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Prevalence and Determinants of Social Entrepreneurship at the Macro-level

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Abstract:

This study deals with the prevalence and drivers of social entrepreneurship across countries. Unique large-scale and internationally comparable data from the Global Entrepreneurship Monitor (GEM) 2009 covering 49 countries at different stages of development are used as our main data source. Hypotheses are generated from a multitude of theoretical perspectives including the failure thesis, interdependence theory, welfare state theory and supply-side theory. As regards the antecedents of the occurrence of social entrepreneurship, our findings suggest above all that social entrepreneurship is a phenomenon driven by wealth. In addition, we find a positive association between government expenditure on welfare and the prevalence of social entrepreneurship which assumes a relation of interdependence and partnership between government and social organizations. This finding supports the interdependence theory. With respect to cultural values, we postulate that a society's level of individualism can be considered to be a driver of social entrepreneurship. This suggests that in societies where ties between individuals are loose, social entrepreneurship is more widespread.

Keywords: Global Entrepreneurship Monitor (GEM); social entrepreneurship; failure thesis; interdependence theory; welfare state theory; supply-side theory

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1. Introduction

A growing awareness of the increasing disparity in wealth distribution, the discrepancy in access to opportunities, and a mounting concern for the environment, has led to increased attention for social entrepreneurship. Social entrepreneurs are increasingly acknowledged for offering solutions to complex and persistent social problems throughout the globe (Kerlin, 2009; Martin & Osberg, 2007; Zahra, Gedajlovic, Neubaum, & Shulman, 2009). In developing and emerging economies, social entrepreneurs have become change agents that address basic and pressing needs such as health care, access to water and sanitation. At the same time, social entrepreneurs in more developed countries provide innovative business models to regenerate deprived communities, provide services and jobs for disabled people and waste recycling and nature protection (Bosma & Levie, 2010). However, despite a growing recognition of social entrepreneurship, there is a lack of understanding of the prevalence and drivers of this type of entrepreneurial activity. This holds in particular in a cross-country setting representing a multiplicity of socio-economic contexts.

This void in the literature is not surprising given the fact that social entrepreneurship is an ill-defined concept (Mair & Martí, 2006; Short, Moss, & Lumpkin, 2009; Zahra et al., 2009) covering a wide variety of activities and representing different models worldwide (Kerlin, 2009; Nicholls & Cho, 2006). The different notions of social entrepreneurship include: non-profit organizations that apply business expertise to become independent of grants and subsidies (Boschee & McClurg, 2003; Reis & Clohesy, 2001; Thompson, 2002); for-profit businesses that offer innovative solutions for persistent social, economic and ecological problems using market-based models (Dees & Battle Anderson, 2006; Dorado, 2006) and hybrid organizations aiming to achieve social impact while maintaining a sustainable business model (Alter, 2007; Nicholls & Cho, 2006; Thompson, Alvy, & Lees, 2000). Moreover and closely related to the definitional complexity, a lack of harmonized and international comparable data has hindered attempts to address this research gap.

The aim of this paper is to increase our understanding of the prevalence and drivers of social entrepreneurship at a country level. In the absence of hypotheses on the variation in the rate of social entrepreneurship across countries, we draw on assumptions and insights from entrepreneurship literature and non-profit literature. By using regression analyses, theoretical perspectives are examined such as failure thesis, interdependence theory, welfare state theory, and supply-side theory. As our main data source we use the Adult Population Survey (APS) from the Global Entrepreneurship Monitor (GEM) 2009 covering 49 countries at different stages of economic development.

For this purpose we define social entrepreneurship as follows: *social entrepreneurship concerns individuals or organizations engaged in entrepreneurial activities with a social goal* (Bosma & Levie, 2010). In addition,

we introduce two measures of social entrepreneurship which have the potential to capture some of the different dynamics and characteristics inherent to this complex concept: "social business entrepreneurs" (i.e. social entrepreneurs actively involved in starting or owning-managing *a business* with a particularly social, environmental or community objective) and "social initiators" (i.e. social entrepreneurs actively involved in *any kind of activity or initiative* that has a particularly social, environmental or community objective).

