The present cross-national study aims to explore the factors that are associated with a country's share of social start-ups in the total number of start-ups and contributes to the emerging stream of literature that explores the contextual drivers of different types of entrepreneurship. Based on data from the Global Entrepreneurship Monitor (GEM) 2009, covering 49 countries, we test several theoretical perspectives, including the failure thesis/institutional void perspective, the interdependence theory/institutional support perspective, welfare state theory and supply-side theory. Multiple regression analyses are applied testing the influence of institutional factors and cultural values on the incidence of social entrepreneurial start-ups relative to other types of start-ups. Our results seem to support the institutional support perspective: the share of social start-ups in all start-ups seems to benefit from favorable institutional circumstances, in particular public sector expenditure and regulatory quality. With respect to cultural values, our results suggest that a society's level of self-expression values benefits start-up diversity in favor of a higher share of social start-ups.

Introduction

Social entrepreneurs are increasingly acknowledged for offering solutions to complex and persistent social problems across the globe (Kerlin 2009; Shaw and Carter 2007; Zahra et al. 2009). Despite this growing recognition, there is a surprising lack of understanding of the prevalence and drivers of this type of entrepreneurial activity (Estrin, Mickiewicz, and Stephan 2013; Stephan, Uhlanaer, and Stride, 2014), which holds at the micro level (individual) and at the macro level (country). The present paper aims to fill the latter gap. This gap at the macro level can be explained by conceptual ambiguity (Mair and Marti 2006; Short, Moss, and Lumpkin 2009; Zahra et al. 2009) and a lack of harmonized and internationally comparable data (Lepoutre et al. 2013; Short, Moss, and Lumpkin 2009).

We aim to explore the drivers that turn people into social entrepreneurs, as opposed to regular entrepreneurs, and increase the share of social start-ups in the total number of start-ups. Understanding which factors drive the diversity of a country's entrepreneurial entry is increasingly relevant to policymakers. Although initiatives for social and environmental change are traditionally undertaken in the public sector, governments have been decreasing their funding in the face of free market ideology and increasing their reliance on self-organization. Initiatives such as the "Big Society" launched by British Prime Minister David Cameron in the UK and "The Social Business Initiative" launched by the European Commission are illustrative. However, which factors tip the balance in favor of entrepreneurship with a primarily social goal remains underexplored. Therefore, we focus on
a country’s relative prevalence or share of social entrepreneurial entry in the total number of entrepreneurial entry1 (Levie and Autio 2011; Verheul, Van Stel, and Thurik 2006).

In the absence of hypotheses on the prevalence of social entrepreneurship across countries, both in absolute and relative terms, we draw on insights from the entrepreneurship literature and the nonprofit literature. Using data from the Global Entrepreneurship Monitor (GEM) 2009, covering 49 countries, and applying regression analyses, we examine theoretical perspectives, such as the failure thesis/institutional void perspective, the interdependence theory/institutional support perspective, welfare state theory, and supply-side theory.

The contribution of the present research to the literature is twofold. First, it provides insights into the factors that relate to the share of social entrepreneurial entry across countries using large-scale and internationally comparable data in a research domain that is dominated by case study designs. Second, we test several existing theories and assess whether these theories apply to the share of social entrepreneurship.

Overall, our results suggest that favorable institutional circumstances, in particular a strong rule of law and high levels of public sector expenditure, benefit the share of social start-ups in all start-ups.

This paper is organized as follows. The next section provides a literature review and introduces the concept of social entrepreneurship as used in this paper. Next, theoretical perspectives are provided, and hypotheses are formulated. Subsequently, our data are presented, followed by the methodology and results. The paper closes with a discussion of the results and a conclusion.

Background

Much work on social entrepreneurship has focused on defining the concept (Hoogendoorn, Pennings, and Thurik 2010; Short, Moss, and Lumpkin 2009),2 which covers a mixture of formal and informal, public and private, and nonprofit and profit activities (Dacin, Dacin, and Matear 2010; Short, Moss, and Lumpkin 2009; Zahra et al. 2009) and encompasses a wide range of sectors, such as environmental protection, health care, education, and the reintegration of the long-term unemployed. Muhammad Yunus, founder of the Grameen Bank for microfinance and recipient of the Nobel Peace Price in 2006 is probably the most referred to example of a social entrepreneur. By addressing the malfunctioning of the capital market for the rural poor in Bangladesh in the early seventies, he created the first microfinance institution (Mair and Marti, 2006; Seelos and Mair 2005). Other examples show the widespread use of the label “social entrepreneurship.” For example, the Institute for One World Health, a not-for-profit pharmaceutical company that develops and produces drugs for orphan diseases, that is, infectious diseases prevalent in the developing world but neglected by for-profit pharmaceutical firms, as customers are unable to pay, and Khan University, which offers free online tutorials (Santos, 2012; Seelos and Mair 2005).

In a recent study, Choi and Majumdar (2014) argue that social entrepreneurship can be conceptualized as a cluster concept with several sub-concepts representing its defining properties, that is, social value creation, the social entrepreneur, the social enterprise organization, market orientation, and social innovation. These defining properties of social entrepreneurship can occur in varying degrees and combinations and even exhibit fewer than all properties and still be regarded as an instant of social entrepreneurship (Choi and Majumdar 2014). The aforementioned Khan University, for example, does not exhibit a market orientation because it offers its product for free and is fully funded by donations. However, Khan University is still considered a social enterprise.

Despite the lack of consensus on what social entrepreneurship is, there is agreement on the dominance of the creation of social value and the importance of primarily serving a social mission (Bacq, Hartog, and Hoogendoorn 2013; Mair and Marti 2006; Stephan, Uhlaner, and

1Throughout this study, the term “(social) entrepreneurial entry” is used to refer to nascent and young entrepreneurial activity (also early-stage entrepreneurial activity). In addition, “entrepreneurial entry” and “start-ups” are used interchangeably. These terms are preferred over “entrepreneurial activity” to stress the dynamic aspect of the subject of study.

