e., written laws and codified rules), whereas informal elements are societal norms such as values, attitudes, beliefs, and meanings (North 1990). While distinct in categorizations, businesses must conform to the interplay of formal and informal mechanisms to survive (Suddaby et al. 2010).

### 2.3 Social entrepreneurship and the formal institutional context

Contextualizing the formal institutional environment for social entrepreneurship behavior presents mixed views, and the influence of the formal institutions has advanced in two divergent streams. One stream argues that strong, supportive, and efficient formal mechanisms favor social entrepreneurship behavior (Stephan et al. 2015). From this standpoint, national-level regulative and supportive institutional mechanisms (Scott 2008) actively support social entrepreneurship behavior in a society (Bosma et al. 2016; OECD/European Commission 2013).

The other line of argument suggests that more passive and neglectful factors of formal institutions positively influence social entrepreneurship behavior (Mair and Marti 2009). In other words, uncertain and unstable institutional conditions can trigger social entrepreneurship behavior (Dacin et al. 2010; Short et al. 2009). The concept of institutional voids in emerging economies is a prominent theme within this argumentation and often focuses on factor-driven economies (Bruton et al. 2013; Khanna and Palepu 2010). Institutional voids emerge as weak mechanisms that fail to promote market participation (McMullen and Bergman 2017).

Following seminal institutional (North 1990; Scott 2008; Williamson 2000) and entrepreneurship literature (Levie and Autio 2011; Estrin et al. 2013b; Stephan et al. 2015), this study provides a comparative analysis of the formal context using the rule of law and the regulative burden upon business faced by firms across economies (Campbell and Lindberg 1990; Lapoutre et al. 2013; Levie and Autio 2011) and government support (Scott 2008).

### 2.4 Formal institutions

Different formal institutions and institutional quality measures have affected the decision to embark on commercial or social entrepreneurship (Estrin et al. 2013a, 2016; Muralidharan and Pathak 2017). Generally understood as the binding rules of society (North 1990), formal institutions outline explicit expectations for social behavior within regions. Depending on varying economic development, formal institutions are perceived and adopted differently across nations. For instance, present regulative regimes in developed economies come from long periods of institutional changes. Most entrepreneurs and firms acknowledge tax policy and regulation as accelerators or inhibitors for entrepreneurship, but how these factors are configured is highly dependent on the institutional context (Allen 2017). Regulation in developed economies focuses more on creating incentives, promoting competitive markets, and performing deregulation (Dacin et al. 2002; Sud et al. 2009). Yet, it is broadly recognized that property rights regulation, taxation policy, and the rule of law are recurrent formal institutions that impact strategy design across all ventures (Griffiths et al. 2013).

#### 2.4.1 The rule of law and social entrepreneurship behavior

The rules of law vary across countries and development levels (Djankov et al. 2002). Legal stability is a concept that conveys how national-level laws, property rights, and contracts are enforced by authorities to reduce uncertainty and increase entrepreneurial incentives within an economy (Mickiewicz et al. 2021). The rule of law also explains the level of security a society can expect through mechanisms of coercion (using force) and order, i.e., the police and judiciary systems (Scott 2008).

When the rule of law is weak or ineffective, institutional voids and instability serve as disincentives for conforming to coercive pressures or compliance (i.e., conforming to contractual duties, property rights protection, etc.). This weakness creates risks of ownership loss and the possibility of expropriation without compensation (Aidis et al. 2008). As there is a lack of protection, it disincentivizes using owned property and resources to establish and maintain businesses (Foss et al. 2021; Ghoul et al. 2017). The inefficacy and weakness of the rule of law have been found more frequently in underdeveloped (factor-driven economies) (Puffer et al. 2010; Stephan et al. 2015). Accordingly, entrepreneurs from factor-driven economies, mainly in poverty, will be more vulnerable to uncertainty and insecurities about property rights and contractual enforcement (Aidis et al. 2008).

Economies with higher levels of development tend to witness improved contractual and property rights protection mechanisms (Tracey and Phillips 2011), which

helps firms cope with some of the uncertainty and pursue continuous development. Furthermore, protected, transferable, and negotiable property rights provide an avenue for entrepreneurial funding and investment, an observable phenomenon in innovation-driven economies (De Soto 2000; Mair and Marti 2009). The increased strength of the rule of law tends to lead to more diverse sources of investment for continued innovation and firm survival (Short et al. 2009). This study adopts this latter stream of the debate and expects that strong levels of the rule will be positively associated with social entrepreneurship behavior in the three groups of economies, hence suggesting that:

**H1** *Overall, strong levels of the rule of law will be positively associated with social entrepreneurship behavior in (a) factor-driven economies, (b) efficiency-driven economies, and (c) innovation-driven economies.*

#### 2.4.2 Business regulation and social entrepreneurship behavior

Business regulations are formal structures that dictate the requirement for firm entry and participation in the market (Williamson 2000). Taxation is a key element of business regulation (Allen 2017; Levie and Autio 2011; Mair and Marti 2009; McMullen and Bergman 2017; Short et al. 2009). Vast tax burdens deter small and new social entrepreneurship ventures from investment capacity due to higher perceived risks (Robinson 2006; Estrin et al. 2013b). Despite social entrepreneurship ventures combining for-profit and social goals, some tax regimes identify them as commercial. Most developing and least developed economies have taxation regimens that do not acknowledge the dual mission that some social ventures may have (i.e., pursuing social and commercial goals), leaving social entrepreneurs without unique tax systems or regimes within the charitable sectors (Etchart and Comolli 2013). This factor may disincentivize these ventures' social mission as tax regulators may not recognize their social goals and create push factors to focus more heavily on commercial gain (Etchart and Comolli 2013; Killian and O'Regan 2019). This mission drift may reduce social entrepreneurship behavior to change from the defined initial social mission (Shepherd et al. 2019). Nevertheless, some developing economies recognize taxation benefits for entrepreneurial ventures with social goals.

There are heterogeneous influences of business regulation across levels of economic development. For example, innovation-driven and well-developed economies focus on business regulation to create incentives and promote competitive markets (Dacin et al. 2002). On the contrary, social entrepreneurs from efficiency-driven and factor-driven economies are more vulnerable to the inefficiency or misfunction of business regulation mechanisms (Etchart and Comolli 2013). However, the lack of efficiency towards reducing barriers and the increased transactional costs can create disincentives for social entrepreneurship behavior (Etchart and Comolli 2013).