The contribution of the present research to the literature is threefold. First, it provides insights into the drivers of social entrepreneurial activity across countries using large-scale and internationally comparable data in a research domain dominated by case-study designs. Second, we test several existing theories and assess whether these theories apply to social entrepreneurship. Finally, by introducing two notions of social entrepreneurship, we contribute by differentiating between various activities captured by the label 'social entrepreneurship'.

Understanding what makes some countries or regions more social entrepreneurial than others is particularly relevant as many governments attach high hopes to the potential of social entrepreneurship to solve some of the pressing problems of our times against the background of diminishing budgets. Moreover, the number of social enterprises can be substantial and therefore understanding the drivers of this type of activity is of interest for policy-makers from an employment, investments and service provision perspective. In addition, these insights are relevant for private support organizations and individuals stimulating the strategic development of social entrepreneurship such as promotion and the creation and improvement of sector infrastructure.

Our results reveal that the prevalence rates of social entrepreneurship range from 0.1% to 4.3% with worldwide 1.8% of the adult population involved in the early stages of social entrepreneurial activities. As regards the antecedents of the variation of this rate of social entrepreneurship across countries, our findings suggest above all that social entrepreneurship is a phenomenon driven by wealth: the higher a society's per capita income, the higher the level of social entrepreneurship. In addition, we find a positive association between government expenditure on welfare and the prevalence of social entrepreneurship which assumes a relation of partnership between the government and social organizations. This finding supports the interdependence theory. No support is found that the prevalence of social entrepreneurship is related to a society's entrepreneurial spirit or to a society's degree of postmaterialism. Instead, a society's level of individualism can be considered a driver of social entrepreneurship. This latter finding suggests that in societies where ties between individuals are loose, social entrepreneurship is more widespread and in more collectivist society's social services are provided by informal sources such as extended families.

This paper is organized as follows. The next section provides a literature background and introduces a definition of social entrepreneurship as applied

throughout this study. The third section presents several theoretical perspectives including the failure thesis, interdependence theory, welfare theory and supply-side theory, relates them to social entrepreneurship and formulates hypotheses. Section four describes our main data source, introduces different measures of social entrepreneurship and explores national level prevalence rates for our sample of 49 countries. Section five describes the methodology and presents the results. The discussion and the conclusion are presented in section six and seven respectively.

2. Background

Much work on social entrepreneurship has focused on defining the concept (Hoogendoorn, Pennings, & Thurik, 2010; Short et al., 2009)[1]. As mentioned in the introduction, this ongoing debate stems from the observation that social entrepreneurship covers a wide variety of activities, and can be approached from many perspectives (Kerlin, 2009; Mair & Martí, 2006; Nicholls & Cho, 2006; Short et al., 2009; Zahra et al., 2009). According to recent literature reviews, the few empirical studies are characterized by a micro-level perspective with a case-study design or small sample sizes and have therefore not yet provided generalizable results (Hoogendoorn et al., 2010; Short et al., 2009). Macro-level studies, however, are scarce and, like research at the micro-level, mainly qualitative. For example, Borzaga and Defourny (2001) explore the characteristics and future prospects of European social enterprises by analyzing fifteen single country studies; Nyssens (2006) focuses on governance issues and public policies in several European countries; and Kerlin (2009) gives an extensive description of the social origins of social enterprise in seven regions across the globe.

In spite of these contributions, quantitative cross-national studies of the actual level and determinants of social entrepreneurship activities are scarce The following factors have, however. been suggested to at least be of influence on cross-country variations of the level of social entrepreneurial activities: (1) the prevalence of social and environmental problems (Elkington & Hartigan, 2008; Zahra, Rawhouser, Bhawe, Neubaum, & Hayton, 2008); (2) differences in the welfare states and the third sector (Borzaga & Defourny, 2001; Elkington & Hartigan, 2008; Kerlin, 2009); (3) favorable legal and tax regimes (Borzaga & Defourny, 2001; Elkington & Hartigan, 2008); (4) the level of development of economic and social systems (Borzaga & Defourny, 2001); and (5) a culture encouraging entrepreneurship (Elkington & Hartigan, 2008). Despite these suggested factors, it is noteworthy here that none of these studies quantify the prevalence. The few studies that do quantify the level of social entrepreneurial activity, take a single country perspective (Harding & Cowling, 2006; Urban, 2008). An exception is the first global survey on social entrepreneurship conducted by the Global Entrepreneurship Monitor (GEM). The 2009 GEM annual report (Bosma & Levie, 2010) is, however, descriptive in nature and does not aim to explain country variations.