2Dacin, Dacin, and Matear (2010) and Zahra et al. (2009) have provided comprehensive overviews of definitions of social entrepreneurship.
“Social” tends to refer to a desire to benefit society in some way without a priori normative restrictions (Bacq, Hartog, and Hoogendoorn 2013).

In the context of the present cross-cultural study we apply a definition, which captures three of the defining properties as described by Choi and Majumdar (2014), that is, social value creation, social entrepreneur and social enterprise organization. We define social entrepreneurship as: individuals or organizations engaged in entrepreneurial activities with a social goal (Mair and Martí 2006; Zahra et al. 2009). This implies that the social entrepreneurial activities under study do not necessarily include generating earned-income from commercial activity (i.e., market orientation) or an innovative approach in pursuing the social mission (i.e., social innovation). Excluding market orientation as one of the defining properties justifies drawing on the nonprofit literature next to the entrepreneurship literature.

Empirical studies of social entrepreneurship are dominated by case study designs with micro-level perspectives (Hoogendoorn, Pennings, and Thurik 2010; Short, Moss, and Lumpkin 2009). Macro-level studies, however, are scarce, and besides a few qualitative studies (Borzaga and Defourny 2001; Kerlin 2009; Nyssens 2006), quantitative studies are of a more recent vintage and mainly use GEM data on social entrepreneurship (Estrin, Mickiewicz, and Stephan 2013; Ferri and Urbano 2011; Griffiths, Gundry, and Kickul 2013). Estrin, Mickiewicz, and Stephan (2013), Griffiths, Gundry, and Kickul (2013) and Ferri and Urbano (2011) all aim to explain the absolute incidence of social entrepreneurship, although the study by Estrin et al. also addresses how social entrepreneurship and commercial entrepreneurship interact. From these studies, it appears that the factors that are conducive to entrepreneurial entry are at most weakly related to social entrepreneurial entry. Some specific factors that seem to be related to this issue are a country’s active participation in social purpose organizations (Ferri and Urbano 2011) and female participation in the labor force (Griffiths, Gundry, and Kickul 2013). In contrast to these studies, we examine social entrepreneurship in relative terms, that is, in terms of the proportion of social entrepreneurs in the total number of entrepreneurs. We use this relative measure to investigate whether factors have a differential relative impact on the composition of entrepreneurship. We draw on theories from the nonprofit literature and the entrepreneurship literature. In the next section, these theories are investigated, and hypotheses are formulated accordingly.

**Hypotheses Formulation**

In this section, we describe four theoretical perspectives that have emerged in the realm of entrepreneurship and nonprofit literature, that is, the failure thesis/institutional void perspective, the interdependence theory/institutional support perspective, welfare state theory, and supply-side theory.

**The Failure Thesis and Institutional Void.** One of the dominant theoretical perspectives that seeks to explain the size of the nonprofit sector is the government failure thesis (Matsunaga, Yamauchi, and Okuyama 2010; Nissan, Castaño, and Carrasco 2012; Salamon, Sokolowski, and List 2003; Weisbrod 1977). Government failure exists when the government fails to meet public and quasi-public goods provision and when market imperfections become socially undesirable. The government failure thesis argues that dissatisfaction with the government increases the demand for quasi-public goods (e.g., health care and education) supplied by nonprofit organizations. As such, nonprofit organizations fill the gap in unsatisfied needs left by both the market and the government (Weisbrod 1977).

The counterpart of this thesis that relates to social entrepreneurship is the institutional void perspective (Dorado and Ventresca 2013; Kerlin 2009; Mair and Martí 2009; Zahra et al. 2008). In social entrepreneurship literature, the

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3One of the reasons for choosing this rather broad conceptualization of the concept is a practical one: restricting the concept by more defining characteristics would leave us with few observations per country.

4In addition to market failure and government failure, Salamon, Sokolowski, and Anheier (2000) acknowledge the existence of failures with respect to the nonprofit or civil society sector. The so-called voluntary failure describes the limitations of the voluntary sector as a mechanism for meeting public needs. We have limited our examination of the government failure thesis because we assume that this type of failure includes and transcends market failure.
institutional void refers to “limited government support especially for social programs” (Stephan, Uhlaner, and Stride 2014, p. 4). Like the failure thesis, this “void” in government support leaves social needs unattended fostering forms of self-organization such as social entrepreneurship. In other words, unattended social needs serve as an opportunity or driver for entrepreneurs to create social value. Although empirical evidence for the failure thesis is weak with respect to the size of the nonprofit sector (Matsumaga, Yamauchi, and Okuyama 2010; Nissan, Castaño, and Carrasco 2012; Salamon, Sokolowski, and Anheier 2000), there is some evidence related to social entrepreneurship. For example, Kerlin (2009) finds that the absence of state social programs relates to the emergence of social enterprise in each of the seven countries that she studies. Ferri and Urbano (2011) and Estrin, Mickiewicz, and Stephan (2013) indicate that the scale of government activity hampers social entrepreneurial entry. At the same time, governments that are active in publically providing private services may also hinder commercial start-ups in these markets (Henrekson 2005; Van Stel, Storey, and Thurik 2007). Hence, with respect to the scale of government support, we hypothesize the following:

**H1a: Government spending on welfare is negatively related to the share of social entrepreneurial entry in all entrepreneurial entry.**