Considering these arguments, this study expects efficient business regulation to influence social entrepreneurship behavior positively. Accordingly, this study hypothesizes:

**H2** *Efficient business regulation is positively associated with social entrepreneurship behavior in (a) factor-driven economies, (b) efficiency-driven economies, and (c) innovation-driven economies.*

#### 2.4.3 Government support/interventions and social entrepreneurship behavior

Governments can also offer supportive mechanisms (Scott 2008), such as policies to utilize public funding for start-up, R&D, and capacity (Aidis et al. 2012; Estrin et al. 2013b, 2016; Etchart and Comolli 2013). Appropriate public interventions hold the potential to enhance social entrepreneurship (OECD/European Commission 2013; Sud et al. 2009), and there have been several studies that provide evidence of the positive influence active support has on firms (Etchart and Comolli 2013; Hoogendoorn 2016; Stephan et al. 2015). However, the literature has also offered mixed results, with some studies suggesting that support given by institutional mechanisms decreases social entrepreneurship behavior due to a "crowding out" effect that diminishes the demand for social entrepreneurship (Estrin et al. 2013b; Fogel et al. 2006). This is because the creation of social safety nets through public spending increases the cost of opportunity for opting out to become commercial entrepreneurs (Islam 2015). Despite this, this study expects that overall, formal support will present favorable conditions for social entrepreneurship behavior in the three groups of countries:

**H3** *Overall, formal active government support is positively associated with social entrepreneurship behavior in (a) factor-driven economies, (b) efficiency-driven economies, and (c) innovation-driven economies.*

### 2.5 Social entrepreneurship and the informal institutional context

Informal institutional elements constitute normative systems (i.e., socially shared values, social norms, collective meanings, attitudes, and beliefs) and have a role in constraining, enabling, empowering, and motivating behavior (Kraatz et al. 2020; North 1989, 1990; Scott 2008; Suddaby et al. 2010; Tolbert et al. 2011). These normative mechanisms promote a form of moral legitimacy for firms and their perceptions of value creation (Dart 2004; Suchman 1995; Sud et al. 2009). Values can be collective and socially shared "conceptions of the preferred or the desirable" behaviors (Scott 2008:54). When a value is highly institutionalized and shared amongst society, it gains collective normative weight that motivates behavior (Kraatz et al. 2020; Townsend and Hart 2008).

Shared values exert influence through enablement, motivation, and empowerment for entrepreneurs (and firms) (Stenholm et al. 2013). They also shape and structure organizational actions and influence missions (Dorado 2006; Gehman et al. 2013). As Van de Ven et al. (2007) discussed, the venture materializes itself as a reflection of social values. Highly imprinted values "can lead towards behaviors enacting that value" (Hitlin and Piliavin 2004:381). They confer legitimacy to create a behavior's acceptability, desirability, and appropriateness perception (Dowling and Pfeffer 1975; Miller et al. 2012). Furthermore, "within-nation value systems tend to be stable over time" (Hitlin and Piliavin 2004:376) and path-dependent (March and Olsen 2008;

North 1990; Williamson 2000). This analytical backdrop might help to explain why some entrepreneurs aim for social goals within their ventures' operations, and others may prefer mostly economic goals (Townsend and Hart 2008).

### 2.5.1 National shared universalism and social entrepreneurship behavior

A prevailing values system motivates social entrepreneurship behavior (Miller et al. 2012; Stephan and Drencheva 2017). Evidence suggests that shared values with a "focus on society" positively influence social entrepreneurship behavior (Renko 2013; Wry and York 2017) and do not expressly expect financial gains (Douglas and Prentice 2019; Ferreira et al. 2019; McMullen and Bergman 2017). Examples of normative elements motivating prosocial behavior can be found in the value of universalism (Fehr et al. 2015; Renko 2013). Universalism is defined as having social concern as a motivation goal (Schwartz 1994; Schwartz et al. 2012) and a "commitment to equality, justice, and protection for all people" (Schwartz et al. 2012:669). Previous empirical work has suggested that universalism, as a value, is shared across countries and denotes a collective goal for the society that shapes behavior (Kraatz et al. 2020; Schwartz 2010). Conducive institutional environments where high moral and legitimacy norms for social entrepreneurship are perceived (Dart 2004), will lead to greater engagement (Fukuda-Parr 2016; Miller et al. 2012; Townsend and Hart 2008). While research finds a high relationship between universalism and prosocial behavior (Schwartz 2010), analyzing this normative element's influence on social entrepreneurship behavior will provide a more comprehensive understanding of their institutional social structures. According to these arguments, this study expects:

**H4** *Overall, highly institutionalized national shared universalism is positively related to social entrepreneurship behavior in (a) factor-driven economies, (b) efficiency-driven economies, and (c) innovation-driven economies.*

### 2.5.2 Perceived self-efficacy and social entrepreneurship behavior

Certain elements of belief systems are also important motivators for prosocial behavior (Caprara et al. 2012). For example, the perception of self-efficacy empowers action through the conception that there is an agency of individuals regarding their peers (Schwartz 2010; Wuepper and Lybbert 2017). The perception and belief regarding possessing the capabilities and skills necessary to undertake an entrepreneurial venture (Boudreaux et al. 2019) has been shown to affect the propensity to prosocial behavior (Caprara et al. 2012; Muralidharan and Pathak 2017; Schwartz 2010). Allessandri et al. (2009) have discussed that a high sense of self-efficacy may influence voluntary actions to benefit others (i.e., helping and responding to others' needs). Previous literature (cf., Wuepper and Lybbert 2017) has also linked the level of economic development to the self-efficacy of individuals, which motivates actions that may have an impact upon society. According to this reasoning we can expect that:

**H5** *Perceived self-efficacy is positively related to social entrepreneurship behavior in (a) factor-driven economies, (b) efficiency-driven economies, and (c) innovation-driven economies.*

#### 2.5.3 The moderating effect of universalism upon the self-efficacy-social entrepreneurship nexus

Prosocial behavior has been linked to an agency that emanates from a set of values and in "accordance to perceived abilities" (Caprara and Steca 2007, 222). Additionally, it has been established that the value of universalism has a link with prosocial behavior (Alessandri et al. 2009; Schwartz 2010). This understanding of the motivational effects of values is also an interesting element of analysis when studying how the informal context may have moderating effects upon belief systems and entrepreneurial action (Boudreaux et al. 2019). For example, Caprara et al. (2012: 1290) identified that the value of universalism along with the belief of self-efficacy "predict individual's tendencies to behave prosocially". Additionally, Wuepper and Lybbert (2017) explain that the cultural context has a role affecting how we perceive self-efficacy and how individuals are led to behave in a certain manner. Schwartz (2010) has also found evidence demonstrating that values, i.e., universalism and self-efficacy, influence prosocial behaviors. The author posed that value-based motivations along with the belief of capability motivated prosocial action in a positive manner. Building on this, this study hypothesizes that universalism, as a shared value, will positively moderate the relationship between perceived self-efficacy and social entrepreneurship. The study aims to explore how this interaction varies across different contextual environments, particularly when compared across levels of economic development.

**H6** *The relationship of perceived self-efficacy and social entrepreneurship is positively moderated by national shared universalism in (a) factor-driven economies, (b) efficiency-driven economies, and (c) innovation-driven economies.*

## 3 Methodology

### 3.1 Research method

This study examines the influence varying economic development levels and institutions have on social entrepreneurship behavior (Estrin et al. 2013b; Levie and Autio 2011). The study focused on the interplay and influence of formal and informal institutional mechanisms to uncover diverse effects across countries. Research about the influence of the institutional context on individuals requires methodologies to consider micro and macro-level factors (Hitt et al. 2007). Accordingly, this approach considers the effects of country-level (Level 2) and individual-level (Level 1) on the dependent variable, social entrepreneurship behavior. It utilizes multilevel logistic regressions to test the hypotheses due to the binary and dichotomous nature of the dependent variable (Laplume et al. 2014).