[1] Comprehensive overviews of definitions of social entrepreneurship have recently been given by Dacin et al. (2010) and Zahra et al. (2009).

One perspective to explore social entrepreneurship at the aggregate level is by perceiving it as an activity that comes into existence at the intersection of market, state and civil society (Figure 1).[2] This perspective allows the definition of social entrepreneurship vis-à-vis its related fields. The next subsection briefly describes this view and subsequently concludes by introducing the definition of social entrepreneurship as used in the remainder of this paper.

2.1. Social entrepreneurship and related fields

Social entrepreneurship represents different models throughout the world. Kerlin (2009) demonstrates, drawing on social origins theory, that a region's history can shape socio-economic conditions that influence the emergence and characteristics of social entrepreneurial activity. Both Kerlin (2006; 2009) and Nicholls (2006) (2006) demonstrate that various models of social entrepreneurship emerge from different points of origin across the junctions of state, market and civil society[3] with their own institutions, guiding principles, and logic.[4] In the United States for example, social entrepreneurship emerges at the crossing of market and civil society against the background of a strong but reluctant state and a long tradition of market reliance. In Latin America, on the other hand, social entrepreneurship and co-operative models of social businesses are more or less positioned at the same crossing as the Unites States but for different reasons. In the Southern part of the American continent, social entrepreneurship is even more 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. In Europe, in contrast, social entrepreneurship is strongly supported by local government and European Union policy. This is evident for example at a European level where the European Commission executes a policy towards 'social economy' enterprises aiming to guarantee a "playing field in which they can compete effectively in their markets and on equal terms with other forms of enterprise, without any regulatory discrimination and respecting their particular principles, modus operandi, needs, particular goals, ethos and working style" (European Commission, 2009; Kerlin, 2009).

Figure 1 visualizes that the boundaries of social entrepreneurship with its related field are not unambiguous; social entrepreneurship entails a mixture of formal and informal, public and private, and non-profit and profit activities. Not surprisingly, a range of closely related concepts thwarts defining social

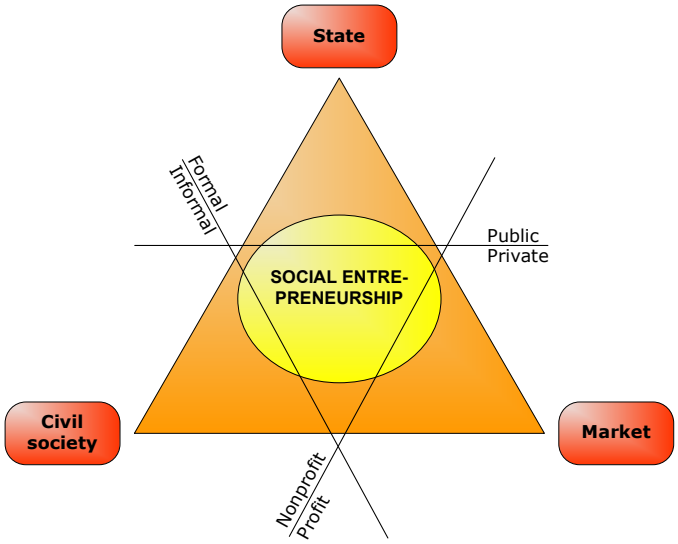
[2] In line with Pestoff (1992) we use the term 'civil society' as a combination of the third sector and the community (Pestoff, 1992).

[3] According to Salamon, Sokolowski, and List (2003), civil society organizations are private in character and not part of the governmental apparatus. In addition, they are, unlike private institutions, not primarily commercial but serving some public or community purpose without generating profits for those involved in them, such as directors or owners. The civil society sector refers to a broad spectrum of organization including registered charities, development non-governmental organizations, community groups, women's organizations, faith-based organizations, professional associations, trades unions, self-help groups, social movements, business associations, coalitions and advocacy groups.