**Interdependence Theory and Institutional Support.** An alternative view of the failure thesis assumes a relationship of potential interdependence or partnership between governments and nonprofit organizations (Matsumaga, Yamauchi, and Okuyama 2010; Nissan, Castaño, and Carrasco 2012; Salamon and Da Costa Nunez 1995; Young 2000). Whereas the failure thesis assumes that nonprofit activity is a residual effect of unsatisfied demand for social services that has been left unanswered by the government and the market, the interdependence theory suggests that nonprofit organizations collectively deliver financed social services on behalf of the government (Young 2000, 2008). Hence, part of the government budget may be used for the development of social entrepreneurial activity. The social entrepreneurial counterpart of this idea of the interdependence theory/institutional support perspective, postulates the same: an active government may favor social entrepreneurial entry (Dorado and Ventresca 2013; Kerlin 2009; Mair and Martí 2009; Zahra et al. 2008). Government support may relate to direct funding (e.g., subsidies and grants) or acting as a market party. Several authors argue that a relationship of partnership and interdependence characterizes the European situation where governments seek more efficient or effective ways to address public goals by contracting out with social mission organizations (Borzaga and Defourny 2001; Nyssens 2006; Young 2008). Despite an assumed negative relationship between commercial entrepreneurial entry and size of the government (Estrin, Korosteleva, and Mickiewicz 2013; Henrekson 2005; Van Stel, Storey, and Thurik 2007), as described above, we formulate the following alternative for H1a:

**H1b: Government spending on welfare is positively related to the share of social entrepreneurial entry in all entrepreneurial entry.**

Next to the scale of the government apparatus, the quality of formal institutions is also found to relate to economic incentives guiding decision-making processes and behavior of agents including entrepreneurial activity (Estrin, Korosteleva, and Mickiewicz 2013; Stenholm et al. 2011). Formal institutions refer to government regulations that commonly take the form of rules, laws and policies (Scott 1995). More specifically, the quality of regulatory institutions such as a strong and predictable legal system form a prerequisite for markets to function well and entrepreneurial activities to prosper (Estrin, Korosteleva, and Mickiewicz 2013). The individual decision to become an entrepreneur is influenced by perceived pay-offs. Stable property rights that are effectively enforced foster individual beliefs in “transactional trust” and safe appropriation of value created (Acemoglu and Johnson 2005; Levie and Autio 2011). However, it has been suggested that regulatory quality is beneficial to different types of entrepreneurship (Bowen and De Clerq 2008; Stenholm et al. 2011). For commercial and social entrepreneurial entry, Estrin, Mickiewicz, and Stephan (2013) find that the quality of the regulatory framework, measured by the constraints on the arbitrary power of the executive branch of the government is positively related to both these types
of entrepreneurship. The effect of regulatory quality on the share of social entrepreneurial entry in all entrepreneurial entry is, however, unknown.

We argue that the impact of regulatory quality is less prominent for social entrepreneurial entry than the impact for commercial entrepreneurial entry. First, as described in the background section, one of the defining characteristics of social entrepreneurship as opposed to commercial entrepreneurship is the drive to maximize social value creation. Santos (2012) adds that social mission organizations sacrifice on the appropriation of the value created. Formal institutions in terms of stable property rights and a predictable legal system are a prerequisite for appropriation of value created (Acemoglu and Johnson 2005) suggesting that the effect of regulatory quality is stronger for commercial entrepreneurial entry than for social entrepreneurial entry. Second, and related to our previous argument, in this study we adopt a definition of social entrepreneurial entry that does not necessarily include a market orientation by generating earned-income from commercial activity suggesting that value capture is less prominent. Hence, although regulatory quality will foster both types of entrepreneurship, its impact on regular entrepreneurship is more prominent. We propose the following hypothesis:

**H2: A country’s regulatory quality is negatively related to the share of social entrepreneurial entry in all entrepreneurial entry.**

**Welfare State Theory.** Early theories on welfare state growth (Wilensky 1975) and more contemporary discussions on the welfare state (Castles 1998; Pierson 1996) suggest a relationship between welfare state expansion and processes of economic growth: “strong economies produce strong welfare states” (Pierson 1996). This relationship implies that economic development is associated with an increase in the size of the welfare state and thus in line with the failure thesis, that is, higher levels of income or wealth decrease the demand for nonprofits (Nissan, Castaño, and Carrasco 2012). Likewise, economic development may also have a negative effect on the absolute level of social entrepreneurship. At the same time, both a strong welfare state and the level of economic development are found to have a negative effect on the level of entrepreneurship (Wennekers et al. 2005; Wennekers and Thurik 1999). Taken together, we formulate the following hypothesis:

**H3: A country’s per capita income is positively related to the share of social entrepreneurial entry in all entrepreneurial entry.**

**Supply-Side Theory.** The necessary conditions for any type of entrepreneurial activity to emerge include the availability of individuals who are willing to and capable of exploiting opportunities and who, as a result, choose the entrepreneurial option. From this supply-side perspective, we explore cultural values as an explanatory factor for the share of social entrepreneurship. Culture, in which individual values and beliefs are embedded, is assumed to influence a wide range of behaviors, including the choice to become an entrepreneur (Freytag and Thurik 2007; Mueller and Thomas 2001). Cultural values have a direct effect on individual characteristics and an indirect influence via needs and motives on levels of entrepreneurship (Hayton, George, and Zahra 2002). Although there are several studies that explore the relationship between aspects of culture and entrepreneurship across cultures (Busenitz, Gomez, and Spencer 2000; McGrath and MacMillan 1992; Mueller and Thomas 2001), the question of which values potentially turn people into social entrepreneurs rather than some other type of entrepreneur is underexplored. Given our aim to explain the share of social start-ups in the total number of start-ups, values of interest are those that motivate individuals to focus on the needs and problems of others. For example, Schwarz and colleagues identify two values that capture pro-social motivation: benevolence (concern for immediate others) and universalism (concern for the welfare of all people) (Bardi and Schwartz 2003; Schwartz 1999). Stephan and Uhlaner (2010) propose a measure for a

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5It is important to note that Estrin, Mickiewicz, and Stephan (2013) explain the prevalence of social entrepreneurial start-ups as a percentage of the adult population, whereas we focus on the share of social entrepreneurial start-ups in all entrepreneurial entry.