### 3.2 Sample

The data for this research were aggregated from secondary sources from the Global Entrepreneurship Monitor (GEM), the Index of Economic Freedom (IEF), the Heritage Foundation, The World Bank, and the Worldwide Governance Indicators (WGI) project. It also included the GEM micro-level survey data from the special issue about social entrepreneurship in 2015.

The GEM Adult Population Survey (APS) examines entrepreneurs' characteristics and social attitudes towards entrepreneurship (Bosma et al. 2020). This survey also includes information from diverse phenomena about creating ventures and elements influencing entrepreneurs across regions. The data include 124,642 individuals from 59 countries worldwide, with participants aged 18 to 64 in rural and urban areas. This survey is the most detailed and comprehensive source of entrepreneurial insights and behavior from around the globe, with 59 (9 factor-, 27 efficiency-, and 23 innovation-driven) participating countries for the 2015 edition. This study extends insights from previous analyses into national institutional frameworks and social entrepreneurship behavior (i.e., Stephan et al. 2015) based on data from the 2009 GEM data collection and originally included 49 countries (Bosma et al. 2016). GEM data are employed in this study also because of its proven usefulness for cross-country and comparative research. For example, in the GEM methodology, all the information gathered is harmonized to increase comparability (Levie et al. 2014). It is the most comprehensive database on a large scale (Estrin et al. 2016). Three groups of countries at different development stages were identified from the data set to compare and highlight variations within the institutional context (Bosma and Levie 2010; Lepoutre et al. 2013). National-level macro-economic data and formal country-level mechanisms lagged one year to consider the policy effects in time (Estrin et al. 2013b; Yi et al. 2017).

### 3.3 Dependent variable

To estimate *social entrepreneurship* behavior, this study used evidence from the GEM survey to identify whether an individual is starting and currently involved in any activity, organization, or initiative that has a particular social or community objective (equal to 1; 0 otherwise) (Bosma et al. 2016; Muralidharan and Pathak 2017). This individual-level variable has been used previously to capture social entrepreneurship behavior.

### 3.4 Independent variables

Representing formal institutions, the *rule of law* comes from the World Governance Indicators (WGI). It captures perceptions about how society rules are observed and becomes an element of reliance on formal institutions that conform to societal and legal practices. This operationalization measures the quality of contract enforcement, the police, the courts, and the likelihood of crime and violence (Levie and Autio 2011; Estrin et al. 2016; Stephan et al. 2015). It ranges from −2.5 to 2.5, the latter value corresponding to a better score on the rule of law.

*Business regulation* embodies how institutional mechanisms can become barriers, or enablers, for new venture creation, entry, and operation. Varying slightly from the rule of law but also drawn from the World Governance Indicators (WGI), this measure focuses on the ease of starting a business, complying with operational regulations, conditions for competitive practices, tax burdens, and market participation (Short et al. 2009). This variable ranges from 0 to 100, with numbers closer to 100 expressing better institutional conditions for business creation and operation. Institutional research has broadly applied this variable of regulatory quality (Aidis et al. 2012; Estrin et al. 2013b; Fuentelsaz et al. 2019; Levie and Autio 2011).

The *government support* variable comes from the Heritage Foundation and measures government expenditures as part of the GDP. It demonstrates the commitment to creating entrepreneurial support through formal incentives and constraints (Hoogendoorn 2016; Saebi et al. 2019). Previous analyses have included this measure (Estrin et al. 2013b; Stephan et al. 2015).

As part of informal institutions, the *national universalism* variable is measured as the percentage of the adult population in a country which expresses a level of social desirability, appropriateness, and normative legitimacy of the concern for generalized welfare, equality, and protection for everyone in a country (Kraatz et al. 2020; Schwartz and Sagie 2000). This measure comes from the GEM and has been used in previous international comparative entrepreneurship research literature (i.e., Stenholm et al. 2013; Stephan et al. 2015; Valdez and Richardson 2013).

The *self-efficacy* variable focuses on the nexus between the motivation, the capability, and the skills necessary to undertake a socially oriented venture (Bandura 1977; Muralidharan and Pathak 2017; Boudreaux et al. 2019). This variable is derived from the GEM survey and has a dichotomous configuration.

The GEM survey data presents demographic data, age (number in years) and age squared. Research has suggested a U-shaped relationship between an entrepreneur's age and their value creation. Furthermore, creating social value tends to be more intensive for younger and older social entrepreneurs, whereas middle-aged entrepreneurs display more interest towards more commercial goals (Brieger et al. 2021). Therefore, this study controls for *age* as this demographic has been related to social entrepreneurship behavior (Stephan et al. 2015). The study also controls with a dichotomous variable, with gender taking 1 for females and the opposite case, 0, to control for *gender* (Estrin et al. 2013b; Renko 2013). Entrepreneurs also create flows of resources from other entrepreneurs (Van de Ven et al. 2007). Previous literature has also documented the link between personal influences towards social entrepreneurship behavior by entrepreneurial peers (Estrin et al. 2013b, 2016). It has been suggested that networks increase the motivation for social entrepreneurship behavior, support, and potential access to resources (Aidis et al. 2008; Estrin et al. 2016). Accordingly, this study controls with a measure of *personal networks* available through the GEM 2015. Education and human capital also contribute to social entrepreneurship behavior (Estrin et al. 2013b, 2016; Stephan et al. 2015). Previous evidence claims that individuals attaining higher levels of education tend to high-growth goals (Estrin et al. 2013a; Cullen et al. 2004). *Educational attainment* is also an element that has explained differences in development (Dilli 2020). This measure comes from the GEM 2015. The variable shows GEM harmonized educational

attainment codified as 0 = No education, 1 = Some secondary, 2 = secondary degree, 3 = post-secondary, and 4 = Graduate. This socio demographic variable indicates in the five categories ranging from the basic school to postgraduate qualifications. All these were transformed into dummies (with no education as the base category).

Considering country-level controls, previous research argues that high levels of corruption affect entrepreneurial motivations and negatively affect society (Baumol 1990). This means society will expect less from entrepreneurship as corruption increases transaction costs for new and operating ventures (Baumol et al. 2007; Tonoyan et al. 2010). Corruption also affects resource availability and acquisition (Boudreaux et al. 2018). Corruption has also been identified to increase conditions for poverty (Rothstein 2011). The operationalization of this variable aligns with the measure *control of corruption*, available through the World Governance Indicators (WGI), which has been included in previous literature (Dutta and Sobel 2016). *Unemployment* was also included to acknowledge the cost of opportunity (Estrin et al. 2016) and is relevant for comparative cross-national studies (Thurik 2009). This variable comes from the Heritage Foundation dataset. Finally, *GDP per capita* is also included as a control, as previous research suggests that higher GDP per capita and national wealth are associated with social entrepreneurship behavior (Estrin et al. 2016; Fernández-Laviada et al. 2020; Levie and Autio 2011; Stephan et al. 2015). This study also includes this control to enhance economies' comparability and economic development with purchasing power parity (PPP) (Aidis et al. 2008; Cullen et al. 2004). These measures come from the Heritage Foundation dataset.