[4] The intermediate space at the crossroad of state, market and community has been claimed to represent: associations (Streeck & Schmitter, 1985); third sector (Evers & Laville, 2004; Pestoff, 1992); civil society (Anderson, Dana, & Dana, 2006); social business entrepreneurs (Kievit, Dijk, & Spruyt, 2008); social economy which incorporates social enterprise (Defourny, 2009; Nyssens, 2006); and social entrepreneurship (Nicholls, 2006a; Nicholls, 2006b).

entrepreneurship. These related concepts include: non-market entrepreneurship (Shockley, Frank, & Stough, 2008), non-profit institutions (Nissan, Castaño, & Carrasco, 2010; United Nations, 2003), sustainable entrepreneurship (York & Venkataraman, 2010) and CSR practice (Garriga & Melé, 2004; Van Marrewijk, 2003), and third sector and social economy (Anheier & Ben ‐ Ner, 1997; Nyssens, 2006). As specific theories with regards to the drivers of social entrepreneurship at the macro-level are not available, we draw on theories and insights from these related fields to formulate and test hypotheses. In particular, we focus on non-profit literature and entrepreneurship literature.

Figure 1 Social entrepreneurship at the intersection of market, state and civil society



Source: Based on Pestoff (1992).

In the next section we investigate several theories from these fields, relate them to social entrepreneurship and formulate hypotheses. But first, we define social entrepreneurship as used throughout the remainder of this paper.

2.2. Defining social entrepreneurship

For the sake of the international comparative perspective of this study we need a definition of social entrepreneurship at a high level of abstraction which captures regional differences in what the term means and how it is supported and developed. By sacrificing specificity (i.e. properties and characteristics) we increase the universal applicability of the concept (Sartori, 1970). Therefore, we define social entrepreneurship as follows: *social entrepreneurship concerns individuals or organizations engaged in entrepreneurial activities with a social goal* (Bosma & Levie, 2010). This definition entails four operational features: individuals, organizations, entrepreneurial activities and social goals.

Including both *individuals* and *organizations* implies that we consider activities that have some structure and stability to their operations (i.e. informal and formally constituted organizations) and activities initiated and launched by individuals not necessarily within an organizational context. By *entrepreneurial*

activities we refer to entrepreneurship as a process ((Bosma & Levie, 2010; Van der Zwan, Thurik, & Grilo, 2010) including both a process of discovering, evaluating and pursuing opportunities (S. Shane & Venkataraman, 2000) as well as a process of new business creation (Gartner, 1990). More specifically and in line with our main data source, we measure entrepreneurship as the share of the adult population that is "in the process of setting up a business they will (partly) own and/or [that is] currently owning and managing an operating young business" (Reynolds et al,, 2005). *Social goals* refer to the enhancement of social wealth creation, as opposed to private wealth creation, and the desire to benefit society in some way. Social wealth creation is the contribution of the individual's entrepreneurial effort to the broader society such as the provision of clean water and education to deprived communities, empowerment of women, and providing jobs for disabled people. In line with Zahra et al. (2009) social wealth can be defined as the result of social value created offset by social costs incurred (Zahra et al., 2009). What contributes to the complexity of defining social goals is that there is no consensus on which social objectives benefit society. According to Cho (2006), this discussion inevitably requires political choices and hence involves a 'value' dimension about which concerns can claim to be in society's 'true' interest (Cho, 2006).[5] For the purpose of this paper we consider 'social' as a desire to benefit society in some way without any normative restrictions.[6]

3. Hypotheses formulation

In this section we describe four theoretical perspectives that have emerged in the realm of entrepreneurship and non-profit literature and formulate hypotheses with regards to the prevalence of social entrepreneurship. These four theoretical perspectives include the failure thesis, interdependence theory, welfare state theory, and supply-side theory.