6This perspective draws on the distinction between the supply side and the demand side of entrepreneurship (Audretsch, Grilo, and Thurik 2007; Van Praag 1996; Verheul et al. 2002).
socially supportive culture, that is, a positive societal climate in which people support each other. Inglehart and Baker (2000) point to a survival versus self-expression dimension in which affluent societies place increasing emphasis on quality of life, environmental protection and self-expression and less emphasis on economic growth and physical security. They show that when societies experience industrialization and economic growth, the dominant values in those societies turn toward more interpersonal trust, tolerance, political activism, and nonmaterialistic values. We hypothesize that the higher a country’s degree of self-expression values, the more likely a population is to consider the well-being of others, which finds its expression in activities such as volunteering, environmental protection, cultural issues, and social entrepreneurship. With respect to regular entrepreneurship, Uhlaner and Thurik (2007) find that countries that are characterized by less materialistic values tend to have a lower incidence of entrepreneurial entry. Taken together, we hypothesize that in societies that have a high degree of self-expression values, regular entrepreneurship is (partly) replaced by social entrepreneurship.

H4: The prevalence of a country’s self-expression values is positively related to the share of social entrepreneurial entry in all entrepreneurial entry is.

Data

This section describes our main data source, introduces our variables, and describes the methodology that we have applied to test our hypotheses.

Data Source

The Adult Population Survey (APS) from the GEM 2009 is used as our main data source. The GEM is the largest on-going research program providing individual- and national-level harmonized data on the attitudes, activities, and aspirations related to entrepreneurial activity. It collects annual survey data in participating countries with samples of at least 2,000 randomly selected adults (i.e., aged between 18 and 64 years old). Entrepreneurially active individuals are identified from the initial question of the survey that enquires whether the respondent is “alone or with others, currently trying to start a new business or owning and managing a company, including any self-employment or selling any goods or services to others.” The principle GEM measure is total early-stage entrepreneurial activity (TEA), which measures the relative amount of nascent entrepreneurs and business owners of young firms in the adult population (18–64 years of age). Nascent entrepreneurs are individuals who have, in the past 12 months, taken action to start a new business of which they will personally own all or part, in which they will actively participate in day-to-day management, and through which they will not have yet paid salaries to anyone for more than 3 months (Reynolds et al. 2005). Young business owners are defined as individuals who actively own and manage a new firm that is not more than 3.5 years old (Reynolds et al. 2005).

The GEM 2009 includes a special study of social entrepreneurship that strictly collects harmonized data on this topic in 49 nations to assess social entrepreneurship prevalence across countries (Bosma and Levie 2010; Lepoutre et al. 2013; Terjesen et al. 2011). The methodology developed to measure population-based social entrepreneurial activity is extensively described in Lepoutre et al. (2013) and builds on several single country pilot studies in the United Kingdom, the United States, and Norway (Harding and Cowling 2004; Levie et al. 2006; Levie and Hart 2011). The question that is used to identify social entrepreneurs reads as follows: “Are you, alone or with others, currently trying

\[7\] These countries are Algeria, Argentina, Belgium, Bosnia and Herzegovina, Brazil, Chile, China, Colombia, Croatia, Dominican Republic, Ecuador, Finland, France, Germany, Greece, Guatemala, Hong Kong, Hungary, Iceland, Iran, Israel, Italy, Jamaica, Jordan, Korea, Latvia, Lebanon, Malaysia, Morocco, Netherlands, Norway, Panama, Peru, Romania, Russia, Saudi Arabia, Serbia, Slovenia, South Africa, Spain, Switzerland, Syria, Uganda, the United Kingdom, the United Arab Emirates, the United States, Uruguay, Venezuela, and the West Bank and Gaza Strip. No data on the special topic were collected in Japan and Tunisia (which did participate in the GEM APS 2009). Data on social entrepreneurship were collected in Denmark but are not included in this analysis, as Denmark used a different data collection approach, making the results insufficiently comparable with those from other countries. Finally, data were collected in Tonga and Yemen but are also excluded in this analysis because these countries reveal extraordinarily high prevalence rates of social entrepreneurship and are therefore considered to be outliers.
to start or currently owning and managing any kind of activity, organization or initiative that has a particularly social, environmental or community objective?

Akin to GEM’s principle measure of entrepreneurship, TEA, a series of follow-up questions allows for testing whether individuals meet the criteria to be classified as a nascent or young social entrepreneur (Lepoutre et al. 2013). The resulting measure, social early-stage entrepreneurial activity (SEA), is used as a measure for social entrepreneurial entry and is hence comparable to TEA.

**Dependent Variable**

We use a relative measure for social entrepreneurial entry as our dependent variable. This measure provides a view of the effect of our independent variables on social entrepreneurial entry relative to their effect on all types of entrepreneurial entry, that is, whether the independent variables influence the composition of entrepreneurship. We calculate the relative social entrepreneurial entry (rSEA) with the following formula: \( rSEA = \frac{(SEA - \text{overlap})}{(TEA + SEA - \text{overlap})} \). “Overlap” contains those entrepreneurs that answer positively to identifying questions for regular and social entrepreneurial activity and specify that they refer to the same organization. We exclude the overlap cases in the denominator to prevent double counting. The cases in the overlap category are classified as TEA rather than SEA.

The values for our dependent variable for each country are provided in Table A. Table A clearly shows a strong variance of rSEA across countries (rSEA ranges from 0.2 percent in Guatemala to 32.9 percent in Finland) and across countries that are grouped by stage of economic development (with rSEA averages of 4.9, 9.7, and 18.3 percent for low-, middle-, and high-income countries, respectively). Although Table A in the Appendix suggests a strong correlation between rSEA and income, we also observe remarkable differences among countries at the same level of economic development. For example, within the category of middle-income countries, rSEA ranges from 1.8 percent in Ecuador to 25.9 percent in Croatia.

**Independent Variables**

The following data sources are used: the International Monetary Fund (IMF) World Economic Outlook Forum, World Bank Development Indicators, Worldwide Governance Indicators, the European Value Survey, and the World Value Survey.