### 3.5 Estimation method

As mentioned above, this research analyzes the relationship among national and individual level variables to apply a multilevel mixed-effects logistic regression modelling as the estimation method (Kwon and Arenius 2010). Multilevel modelling establishes a hierarchical structure where the individual level is level 1, and the National level is level 2 (Autio and Acs 2010; Estrin et al. 2013b). Multilevel logistic regressions are recommended when the dependent variable has binary conditions (Laplume et al. 2014) and benefit organizational studies by highlighting the inherently complex nature of relationships between variables and activities (Hitt et al. 2007). Before starting the comparative statistical analysis, countries were classified into three datasets according to the categorization available within the GEM data source. Furthermore, multivariate logistic regressions were conducted for each group of countries to obtain a null model, where only the dependent variable was included in the model construction (Autio et al. 2013; Boudreaux et al. 2019). Furthermore, as robustness test, additional multilevel logistic regressions were conducted. In this occasion GDP variables were omitted for each level of development (Table 6 in the Appendix). Finally, this study hypothesized a positive moderative effect of the shared value of universalism upon the relationship of the perception of self-efficacy and social entrepreneurship. For this reason, an interaction regression process was conducted on the three groups of economies.

## 4 Results

Table 1 presents descriptive statistics and Table 2 presents the correlation matrix for the analyzed variables. We can observe in Table 1 that 10% of individuals across the factor-driven countries (least developed in the sample) are social entrepreneurs. This number drops down when we consider efficiency-driven countries (develop-

**Table 1** Descriptive statistics

| | Group 1 | Group 2 | Group 3 |
|---|---|---|---|
| | Mean (SD) | Mean (SD) | Mean (SD) |
| Social entrepreneurship | 0.102 | 0.053 | 0.046 |
| | (0.303) | (0.223) | (0.21) |
| Rule of law | −0.366 | 0.001 | 1.405 |
| | (0.48) | (0.682) | (0.515) |
| Business regulation | −0.443 | 0.257 | 1.282 |
| | (0.547) | (0.651) | (0.501) |
| Government support | 25.093 | 30.458 | 44.81 |
| | (4.621) | (8.397) | (6.217) |
| National universalism | 0.516 | 0.624 | 0.661 |
| | (0.119) | (0.11) | (0.097) |
| *Controls* | | | |
| *Individual level* | | | |
| Self-efficacy | 0.668 | 0.538 | 0.429 |
| | (0.471) | (0.499) | (0.495) |
| Personal network | 0.546 | 0.409 | 0.322 |
| | (0.498) | (0.492) | (0.467) |
| Age | 35.438 | 39.635 | 43.425 |
| | (12.367) | (14.273) | (14.505) |
| Age sq | 1408.785 | 1774.683 | 2096.077 |
| | (975.009) | (1235.904) | (1310.033) |
| Gender | 0.512 | 0.506 | 0.497 |
| | (0.5) | (0.5) | (0.5) |
| *Educational attainment* | | | |
| Some secondary | 0.166 | 0.165 | 0.167 |
| | (0.372) | (0.371) | (0.373) |
| Secondary degree | 0.271 | 0.407 | 0.359 |
| | (0.445) | (0.491) | (0.480) |
| Post secondary | 0.285 | 0.245 | 0.356 |
| | (0.452) | (0.430) | (0.479) |
| Grad Exp | 0.024 | 0.034 | 0.074 |
| | (0.153) | (0.182) | (0.262) |
| *Country level* | | | |
| C. of corruption | −0.383 | −0.074 | 1.233 |
| | (0.523) | (0.712) | (0.68) |
| GDP per capita (PPP) | 6689.831 | 13,131.294 | 36,301.744 |
| | (5548.761) | (5024.483) | (9596.591) |
| Unemployment | 23.176 | 9.03 | 12.926 |
| | (22.615) | (6.547) | (8.343) |
| N | 16,680 | 54,261 | 53,701 |

*SD* Standard deviation

**Table 2** Correlation matrix

| Variables | Mean (SD) | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SE | 0.056 | 1.000 | | | | | | | | | | | | | | | | |
| | (0.229) | | | | | | | | | | | | | | | | | |
| Rule of law | 0.613 | −0.003 | 1.000 | | | | | | | | | | | | | | | |
| | (0.952) | (0.176) | | | | | | | | | | | | | | | | |
| Buss regulation | 0.650 | 0.006* | 0.936* | 1.000 | | | | | | | | | | | | | | |
| | (0.851) | (0.014) | (0.000) | | | | | | | | | | | | | | | |
| Gov. support | 36.512 | −0.040* | 0.646* | 0.521* | 1.000 | | | | | | | | | | | | | |
| | (10.621) | (0.000) | (0.000) | (0.000) | | | | | | | | | | | | | | |
| Universalism | 0.626 | −0.028* | 0.166* | 0.173* | 0.311* | 1.000 | | | | | | | | | | | | |
| | (0.116) | (0.000) | (0.000) | (0.000) | (0.000) | | | | | | | | | | | | | |
| Self-efficacy | 0.503 | 0.106* | −0.121* | −0.123* | −0.112* | 0.001 | 1.000 | | | | | | | | | | | |
| | (0.5) | (0.000) | (0.000) | (0.000) | (0.000) | (0.768) | | | | | | | | | | | | |
| Personal network | 0.385 | 0.110* | −0.127* | −0.117* | −0.138* | −0.062* | 0.252* | 1.000 | | | | | | | | | | |
| | (0.487) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | | | | | | | | | | | |
| Age | 40.905 | −0.006* | 0.194* | 0.183* | 0.158* | 0.069* | −0.020* | −0.111* | 1.000 | | | | | | | | | |
| | (14.421) | (0.016) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | | | | | | | | | | |
| Age sq | 1881.217 | −0.008* | 0.199* | 0.187* | 0.155* | 0.059* | −0.037* | −0.121* | 0.984* | 1.000 | | | | | | | | |
| | (1264.741) | (0.002) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | | | | | | | | | |
| Gender | 0.503 | −0.025* | −0.005* | −0.001 | −0.008* | 0.008* | −0.120* | −0.066* | 0.014* | 0.014* | 1.000 | | | | | | | |
| | (0.5) | (0.000) | (0.028) | (0.621) | (0.001) | (0.004) | (0.000) | (0.000) | (0.000) | (0.000) | | | | | | | | |
| Some secondary | 0.166 | −0.044* | −0.042* | −0.035* | −0.001 | −0.001 | −0.059* | −0.041* | 0.041* | 0.040* | 0.004 | 1.000 | | | | | | |
| | (0.372) | (0.000) | (0.000) | (0.000) | (0.780) | (0.674) | (0.000) | (0.000) | (0.000) | (0.000) | (0.097) | | | | | | | |
| Secondary Deg | 0.368 | −0.044* | 0.006* | 0.014* | 0.012* | 0.046* | −0.026* | −0.017* | −0.099* | −0.091* | −0.027* | −0.340* | 1.000 | | | | | |
| | (0.482) | (0.000) | (0.018) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | | | | | | |
| Post secondary | 0.302 | 0.032* | 0.131* | 0.103* | 0.065* | −0.020* | 0.049* | 0.048* | −0.022* | −0.029* | 0.007* | −0.293* | −0.501* | 1.000 | | | | |
| | (0.459) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.007) | (0.000) | (0.000) | | | | | |
| Grad Exp | 0.052 | 0.065* | 0.099* | 0.096* | 0.093* | −0.033* | 0.038* | 0.028* | 0.026* | 0.020* | −0.013* | −0.104* | −0.178* | −0.153* | 1.000 | | | |
| | (0.221) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | | | | |
| Cont.-corruption | 0.499 | 0.012* | 0.972* | 0.891* | 0.602* | 0.096* | −0.101* | −0.125* | 0.196* | 0.206* | −0.005 | −0.061* | 0.003 | 0.131* | 0.094* | 1.000 | | |
| | (0.969) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.067) | (0.000) | (0.187) | (0.000) | (0.000) | | | |
| GDP/Capita PPP | 23,178.005 | −0.021* | 0.850* | 0.780* | 0.671* | 0.092* | −0.131* | −0.130* | 0.181* | 0.182* | −0.008* | −0.034* | −0.003 | 0.144* | 0.110* | 0.829* | 1.000 | |