3.1. Failure thesis

One of the dominant theoretical perspectives in explaining the size of the non-profit sector is the failure thesis (Salamon et al., 2000). This theoretical perspective assumes that the level of non-profit activity is influenced by the extent to which the market and state are performing their basic functions (Nissan et al., 2010; Salamon et al., 2000; Salamon et al., 2003; Weisbrod, 1977).[7] Within classical economic theory, market imperfections such as unsatisfied production of public goods for reasons of free-rider behavior are considered the justification for the presence of government (Weisbrod, 1977). As perfect market conditions are

[5] Illustrative in this respect is an article by Abdukadirov in "The dark side of social entrepreneurship" in which it is argued that terrorists may be considered social entrepreneurs (Abdukadirov, 2010).

[6] It goes beyond the scope of this paper to unveil the complexity of social goals, political choices and values. See for more discussion Cho (2006) and Tan, Williams & Tan (2005).

[7] Next to market failure and state failure, Salamon et al. (2000) acknowledge the existence of failures with respect to the non-profit or civil society sector. The so-called voluntary failure describes the limitations of the voluntary sector as a mechanism for meeting public needs. We limited our examination of the failure thesis to market and state.

rarely met[8], the state performs a variety of functions: provide and maintain institutions, correct in case of market failure, produce public goods, and act as a market party. Government failure exists when the above-mentioned functions are not met and market imperfections become socially undesirable. According to Weisbrod (1977), non-profit organizations fill the gap left by market and government. So far, empirical evidence for this theoretical perspective regarding non-profit activity has not been convincing. A study by Salomon et al. (2000) using two measures for government failure (i.e. (1) the degree of heterogeneity[9] in a population measured in terms of religious diversity and (2) government social spending), did not confirm this thesis. The same holds for a recent study by Nissan et al. (2010) using public expenditure in welfare as an indicator for government failure.

The belief that weak functioning or failure of market or government is of influence on the prevalence of social entrepreneurship seems to be widespread (Elkington & Hartigan, 2008; Kerlin, 2009; Mair & Martí, 2009; Nicholls, 2006b; Nyssens, 2006; Zahra et al., 2008). Kerlin (2009), for example, found that the general theme underlying the emergence of social enterprise in all seven regions and countries she studied is the absence of state social programs of funding, due to either the retreat or poor functioning of the state. Hence, we assume that social entrepreneurs perceive these failures as a source of opportunities and try to create social value by addressing them. An example of a market failure that resulted in an innovative business model with a social aim is microfinance. Yunus, founder of the Grameen Bank for microfinance and recipient of the Nobel Peace Price in 2006, addressed the malfunctioning of the capital market for the rural poor in Bangladesh in the early seventies. He created the first microfinance institution, which enabled poor people to borrow small amounts of money as start-up capital to change their own future. Therefore, applying the failure thesis to explain the variation in the level of social entrepreneurship seems to be justified and hence we formulate the following hypothesis[10]:

H1a: The prevalence rate of social entrepreneurship is negatively related to government expenditure on welfare.

3.2. Interdependence theory

An alternative view of the failure thesis originates from the idea that the relationship between governments and non-profit organizations need not be supplementary where non-profits supplement the government and in principle both address the same needs. (Nissan et al., 2010; Salamon & da Costa Nunez, 1995; Young, 2000). The alternative view assumes a relationship of potential interdependence or partnership where non-profits and government complement each other. Whereas the failure thesis assumes non-profit activity to be a residual

[8] Markets are successful if the following conditions are met: perfect competition, perfect information, absence of externalities, divisibility, excludability, zero transactions costs, zero entry barriers, economic rationality, fair distribution of wealth and income (Harris & Carman, 1983).

[9] Weisbrod (1977) points out that government failure is most likely when considerable heterogeneity exists in a population which indicates the existence of a broad spectrum of opinions about which public goods to produce or more general, when market imperfections need government interventions. This is also known as heterogeneity theory.

[10] We focus on government failure since we assume that government failure includes and transcends market failure.

of unsatisfied demand for social services left unanswered by the state, the interdependence theory assumes that non-profit organizations are more flexible and pro-active in responding to social needs. Non-profits are not only often active in a field before governments are able to respond, they also mobilize political support needed to stimulate government involvement (Salamon & da Costa Nunez, 1995; Salamon et al., 2000; Young, 2000). In case the relationship between government and the non-profit sector is one of partnership, non-profit organizations deliver collectively financed social services on behalf of the government.