We use Gross Domestic Product (GDP) per capita in purchasing power parity per international dollar as an indicator of a country’s level of income (H3). To test H1a and H1b, we use a country’s public expenditure as a percentage of the GDP as a proxy of government spending on welfare. Public expenditure is defined as all expenses for the government’s operating activities that provide goods and services, including the compensation of employees, interest and subsidies, grants, and social benefits. H2 is tested using a composite indicator that captures the quality of the regulatory framework: the rule of law (Estrin, Korosteleva, and Mickiewicz 2013; Levie and Autio 2011). The rule of law is defined by “…the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence” (Kaufmann, Kraay, and Mastruzzi 2011, p. 223). The survival versus self-expression index from Inglehart and Baker (2000) is used to test H4. Based on a factor analysis, this index is constructed by Inglehart and Baker from five items in the World Value Survey. We use the data from the 5th wave of data collection and the 4th wave (in case the 5th wave was not available). We refer to Table B in the Appendix for a description and source reference for the variables that are used to test our hypotheses.

Strong bivariate correlations can be observed between per capita level of income and two other independent variables: rule of law and survival versus self-expression values (see Table C of the Appendix). In both cases, the literature indicates a relationship between economic

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8Results do not change in case we alternatively specify the overlap cases as social enterprises.

9See Kaufmann, Kraay, and Mastruzzi (2011) for the key methodological and analytical issues in the construction of this indicator and www.govindicators.org for individual variables and their sources.

10The factor analysis is based on based on a representative stratified random samples of the adult population of 18 years old and older (there are also some exceptions such as Armenia (15+) and Finland 18–74 years).
Methodology and Results

Method

We test our hypothesis by means of multiple linear regression analyses. Table 1 presents a summary of five model specifications (Models I–V) that show the estimates of the coefficients and corresponding robust standard errors.11 Model I includes GDP per capita and tests hypothesis 3. Model II includes public expenditure as a percentage of GDP and tests H1a and H1b. Model III considers rule of law and tests H2. Finally, models IV and V are used to test the effect of self-expression values. Models II and IV are seemingly identical and differ only in the number of countries included, which allows us to account for the independent contribution of the survival versus self-expression variable in Model V relative to Model IV.

Results

In Table 1, the coefficients reveal the expected change in our dependent variable, which is associated with a one unit increase in the independent variable. Although this association may suggest causality between variables, we should be careful due to the potential endogeneity problem that dual causality, for example, causes. The analysis primarily aims to find relationships between variables and the share of social entrepreneurial entry. A positive effect of the public sector expenditure variable, for example, would tell us that countries with higher public expenditures are expected to have a higher share of social entrepreneurial entry compared with countries with lower public expenditures.

Model I shows that income per capita is positively associated with the share of social entrepreneurial entry; an increase in a country’s per capita income by one (i.e., one thousand international dollar) is associated with an expected increase of the share of social entrepreneurial entry in all entrepreneurial entry by 0.33. However, this effect is not robust throughout the various models. Extending our model to include a country’s public expenditure (Model II) substantially changes the total variation explained and shows the effect of GDP to be insignificant. Public expenditure is positively and significantly associated with the share of social entrepreneurial activity. This effect remains robust throughout the different models. Therefore, the model rejects H1a and supports H1b. The estimation results of Model III show that a strong rule of law is positively related with our dependent variable, although only at a significance level of 10 percent. Although it is not in line with H2, this finding does suggest that regulatory quality has an effect on the composition of types of entrepreneurship. Finally, our results suggest a positive effect, although only at a 10 percent significance level, of self-expression values on the share of social entrepreneurship. Despite this positive effect, including self-expression values has a limited contribution to the total variation explained. Moreover, the number of countries for which the self-expression values are available is limited (n = 31), and drawing conclusions is a tricky pursuit.

The next section discusses the results, describes the limitations of this study and provides suggestions for future research.

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11 See Table D in the Appendix for the bivariate correlations between the dependent and independent variables corrected for per capita income.

12 The limited number of observation does not allow for specifying complex models including more than three independent variables.

13 In contrast to the often-established evidence for a U-shaped relationship between a country’s level of income and prevalence of entrepreneurship (Wennekers et al. 2005, 2010) we do not find evidence for a non-linear relationship. Hence, only a linear term of GDP per capita is included.
Discussion

Discussion of Results

On the whole, the regression results suggest that the share of social entrepreneurial entry in the entire entrepreneurial entry is driven by public sector expenditure. Based on the positive and significant coefficients for public sector expenditure throughout the models in Table 1, it seems that public sector expenditure of all factors included exerts the most influence. Countries that have high levels of public expenditure, on average, show a higher share of social entrepreneurial start-ups. This finding supports H1b and seems to be in line with the interdependence theory, which argues that public goals are contracted out with private initiatives and that part of the government budget favors the development of social start-ups (Young 2000, 2008). However, this finding does not mean that higher public spending automatically favors social start-ups. By using a relative measure, the association between public sector expenditure and the share of social entrepreneurship could be the result of effects on the numerator (i.e., absolute level of SEA), the denominator (i.e., absolute level of TEA) or both. Where Ferri and Urbano (2011) find a negative effect of public spending on the absolute level of social entrepreneurship, Estrin, Mickiewicz, and Stephan (2013) show that government spending has a negative effect on both the absolute level of social as well as commercial entrepreneurial entry with a marginally stronger effect for commercial start-ups. In an additional analysis (not displayed) we find no significant relationship between public spending and the absolute level of social entrepreneurial entry. Taken together, and in line with the results found by Ferri and Urbano (2011) and Estrin, Mickiewicz, and Stephan (2013), the positive association between public spending and the share of social entrepreneurial entry as found in this study, seems to

Table 1
Multiple Linear Regression Results Explaining Relative Early-Stage Social Entrepreneurial Activity as a Percentage of All Early-Stage Entrepreneurial Activity Using Aggregate Level Conditions