**Table 2** (continued)

| Variables | Mean (SD) | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (14,575.367) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.001) | (0.000) | (0.209) | (0.000) | (0.000) | (0.000) | | |
| Unemployment | 12.643 | 0.094* | −0.149* | −0.216* | 0.068* | 0.202* | 0.097* | 0.058* | −0.060* | −0.067* | −0.006* | 0.016* | −0.043* | −0.103* | −0.026* | −0.173* | −0.191* | 1.000 |
| | (11.534) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.017) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | |

Significance levels: $p<0.05$

*$p<0.1$. *SD* Standard deviation

ing) as there are 5.3% of social entrepreneurs and 4.6% in innovation-driven (developed) ones. From Table 2 we can observe that social entrepreneurship is positively correlated to business regulation and self-efficacy. As multicollinearity might be a problem, we have conducted the variance inflation factor analysis (VIF), finding an average value of 6.26 across our variables, which is lower than 10 as the suggested threshold (Hsieh et al. 2003; Neter et al. 1989). Therefore, multicollinearity is not an issue in our data.

Table 3 displays the main results that help us validate or reject our hypotheses. The process to validate the use of multilevel modelling continued with estimating the Intra-class Correlation (ICC). The results were valid (26.73% for factor-driven economies, 13.86% for efficiency-driven economies and 28.28% for innovation-driven economies) and permitted following the estimation strategy. All formal country-level and macroeconomic variables were lagged for better estimating the influence of factors (Estrin et al. 2013b; Yi et al. 2017).

### 4.1 Rule of law and social entrepreneurship

Models 1, 2, and 3 in Table 3 present results for H1 (a, b, c), respectively, regarding the relationship between the rule of law and social entrepreneurship behavior. The results are significant in all studied groups of countries. While the relationship for factor-driven economies is positive ($b=3.896$, $dy/dx=0.261$, $p<0.001$), efficiency and innovation-driven economies present a negative relationship ($b=-2.448$, $dy/dx=-0.105$, $p<0.01$, and $b=-5.430$, $dy/dx=-0.230$, $p<0.01$), respectively. Accordingly, H1a is fully supported, and H2b and H2c presented the opposite direction as the hypotheses expected.

### 4.2 Business regulation dimension and social entrepreneurship

Models 1, 2 and 3 of Table 3 show coefficients and marginal effects for the multilevel logistic regressions regarding hypotheses H2a, b, and c. According to these results, the relationship of the business regulation quality is significant for all economies in the sample. There is a negative direction for factor-driven economies, coefficient ($b=-0.928$, $dy/dx=-0.062$, $p<0.05$).

Efficiency-driven economies and innovation-driven economies presented a positive relationship ($b=1.309$, $dy/dx=0.055$, $p<0.01$) with ($b=1.918$, $dy/dx=0.081$, $p<0.001$) for innovation-driven economies. While these results provide statistical support for these hypotheses, the expected direction of the relationship applied for efficiency and innovation-driven economies gives full support for hypotheses 2b and 2c, not for factor-driven economies (Hypothesis 2a).

### 4.3 Government support and social entrepreneurship

Models 1, 2, and 3 of Table 3 report the coefficients and marginal effects for the multilevel logistic regressions regarding hypothesis H3 (a, b, c). The factor-driven economies presented a negative and highly significative relationship ($b=-0.175$, $dy/dx=-0.012$, $p<0.001$). On the contrary, innovation-driven economies presented a

**Table 3** Data results mixed effects multi-level logistic regressions

| Social entrepreneurship | Model 1 | | Model 2 | | Model 3 | |
|---|---|---|---|---|---|---|
| | *b (se)* | *dy/dx (se)* | *b (se)* | *dy/dx (se)* | *b (se)* | *dy/dx (se)* |
| Rule of law | 3.896*** | 0.261*** | −2.488** | −0.105** | −5.430*** | −0.230** |
| | (0.628) | (0.042) | (0.779) | (0.036) | (1.632) | (0.072) |
| Business regulation | −0.928* | −0.062* | 1.309** | 0.055** | 1.918*** | 0.081*** |
| | (0.436) | (0.029) | (0.429) | (0.020) | (0.555) | (0.024) |
| Government support | −0.175*** | −0.012*** | 0.035 | 0.001 | 0.035* | 0.001* |
| | (0.021) | (0.001) | (0.023) | (0.001) | (0.016) | (0.001) |
| National universalism | −0.042 | −0.003 | 0.205 | 0.009 | 2.481* | 0.105* |
| | (0.810) | (0.054) | (1.164) | (0.049) | (1.071) | (0.046) |
| Self-efficacy | 0.669*** | 0.045*** | 0.559*** | 0.024*** | 0.788*** | 0.033*** |
| | (0.082) | (0.005) | (0.047) | (0.003) | (0.047) | (0.003) |
| *Controls* | | | | | | |
| *Individual level* | | | | | | |
| Personal network | 0.824*** | 0.055*** | 0.679*** | 0.029*** | 0.701*** | 0.030*** |
| | (0.070) | (0.005) | (0.044) | (0.003) | (0.046) | (0.003) |
| Age | 0.086*** | 0.006*** | −0.016 | −0.001 | 0.022* | 0.001* |
| | (0.016) | (0.001) | (0.008) | (0.000) | (0.010) | (0.000) |
| Age Sq | −0.001*** | −0.000*** | 0.000* | 0.000* | −0.000* | −0.000* |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Gender | −0.357*** | −0.024*** | −0.109** | −0.005* | 0.003 | 0.000 |
| | (0.061) | (0.004) | (0.042) | (0.002) | (0.044) | (0.002) |
| *Educational attainment* | | | | | | |
| Some secondary | 0.097 | 0.007 | 0.231* | 0.007* | 0.041 | 0.001 |
| | (0.106) | (0.007) | (0.096) | (0.003) | (0.153) | (0.004) |
| Secondary degree | −0.133 | −0.008 | 0.467*** | 0.015*** | 0.268 | 0.008* |
| | (0.108) | (0.007) | (0.082) | (0.003) | (0.146) | (0.004) |
| Post secondary | 0.202 | 0.014 | 0.977*** | 0.040*** | 0.762*** | 0.029*** |
| | (0.108) | (0.007) | (0.084) | (0.005) | (0.144) | (0.005) |
| Graduate Exp | 0.219 | 0.015 | 1.299*** | 0.062*** | 1.225*** | 0.058*** |
| | (0.212) | (0.016) | (0.108) | (0.009) | (0.151) | (0.007) |
| *Country level* | | | | | | |
| C. of corruption | −1.268*** | −0.085*** | 1.496* | 0.063* | 2.904* | 0.123* |
| | (0.288) | (0.019) | (0.593) | (0.027) | (1.168) | (0.051) |
| GDP per capita (PPP) | 0.000 | 0.000 | −0.000 | −0.000 | 0.000** | 0.000** |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Unemployment | 0.044*** | 0.003*** | −0.006 | −0.000 | −0.042* | −0.002* |
| | (0.004) | (0.000) | (0.019) | (0.001) | (0.020) | (0.001) |
| Constant | −1.346* | | −5.227*** | | −6.916*** | |
| | (0.534) | | (0.913) | | (1.266) | |
| var(Constant) | 0.000 | | 0.316** | | 0.131** | |
| | (0.000) | | (0.099) | | (0.047) | |