Regarding social entrepreneurship, several authors argue that a relationship of partnership and interdependence characterizes the European situation (Borzaga & Defourny, 2001; Nyssens, 2006). Young (2008) and Kerlin (2006) state that a relationship of interdependence or a contractual relationship is also common in the United States, albeit for different reasons. In Europe this practice is considered an alternative approach to the traditional welfare state model and hence stimulated by the government whereas in the United States resource scarcity drives these organizations to seek for new combinations of preferred and non-preferred service offerings. In both cases governments seeking more efficient or effective ways to address public goals contract out with private initiatives (Young, 2000; Young, 2008). Hence, we expect that part of the government budget favors the development of social entrepreneurial activity. From this perspective we therefore formulate the following alternative for hypothesis 1a:

H1b: The prevalence rate of social entrepreneurship is positively related to government spending on welfare.

3.3. Welfare state theory

Early theories on welfare state growth (Wilensky, 1975) and more contemporary discussion on welfare state (Pierson, 1996) suggest a relationship between welfare state expansion and processes of economic growth; “strong economies produce strong welfare states” (Pierson, 1996). This implies that economic development is associated with an increase in size of the welfare state and hence, in line with the failure thesis, higher levels of income or wealth decrease the demand for non-profits (Nissan et al., 2010). Hence the following hypothesis is formulated:

H2a: The prevalence rate of social entrepreneurship is negatively related to GDP per capita.

In contrast with this perspective, an alternative explanation stemming from the realm of social entrepreneurship literature suggests an opposing view. Bosma and Levie (2010) suggest that individuals in richer countries, having satisfied their own basic needs, can afford to turn to needs of others (Bosma & Levie, 2010). Hence this leads to the following opposing hypothesis:

H2b: The prevalence rate of social entrepreneurship is positively related to per capita income.

Inglehart (1981; 1997; 2000) suggests that an increase in wealth is associated with fundamental changes in values. Whereas Bosma and Levie (2010) suggest that wealthy individual can simply afford to turn to the needs of others, Inglehart suggests that economic development will eventually lead to a shift from materialistic to postmaterialistic values. The concept of postmaterialism refers to the degree to which the population of a society values non-materialistic life-goals such as personal development, self-expression and the desire for meaningful work over material ones (Inglehart, 1981; Inglehart, 1997; Inglehart, 2000). We hypothesize that the higher the degree of postmaterialism in a country, the more likely the population considers the well-being of others, finding its expression in activities such as volunteering, environmental protection, cultural issues and social entrepreneurship. An interesting study in this respect is one by Uhlaner and Thurik (2007) who found a negative relationship between postmaterialism and entrepreneurial activity across countries. They argue that material gains, which are of less value to postmaterialist individuals, are crucial to commercial entrepreneurship. Postmaterialistic societies put less emphasis on economic growth and hence, are likely to be less entrepreneurial. Given Baumol's argument (1990) of substitution of one form of entrepreneurship for another as a result of changes in institutions, rules and norms in society, we assume that in postmaterialistic societies, commercial entrepreneurship is (partly) replaced by social entrepreneurship. This leads to the following hypothesis:

H3: The prevalence rate of social entrepreneurship is positively related to the level of postmaterialism.

3.4. Supply-side theory

A necessary condition for any type of entrepreneurial activity to emerge is the availability of individuals who are willing to and capable of exploiting opportunities and, indeed, choose the entrepreneurial option.[11] A significant empirical literature exists that seeks to test a range of factors influencing occupational choices at the individual level.[12] At the aggregate level, explanations for the prevalence of entrepreneurship are subject to a more multidisciplinary approach such as the 'eclectic' framework by Verheul, Wennekers, Audretsch and Thurik (2002).[13] According to Verheul et al. (2002), explanatory factors of the rate of entrepreneurship can be classified into supply and demand side factors. On the supply side, aggregate characteristics of the country to which an individual belongs are considered and shaped by a demographic dimension including population growth, age structure, rate of urbanization, and income levels) as well as a cultural one including values and beliefs (Audretsch et al., 2007).