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>6.686**</td>
<td>−5.088</td>
<td>6.704**</td>
<td>−6.797*</td>
<td>−7.377*</td>
</tr>
<tr>
<td>(2.54)</td>
<td>(−1.56)</td>
<td>(2.70)</td>
<td>(−1.83)</td>
<td>(−1.95)</td>
<td></td>
</tr>
<tr>
<td>GDP per capita/1,000</td>
<td>0.331**</td>
<td>0.174</td>
<td>0.319**</td>
<td>0.179</td>
<td>0.149</td>
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<tr>
<td>(2.39)</td>
<td>(1.07)</td>
<td>(2.41)</td>
<td>(1.07)</td>
<td>(0.87)</td>
<td></td>
</tr>
<tr>
<td>Public sector expenditure/GDP</td>
<td>0.483***</td>
<td>0.525***</td>
<td>0.567***</td>
<td></td>
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<td>(2.88)</td>
<td>(2.98)</td>
<td>(3.15)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Rule of law (corrected for GDP)</td>
<td>4.345*</td>
<td>(1.87)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survival versus self-expression (corrected for GDP)</td>
<td>1.834*</td>
<td>(1.87)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.2472</td>
<td>0.4412</td>
<td>0.2967</td>
<td>0.4278</td>
<td>0.4515</td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td>0.2237</td>
<td>0.4052</td>
<td>0.2513</td>
<td>0.3870</td>
<td>0.3905</td>
</tr>
<tr>
<td>N</td>
<td>34a</td>
<td>34a</td>
<td>34a</td>
<td>31b</td>
<td>31b</td>
</tr>
</tbody>
</table>

*aCountries included: Algeria, Belgium, Bosnia and Herzegovina, Brazil, Chile, Croatia, Finland, France, Germany, Greece, Guatemala, Hungary, Iceland, Iran, Israel, Italy, Korea, Latvia, Lebanon, Morocco, Netherlands, Norway, Peru, Romania, Russia, Serbia, Slovenia, South Africa, Spain, Uganda, United Kingdom, United States, Uruguay, Venezuela.

*bCountries excluded from sample in Models IV and V due to incomplete data: Algeria, Chile, and Uganda.

Note: *Significant at 10 percent level; **Significant at 5 percent level; ***Significant at 1 percent level; t-values are between brackets.
be the result of a decrease in the absolute total number of start-ups. The message for policymakers who aim to stimulate the diversity of entrepreneurial start-ups in favor of social start-ups is to focus on micro-policies, that is, policies that specifically target social start-ups. Macropolicies, in which social start-ups are not the primary policy focus, may have unintended consequences, such as the presumed decrease of total start-ups.

Next, we observe a positive and weakly significant association between the rule of law and the share of social entrepreneurial start-ups, which suggests that the effect of stable and predictable formal institutions has a relative stronger effect on social start-ups than on regular start-ups. This finding adds to the earlier findings of Estrin, Mickiewicz, and Stephan (2013) that the prevalence of social start-ups benefits more from constitutional level institutions than do regular types of start-ups. However, while the joint influence of the individual components of the indicator “rule of law” is positive and, albeit weakly, significant, each individual component may impact entrepreneurial start-up differently. McMullen, Bagby, and Palich (2008) show that intellectual property rights protection tends to impact entrepreneurial activity differently than the perception of corruption in the business environment whereas both these institutional dimensions are included in the composite indicator rule of law. In the context of different types of entrepreneurship, the dominance of value creation over value capture for social entrepreneurs (Santos 2012) may trigger a different mechanism compared to commercial entrepreneurship. More detailed analyses of the individual dimensions of rule of law and the mechanisms at play for different types of entrepreneurship may be a fruitful path for future research.

In addition, a recent debate suggests that the link between regulatory quality and entrepreneurial entry varies across countries characterized by different levels of development (Aidis, Estrin, and Mickiewicz 2012; Hartog et al. 2010). Aidis, Estrin, and Mickiewicz (2012) find a positive effect of rule of law when low-income countries and middle-income economies are included in their sample. When a group of high-income economies is included, the effect of rule of law disappears. Hartog et al. (2010) argue that while most entrepreneurs do benefit from improvements in the rule of law, the benefits primarily accrue to incumbent firms by reducing investment risk simulating growth. Also in the context of this study, it matters which countries are included in the sample. Additional analyses show (results not displayed) that in case we exclude low-income countries from our sample, the effect of rule of law on the share of social start-ups is no longer significant. This observation shows that the results cannot be generalized without further research.

With respect to the welfare state perspective and the effect of per capita income, we find no consistent effect throughout our model specifications. The initial significant and positive effect becomes nonsignificant as soon as public expenditure is included. This finding suggests that the presumed influence of per capita income is actually captured by the influence of public expenditure and that mediating effects are possibly at play.

What do we learn with respect to the institutional support and institutional void perspectives? We do not find support for the institutional void perspective; both formal institutional indicators favor the share of social entrepreneurial entry. Hence, in addition to the absolute prevalence, the relative prevalence of social start-ups benefits from favorable institutional settings, notwithstanding the existence of exceptional social entrepreneurs who are able to generate an impact under harsh institutional conditions. However, does either the institutional void or institutional support actually favor social entrepreneurship? Although our results indeed tend to suggest that the share of social entrepreneurial entry at the country level prospers in a context characterized by supportive institutions, this is a tentative conclusion and more research is clearly warranted. For example, the share of social entrepreneurship may be explained by a combination of determinants or configurations of institutions with institutional complementarities (Crouch 2006; Jackson and Deeg 2008). Kerlin (2009) for example, demonstrates that a region's history including the absence of certain supportive institutions can shape socioeconomic conditions that influence the emergence of social entrepreneurial activity. In this respect, she points at Latin America where social entrepreneurship is strongly associated with civil society since both the public and the private sectors are less well developed and problems such as poverty and production conditions are poorly addressed. This contrast the European situation where social entrepreneurship is supported by local government and
European Union policy (Kerlin 2009). The fuzzy set approach as described by Ragin (2008) may seem useful here for further research.