***$p<0.001$, **$p<0.01$, *$p<0.05$, $^{+}p<0.1$.

For education attainment, the base category is No education

significative and positive relationship ($b=0.035$, $dy/dx=0.001$, $p<0.05$). Efficiency-driven economies did not have a significant relationship. According to the results, H3c is fully supported, and H3a is not fully supported, as the hypothesis presented an unexpected direction.

### 4.4 National universalism and social entrepreneurship

Regarding the fourth group of hypotheses, H4 (a, b, c), the relationship of the shared normative universalism and social entrepreneurship behavior was significative and positive for innovation-driven economies at the most developed level (H4c), ($b=2.481$, $dy/dx=0.105$, $p<0.05$). According to the results, hypothesis 4c is fully supported. The relationship is not significant for factor-driven and efficiency-driven economies.

### 4.5 Perceived self-efficacy and social entrepreneurship

Models 1, 2 and 3 of Table 3 also present result for the group of hypotheses regarding the influence of the perceived self-efficacy on social entrepreneurship behavior, H5 (a, b, and c). These hypotheses presented the following results for H5a ($b=0.669$, $dy/dx=0.045$, $p<0.001$), whereas for H5b was $b=0.559$ ($dy/dx=0.024$, $p<0.001$) and for H5c was $b=0.788$ ($dy/dx=0.033$, $p<0.001$). In this case the three presented hypotheses were significative and positive for the three groups of economies. The expected relationships of self-efficacy and social entrepreneurship can be supported.

### 4.6 The moderating effect of universalism upon the nexus of self-efficacy and social entrepreneurship

Table 4 presents Models 4, 5 and 6 which offer the results for the interaction regressions (Hypotheses H6a, H6b, H6c). From model 6 we can find a moderate significative result which offer arguments for hypothesis support, H6c. However, our hypothesis anticipated a positive moderation effect, but the result was negative, which does not fully support the hypothesis. Notice that the main direct effects remain invariant when introducing moderations across economic development stages.

## 5 Discussion and conclusions

This comparative analysis of institutional mechanisms contributes to the debate about the influence national-level contexts exert on the motivations, forms, and outputs of social entrepreneurship behavior (Estrin et al. 2013b; Stephan et al. 2015). Studying contextual pressures requires a multilevel analysis to understand the interplay of different effects (Oliver 1991; Scott 2008). The evidence suggested that the implicit meanings and values of social entrepreneurial ventures are highly dependent upon the environment in which they are situated (Scartozzi et al. 2025). A richer conceptualization of how social entrepreneurship emerges should account for how varying economic development levels influence firm formation and overarching behaviors.

**Table 4** Interaction results

| | Model 4 | Model 5 | Model 6 |
|---|---|---|---|
| Social entrepreneurship | *b (se)* | *b (se)* | *b (se)* |
| Rule of law | 3.971*** | −2.489** | −5.427*** |
| | (0.630) | (0.779) | (1.637) |
| Business regulation | −0.981* | 1.309** | 1.906*** |
| | (0.437) | (0.429) | (0.557) |
| Government support | −0.177*** | 0.035 | 0.034* |
| | (0.021) | (0.023) | (0.016) |
| National universalism | 0.974 | 0.089 | 2.899** |
| | (1.085) | (1.195) | (1.100) |
| Self-efficacy | 1.310** | 0.437 | 1.201*** |
| | (0.469) | (0.285) | (0.242) |
| Self-efficacy × National universalism | −1.178 | 0.194 | −0.654$^{+}$ |
| | (0.844) | (0.449) | (0.375) |
| *Controls* | | | |
| *Individual level* | | | |
| Personal network | 0.824*** | 0.679*** | 0.700*** |
| | (0.070) | (0.044) | (0.046) |
| Age | 0.086*** | −0.016 | 0.022* |
| | (0.016) | (0.008) | (0.010) |
| Age sq | −0.001*** | 0.000* | −0.000* |
| | (0.000) | (0.000) | (0.000) |
| Gender | −0.354*** | −0.109** | 0.004 |
| | (0.061) | (0.042) | (0.044) |
| *Educational attainment* | | | |
| Some secondary | 0.096 | 0.231* | 0.043 |
| | (0.106) | (0.096) | (0.153) |
| Secondary degree | −0.137 | 0.467*** | 0.273 |
| | (0.108) | (0.082) | (0.146) |
| Post secondary | 0.200 | 0.977*** | 0.766*** |
| | (0.108) | (0.084) | (0.144) |
| Graduate Exp | 0.215 | 1.299*** | 1.229*** |
| | (0.212) | (0.108) | (0.151) |
| *Country level* | | | |
| C. of corruption | −1.271*** | 1.494* | 2.910* |
| | (0.289) | (0.593) | (1.171) |
| GDP per capita (PPP) | 0.000 | −0.000 | 0.000** |
| | (0.000) | (0.000) | (0.000) |
| Unemployment | 0.044*** | −0.006 | −0.042* |
| | (0.004) | (0.019) | (0.020) |
| Constant | −1.848** | −5.157*** | −7.166*** |
| | (0.644) | (0.928) | (1.278) |
| Var (Constant) | 0.000 | 0.317** | 0.132** |
| | (0.000) | (0.099) | (0.048) |

***$p<0.001$, **$p<0.01$, *$p<0.05$, $^{+}p<0.1$. For education attainment, the base category is No education

For example, this study showed how the configurations of formal and informal institutions may play dissimilar roles when levels of development are included in the analysis of social entrepreneurship behavior. Therefore, implications for theory and practice are derived.

### 5.1 Implications for theory and literature

The study found that the formal institutional context's legal dimension (the rule of law) influences social entrepreneurship behavior in diverse ways across levels of development. A strong rule of law will be rich soil for social entrepreneurship in factor-driven economies and corresponds to a supportive context perspective for least-developed economies (Ault 2016; Hoogendoorn 2016; Stephan et al. 2015). According to this, the institutional elements that integrate the rule of law (Kaufmann et al. 2011) pave the way for entrepreneurs to participate in finding solutions to social demands. Protected property rights and ownership competences of resources, materialized through strong property rights, can enable entrepreneurial behavior (De Soto 2000; Foss et al. 2021) and allow opportunities to address social demands (Alvarez and Barney 2014; Mair and Marti 2009). On the contrary, efficiency and innovation-driven economies witnessed negative relationships between strong legal contexts and social entrepreneurship behavior. In these economies, entrepreneurship is traditionally focused on commercial high-growth opportunities (Estrin et al. 2016), while social entrepreneurship tends to support people in specific vulnerable sectors of the population and focus on equality, diversity, and inclusion issues (Aidis et al. 2012; Bosma and Levie 2010; Estrin et al. 2013b; Saebi et al. 2019). These economies with strong levels of rule of law focus on incentivizing highly innovative ventures (Autio and Acs 2010) while reducing the need for social ventures.

The business regulation dimension examined the barriers to market participation in social entrepreneurship (Mair and Marti 2009). Again, the three economic development levels presented differences. A negative and significative relationship was observed in factor-driven economies, in which favorable business regulation negatively influences social entrepreneurship behavior. This result aligns with previous literature showing that better business regulation conditions (i.e., lower barriers to entry or favorable operating conditions) tend to signal interest in commercial entrepreneurship (Autio and Acs 2010; Estrin et al. 2016). The results show that formal incentives and rewards in regulation (i.e., optimal business entry, operation requirements or rewards in taxation) are not incentivizing social entrepreneurship in factor-driven economies. This discusses how formal incentives and support impact various entrepreneurial behaviors (Etchart and Comolli 2013). For those in factor-driven economies, incentives for commercial entrepreneurship occur (i.e., forms of self-employment for income, necessity, or opportunity entrepreneurship) (Bosma and Levie 2010). However, innovation and efficiency-driven economies presented a positive and significant relationship with efficient business regulation. Favorable business factors and regulative viability do not deter social entrepreneurial behavior while pursuing commercial and social goals in these two groups of economies (Battilana and Lee 2014; Townsend and Hart 2008).

The institutional elements of government support in the formal institutional context does not incentivize social entrepreneurship behavior in factor-driven economies (Estrin et al. 2013b; Mair and Marti 2009). As suggested in previous studies, this may crowd out social entrepreneurship behavior, as government direct participation in social sectors may displace latent social entrepreneurship behavior (Fogel et al. 2006) or cause overlaps with social goals (i.e., water, education, health-related provision) (Bosma and Levie 2010; Dorado and Ventresca 2013). Innovation-driven economies presented a marginally significant and positive relationship with supportive mechanisms (Ault 2016; Hoogendoorn 2016). This aligns with results seen within a recent survey that ranked countries for government support and commended mostly innovation-driven economies (i.e., South Korea, Canada, Belgium, and Australia) (Thomson Reuters Foundation 2019).

The influence of national-level universalism on social entrepreneurship behavior presented diverse patterns at different levels of development as well. The shared normative values and beliefs, and the sense of appropriateness and desirability of the concern for generalized welfare, equality, protection, and justice for everyone in a country (Kraatz et al. 2020; Schwartz and Sagie 2000) seen as an enabling and motivating mechanism for social entrepreneurship behavior (Renko 2013) did not present significant results for factor-driven and efficiency-driven economies. However, the results suggest that normative support and moral legitimation are essential in innovation-driven, most-developed economies for motivating social entrepreneurship behavior (Dart 2004; Short et al. 2009). A positive relationship can be seen in these developed economies, and it can be inferred that for supporting the inclusion of vulnerable sectors, for example, is a motive for social entrepreneurship activities (Bosma and Levie 2010; Saebi et al. 2019).

Regarding the influence of perceived self-efficacy on social entrepreneurship, we found that self-efficacy beliefs motivate social entrepreneurship across all three groups of economies. Institutional theory explains that beliefs, as cultural-cognitive elements of informal institutions, drive behaviors (Scott 2008). Our findings suggest that the motivational effect of self-efficacy on social entrepreneurship is consistent across different levels of economic development, indicating the persistence of informal institutional influences regardless of socioeconomic conditions, whether underdeveloped or economically affluent.

Comparing three groups of economies extends our knowledge about how social entrepreneurship varies in different contextual environments (North 1989, 1990). The insights from this study demonstrate how institutional contexts influence individuals across different levels of development in diverse ways (Estrin et al. 2013b). Regarding the debate about supportive structures influencing social entrepreneurship behavior, this study demonstrated that specific dimensions of institutions play diverse roles across stages of development. Legal stability (rule of law) is fundamental for factor-driven economies. At the same time, the higher quality of business regulation allows entrepreneurs to include social goals in their ventures in more developed economies (efficiency-driven and innovation-driven economies). Active participation of public budgets "crowds out" social entrepreneurship behavior in factor-driven economies while playing a supportive role in advanced (innovation-driven economies). Univer-

salism's highly shared value motivates social entrepreneurship in the most developed economies.

### 5.2 Implications for policy and practice

Policymakers interested in formulating support for social entrepreneurship behavior (i.e., social entrepreneurship policy) need to consider the importance of defining social entrepreneurship, as suggested by Klapper et al. (2006). The results from this study suggest prioritizing incentives, systems of rewards, and lowering barriers to entry and operation (Lepoutre et al. 2013). Reducing regulative barriers and legal frameworks while embracing educational goals promotes social normative expectations and shared values. These factors are essential for forming a holistic policy focused on social entrepreneurship's success rate and impact and reducing hampering effects (Bradley et al. 2021).

However, some supportive institutions might crowd out social entrepreneurship behavior if not formulated correctly. National governments can broaden their reach by establishing policies and regulations for incentivizing ventures with social goals complementary to priority areas. Supporting social entrepreneurship should not be regarded under the same lenses as commercial forms of entrepreneurship support, where employment, technology advancement, and aggregate national growth are the main macro policy goals (Autio and Acs 2010; Henrekson and Stenkula 2010). The local context and the variations between incentivizing social entrepreneurship and commercial entrepreneurship must be considered for the formation of solid policies.

For instance, this study shows that some forms of supportive participation can disincentivize social entrepreneurship behavior. This is because varying forms of social programs reduce the need for social entrepreneurs to attend to social demands but still could create ventures complementary to formal programs and projects (i.e., for inclusion, community building oriented efforts, further training of population in technical skills). Overall, the goal could capture social entrepreneurship efforts to develop activities that formal agents require. This study can be seen as an invitation for policymakers to craft targeted and guided mechanisms which align with the local levels of development and contexts to promote a higher level of normative legitimacy and motivation for social entrepreneurship behavior (Dart 2004; Miller et al. 2012).