From our supply-side perspective, we find support for H4; societies with high self-expression values also experience higher shares of social entrepreneurial entry relative to societies with low self-expression values. This finding is interesting for further research in particular against the background of Inglehart's analysis of intergenerational value differences at the individual level (1997, 2000, 2003).\footnote{14} Inglehart suggests that younger birth cohorts that have experienced unprecedented prosperity are more likely to value nonmaterial goals, such as the desire for meaningful work. This idea thus implies that young people turn to social entrepreneurship instead of other forms of entrepreneurship because they have different values compared with older birth cohorts. Exploring intergenerational value differences is a highly relevant research option because the shift from survival to self-expression values is potentially universal and should occur, according to Inglehart, in any country that moves from conditions of economic insecurity to relative security (Inglehart 1997). Understanding this relationship will allow us to anticipate changes in social entrepreneurial activity.

Limitations

Our study is not without limitations. First, as described in the introduction, social entrepreneurship is an ill-defined concept that represents different models across the globe. Despite the thorough methodology applied by Lepoutre et al. (2013) to measure social entrepreneurship, the initial question used to identify social entrepreneurs is not without critique. Bacq, Hartog, and Hoogendoorn (2013) argue that stretching the concept of social entrepreneurship to a worldwide comparison may provide a false understanding of differences in degree of the phenomenon as long as we do not dispose of a substantive understanding of local contingencies. The observation that social entrepreneurship not only means different things to different people but also different things to different people in different locations (Mair 2010, p. 17) hinders finding determinants that are able to explain this phenomenon on a global scale. In addition, the data set aims to capture this concept using a single question. Although this can be justified by reducing data collection costs and respondents' refusal rates, it leaves room to improve measurement validity.

A second limitation of our study involves its small number of observations due to unavailable data for variables from additional data sources. Potential drivers, such as the type of capitalism, the degree of volunteering, the strength of civil society, and specific institutional support for social entrepreneurship could not be included due to the lack of (harmonized) data. As a result, high-income countries are overrepresented, which influences the results. It should be noted that high-income countries (approximately $30,000 and above) show a much higher level of rSEA variation compared with low-income countries, which leads to more uncertainty in the estimated regression line.

A third limitation is our inability to establish causal directions between variables. Our multivariate analyses increase the understanding of the ways in which variables are related; however, they do not necessarily imply causality between variables. Our cross-sectional data hinders further analyses in this respect. In addition, our cross-sectional data were collected in 2009, at the midst of the economic crises. Given the cross-sectional character, we cannot detect the effect of how the 2009 circumstances influenced the data and herewith the results. This factor also limits us in terms of the (policy) implications that we can draw from this study.

Finally, although unique, all variables are measured at one point in time, and although a certain time lag is considered (for example, we regress the social entrepreneurial activity of 2009 on the GDP per capita of 2008), we do not know what may be considered a realistic time lag. We try to account for this ambiguity by exclusively focussing on nascent and young entrepreneurship. However, this limitation stresses the exploratory stage of cross-country social entrepreneurship comparisons.

Conclusions

Policymakers who aim to stimulate self-organization around social and environmental challenges by private sector parties, such as social enterprises, must understand what drives...
these initiatives. This paper aims to explore the factors that are associated with a country’s share of social entrepreneurial entry in the total amount of entrepreneurial entry. We test our hypotheses using data from the GEM 2009, which covers 49 countries.

The contribution of this study is at least twofold. First, this study contributes to the emerging stream of literature that explores the contextual drivers of different types of entrepreneurship. We explore country level institutional and cultural factors that may relate to the act of founding a social entrepreneurial start-up rather than other types of start-ups. The results confirm the idea that different factors are indeed driving a country’s diversity of entrepreneurial activity. More specifically, of those factors explored in this study, public sector expenditure seems to exert the most influence on a country’s share of social entrepreneurship. Second, the factors included allow us to test several existing theories that have been associated with the incidence of social entrepreneurship at country level: institutional support perspective, institutional void perspective, welfare state theory and supply-side theory. Foremost, our results point towards support for the institutional support perspective; we find that the share of social start-ups in all start-ups is positively associated with favorable institutional circumstances, in particular the public sector expenditure and, to a lesser extent, regulatory quality. Where Stephan, Uhlmaner, and Stride (2014) also find support for the institutional support perspective for the absolute level of social entrepreneurship, we find additional support for this perspective related to the relative level of social entrepreneurial start-ups. Despite little support for the institutional void perspective, which assumes that a malfunctioning market or state creates opportunities for social entrepreneurs, there is reason to assume that the results vary across developing and developed economies. The institutional support perspective dominates the welfare state perspective that is the presumed influence of per capita income is captured by the influence of public sector expenditure suggesting mediating effects. With respect to our final perspective, the supply-side theory, results show that self-expression values are positively associated with the share of social start-ups. Self-expression values, as opposed to values related to survival and physical security, emphasize quality of life, environmental protection, meaningful work, and non-materialism. In case we interpret this positive association as the influence of these values on the share of social start-ups, we may conclude that a high level of self-expression values turns people into social entrepreneurs rather than other types of entrepreneurs.

Additional research is clearly needed to understand how to identify other drivers that support and influence the absolute and relative incidence of social entrepreneurship. This study leaves the following questions unanswered: Does social entrepreneurship attract people to become entrepreneurs who otherwise would have never chosen the entrepreneurial option? Is social entrepreneurship, as a form of self-organization, an efficient and effective way to address public goals? Against the background of shrinking public funds worldwide, our suggested positive relationship between public expenditure and the share of social start-ups makes this latter question and hence additional critical research more than relevant.