Lastly, the relationship between efficient business regulation and social entrepreneurship suggests that low barriers to entry and operation, with tax systems offering appropriate rewards, is an important policy measure that may influence issues of mission drift to purely economic and profit goals. Social entrepreneurs need systems of incentives to support them in enduring the challenges of creating economic and social value, aiming for the sustainability of their ventures, without the risk of losing their social mission. Social entrepreneurs will increase their dual commitment and may focus on increasing their social scope when regulative structures offer support, especially in lower-developed economies. A key element is that social entrepreneurs can capitalize on public–private partnerships to shelter the sharp effects of unsupportive institutional contexts.

### 5.3 Limitations and future research

This research was built on data that have been slowly becoming available through specialized literature, e.g., the GEM Report. However, this also means that the dataset may not show the latest nuances of the social entrepreneurship phenomenon. Nonetheless, this study presented the opportunity to create a link with seminal literature and future studies that may approach new sources of data for a more recent picture of social entrepreneurship.

This study employed an empirical approach to identify three distinct economic development levels for comparative analysis. These groups, drawn from the primary data source, aligned with the study's objectives of examining social entrepreneurship on a global scale while ensuring consistency with the dataset. This categorization focused on varying levels of economic development, allowing for the classification of countries based on their economic profiles and development stages. Future research could, however, adopt newer development-based country categorizations for similar comparative purposes (see, for example, Aparicio et al. 2021).

Diverse disciplines of study acknowledge some countries as contemporary examples of accrued institutional voids that are not part of the GEM survey or that just recently started to be included in the survey. Therefore, it would be essential to conduct future studies that would include these countries, as they provide interesting insights into institutional and entrepreneurship literature related to social entrepreneurship behavior.

Future studies about mission drift in ventures attending social missions (Grimes et al. 2019) can be nurtured by applying institutional lenses to identify mechanisms and elements as per the relevance for the research on influences and antecedents of the institutional context upon social entrepreneurship behavior. The insights of this study can be used as part of future studies that identify specific institutional elements that play a role in influencing mission drift, for instance, by creating institutional ambiguity (Townsend and Hart 2008).

Furthermore, there remains some level of fragmentation in the ongoing theoretical debates on the prominent antecedents and concepts driving social entrepreneurship. This lack of consensus indicates the need for further conceptual and theoretical development and, thus, the field would benefit from further in-depth views to identify a broader set of variables. Therefore, future research can also build on the framework presented and deploy mixed method approaches, including a range of qualitative approaches, to better understand the influence of supportive or weak institutional contexts for social entrepreneurship. Aligned with this, further literature reviews that aim to synthesize the nature of social entrepreneurial behavior across disciplines, geographies, and contexts can also be a powerful method for expanding our understanding of the relevant antecedents or consequences (Kraus et al. 2024), as well advance theory. Lastly, the framework from this study can also be applied towards further understanding for resource scarcity and bricolage on social entrepreneurship (Busch and Barkema 2021; Desa and Basu 2013).

### 5.4 Conclusion

This study contributed to the debate regarding the influence of the institutional context on social entrepreneurship behavior. This study analyzed relevant institutional elements that needed to be compared across levels of development to appreciate aspects of the influence that holistically enable, constrain, and motivate social entrepreneurship behavior. Diverse implications for the discussion about the roles of institutions were derived from the findings of this research paper. The theoretical contributions of this study can help to have a deeper understanding of the differing types of social entrepreneurs (Zahra et al. 2009; Davis et al. 2021) by including the institutional influences observed across levels of development. The context for social entrepreneurship that different levels of development create needs to be considered to better understand differences amongst types of social entrepreneurs.

## Appendix

See Tables 5 and 6.

**Table 5** Countries included in the dataset for the study

| Group 1 factor-driven | Group 2 efficiency-driven | | Group 3 innovation-driven | |
|---|---|---|---|---|
| Botswana | Argentina | Lebanon | Australia | Norway |
| Burkina Faso | Barbados | Macedonia | Belgium | Portugal |
| Cameroon | Brazil | Malaysia | Canada | Slovakia |
| India | Bulgaria | Mexico | Estonia | Slovenia |
| Iran | Chile | Morocco | Finland | South Korea |
| Kazakhstan | China | Panama | Germany | Spain |
| Philippines | Colombia | Peru | Greece | Sweden |
| Senegal | Croatia | Poland | Ireland | Switzerland |
| Vietnam | Ecuador | Romania | Israel | Taiwan |
| | Egypt | South Africa | Italy | United Kingdom |
| | Guatemala | Thailand | Luxembourg | United States |
| | Hungary | Tunisia | Netherlands | |
| | Indonesia | Uruguay | | |
| | Latvia | | | |

**Table 6** Robustness test through multilevel logit regression

| Social entrepreneurship | Model 7 | Model 8 | Model 9 |
|---|---|---|---|
| | *b (se)* | *b (se)* | *b (se)* |
| Rule of law | 3.864*** | −2.413** | −5.050** |
| | (0.389) | (0.775) | (1.931) |
| Business regulation | −0.912* | 1.216** | 1.493* |
| | (0.364) | (0.404) | (0.638) |
| Government support | −0.174*** | 0.025 | 0.024 |
| | (0.015) | (0.018) | (0.019) |
| National universalism | −0.056 | 0.410 | 1.448 |
| | (0.782) | (1.122) | (1.192) |
| Self-efficacy | 0.669*** | 0.559*** | 0.787*** |
| | (0.082) | (0.047) | (0.047) |
| *Controls* | | | |
| *Individual level* | | | |
| Personal network | 0.824*** | 0.679*** | 0.700*** |
| | (0.070) | (0.044) | (0.046) |
| Age | 0.086*** | −0.016 | 0.022* |
| | (0.016) | (0.008) | (0.010) |
| Age Sq | −0.001*** | 0.000* | −0.000* |
| | (0.000) | (0.000) | (0.000) |
| Gender | −0.357*** | −0.109** | 0.003 |
| | (0.061) | (0.042) | (0.044) |
| Educational attainment | | | |
| Some secondary | 0.097 | 0.230* | 0.047 |
| | (0.106) | (0.096) | (0.153) |
| Secondary degree | −0.133 | 0.466*** | 0.270 |
| | (0.108) | (0.082) | (0.146) |
| Post secondary | 0.203 | 0.976*** | 0.762*** |
| | (0.108) | (0.084) | (0.144) |
| Graduate exp | 0.219 | 1.298*** | 1.227*** |
| | (0.212) | (0.108) | (0.151) |
| *Country level* | | | |
| C. of corruption | −1.253*** | 1.368* | 3.133* |
| | (0.170) | (0.560) | (1.386) |
| Unemployment | 0.044*** | −0.003 | −0.040 |
| | (0.002) | (0.018) | (0.024) |
| Constant | −1.349* | −5.411*** | −5.023*** |
| | (0.532) | (0.868) | (1.265) |
| Var(Constant) | 0.000 | 0.321** | 0.192** |
| | (0.000) | (0.100) | (0.067) |

***$p<0.001$,
**$p<0.01$, *$p<0.05$, $^{+}p<0.1$

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