References


## Table A
Share of Early-Stage Social Entrepreneurial Activity as a Percentage of All Early-Stage Entrepreneurial Activity (rSEA), by Stage of Economic Development

<table>
<thead>
<tr>
<th>Low-income countries</th>
<th>Middle-income countries</th>
<th>High-income countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>rSEA</td>
<td>Country</td>
</tr>
<tr>
<td>Algeria</td>
<td>6.1</td>
<td>Argentina</td>
</tr>
<tr>
<td>Guatemala</td>
<td>0.2</td>
<td>Bosnia &amp; Herzegovina</td>
</tr>
<tr>
<td>Jamaica</td>
<td>6.0</td>
<td>Brazil</td>
</tr>
<tr>
<td>Lebanon</td>
<td>5.3</td>
<td>Chile</td>
</tr>
<tr>
<td>Morocco</td>
<td>1.6</td>
<td>China</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>3.5</td>
<td>Colombia</td>
</tr>
<tr>
<td>Syria</td>
<td>10.0</td>
<td>Croatia</td>
</tr>
<tr>
<td>Uganda</td>
<td>4.9</td>
<td>Dominican Republic</td>
</tr>
<tr>
<td>Venezuela</td>
<td>8.9</td>
<td>Ecuador</td>
</tr>
<tr>
<td>West Bank &amp; Gaza</td>
<td>3.7</td>
<td>Hungary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Iran</td>
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<td></td>
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<td>Jordan</td>
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<td>Latvia</td>
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<td>Malaysia</td>
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<td>Peru</td>
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<td>Romania</td>
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<td></td>
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<td>Russia</td>
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<td></td>
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<td>Serbia</td>
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<td></td>
<td></td>
<td>South Africa</td>
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<tr>
<td></td>
<td></td>
<td>Uruguay</td>
</tr>
</tbody>
</table>

( Unweighted ) average 4.9  ( Unweighted ) average 9.7  ( Unweighted ) average 18.3
Overall ( unweighted ) average 10.4

Table B
Description of Variables for the Regression Models

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of social entrepreneurs in the total number of entrepreneurs</td>
<td>Percentage of the adult population that is actively involved in starting or owning-managing any kind of activity, organization, or initiative that has a particularly social, environmental, or community objective divided by the percentage of the adult population that is active as a nascent or young entrepreneur</td>
<td>Adult Population Survey (APS) of GEM 2009</td>
</tr>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per capita income</td>
<td>Gross domestic product per capita (year 2008) as expressed in (thousands of) purchasing power parities per international dollar</td>
<td>IMF World Economic Outlook Database, version April 2008</td>
</tr>
<tr>
<td>Public sector expenditure as percent of GDP</td>
<td>Expense is cash payments for operating activities of the government in providing goods and services as a percentage of gross domestic product. This includes compensation of employees (such as wages and salaries), interest and subsidies, grants, social benefits, and other expenses such as rent and dividends</td>
<td>World Bank Development Indicators, 2008 <a href="http://data.worldbank.org/topic/public-sector">http://data.worldbank.org/topic/public-sector</a></td>
</tr>
<tr>
<td>Rule of law</td>
<td>Reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and</td>
<td>Worldwide Governance Indicators, 2008 <a href="http://www.govindicators.org">www.govindicators.org</a></td>
</tr>
<tr>
<td>Variable</td>
<td>Description</td>
<td>Source</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Survival versus self-expression</td>
<td>Inglehart’s survival versus self-expression index (ranging from −2.5 to 2.0). Based on a five item scale including: Respondent gives priority given to economic and physical security over self-expression and quality of life; respondents describes self as not very happy, respondent has not signed and would not sign a petition; homosexuality is never justifiable; you have to be very careful about trusting people (Inglehart and Baker, 2000)</td>
<td>European Value Survey (<a href="http://www.europeanvaluesstudy.eu//">http://www.europeanvaluesstudy.eu//</a>) / World Value Survey (<a href="http://www.worldvaluessurvey.org/">http://www.worldvaluessurvey.org/</a>), 5th wave or 4th wave in case 5th wave not available</td>
</tr>
</tbody>
</table>
### Table C

**Bivariate Correlations Among the Dependent and Independent Variables **Uncorrected for GDP Per Capita**

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. rSEA&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. GDP per capita</td>
<td>0.49&lt;sup&gt;*&lt;/sup&gt;</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Public sector expenditure/GDP</td>
<td>0.62&lt;sup&gt;*&lt;/sup&gt;</td>
<td>0.47&lt;sup&gt;*&lt;/sup&gt;</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Rule of law</td>
<td>0.53&lt;sup&gt;*&lt;/sup&gt;</td>
<td>0.86&lt;sup&gt;*&lt;/sup&gt;</td>
<td>0.44&lt;sup&gt;*&lt;/sup&gt;</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>5. Survival versus self-expression</td>
<td>0.33</td>
<td>0.56&lt;sup&gt;*&lt;/sup&gt;</td>
<td>0.10</td>
<td>0.45&lt;sup&gt;*&lt;/sup&gt;</td>
<td>1.00</td>
</tr>
</tbody>
</table>

<sup>a</sup>Relative early-stage social entrepreneurial activity as a percentage of all early-stage entrepreneurial activity.

*Note:* *Correlation is significant at 1 percent level.

### Table D

**Bivariate Correlations Among the Dependent and Independent Variables Corrected for GDP Per Capita**

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. rSEA&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. GDP per capita</td>
<td>0.49&lt;sup&gt;*&lt;/sup&gt;</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Public sector expenditure/GDP</td>
<td>0.62&lt;sup&gt;*&lt;/sup&gt;</td>
<td>0.47&lt;sup&gt;*&lt;/sup&gt;</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Rule of law corrected for GDP</td>
<td>0.18</td>
<td>0.00</td>
<td>0.09</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>5. Survival versus self-expression corrected for GDP</td>
<td>0.10</td>
<td>0.00</td>
<td>-0.15</td>
<td>-0.04</td>
<td>1.00</td>
</tr>
</tbody>
</table>

<sup>a</sup>Relative early-stage social entrepreneurial activity as a percentage of all early-stage entrepreneurial activity.

*Note:* *Correlation is significant at 1 percent level.