In order to understand the explanatory factors of the prevalence of social entrepreneurship from a supply side perspective, we explore two cultural factors:

[11] This perspective draws on the distinction between the supply side and the demand side of entrepreneurship (Audretsch, Grilo, & Thurik, 2007; Bosma, Zwinkels, & Carree, 1999; Van Praag, 1996; Verheul, Wennekers, Audretsch, & Thurik, 2002).

[12] See for an overview of references Parker (2009) Blanchflower (2004) and Grilo & Thurik (Grilo & Thurik, 2005)

[13] For updates of this framework see Wennekers, Uhlaner & Thurik (2002) and Audretsch, Grilo & Thurik (Audretsch et al., 2007).

entrepreneurial spirit (i.e. the level of entrepreneurial activity) and individualistic versus collectivistic values. Next, we introduce these factors and formulate hypotheses for each of them.

Entrepreneurial spirit. One approach that relates culture to entrepreneurial behavior at a country level is the 'legitimation' or 'moral approval' approach (Etzioni, 1987) which assumes that a higher overall level of legitimation of entrepreneurship will result in higher prevalence rates.[14] Legitimation may be reflected in more attention to entrepreneurship in the media and the educational system, high social status of entrepreneurs, and public policies to encourage self-employment (Freytag & Thurik, 2007). This approach resonates with a suggestion made by Elkington (2008) who put forward that the prevalence of social entrepreneurship is positively influenced by a culture encouraging entrepreneurship. It seems indeed plausible to assume that a culture which favors entrepreneurship influences the likelihood of individuals motivated to address social needs to turn to entrepreneurial practices instead of, for example, charity or philanthropy. We postulate the following hypothesis:

H4: The prevalence rate of social entrepreneurship is positively related to a society's entrepreneurial spirit.

Individualistic versus collectivistic values. According to Hofstede (Hofstede, 1991) most people in our world live in collectivist societies: societies in which the interest of the group prevails over the interest of the individual. In these societies the relationship between the group, also referred to as extended family, and the individual is one of dependence where individuals take care of each other and throughout people's lifetimes continue to protect each other. In contrast, in individualistic societies individual ties between individuals are loose and individuals are taught from early childhood onwards to take care of themselves independent of a group. Individualistic and collectivistic values[15] have also been associated with levels of entrepreneurship and Hofstede's index which measures the degree of individualism has been used by multiple authors (Hartog, Van Stel, & Storey, 2010; Hofstede, 1980; Mitchell, Smith, Seawright, & Morse, 2000; Mueller & Thomas, 2001; S. A. Shane, 1992). Hayton, George and Zahra (2002) conclude, based on an extensive review of empirical research relating national culture to entrepreneurship that cultural values have a direct effect on individual characteristics and an indirect influence via needs and motives on levels of entrepreneurship. In general, these authors state, it is hypothesized that cultures high in individualism are supportive of entrepreneurship. In particular, evidence was found that cultural values such as uncertainty avoidance and individualism are significantly related to individual traits that are commonly associated with entrepreneurship: internal locus of control, risk taking, and innovativeness (Hayton et al., 2002; Mueller & Thomas, 2001).

[14] See for a more detailed description of this approach and a two other approaches that relate culture to the level of entrepreneurship (i.e. the aggregate psychological trait approach and the push explanation of entrepreneurship) Wennekers (2006), Noorderhaven et al. (2004), Baum et al. (1993), and Freytag and Thurik (Freytag & Thurik, 2007).

[15] Hofstede's other cultural dimensions include Power Distance Index (PDI), Masculinity (MAS), Uncertainty Avoidance Index (UAI) and Long-Term oOrientation (LTO).

With respect to social entrepreneurship, Borzaga and Defourny (2001) suggest that social enterprises are not widespread in countries where social services are, to a large extent, provided by informal sources such as families. Conversely, they suggest that in countries where family ties are loose, the demand for social services is higher and hence social enterprises are more widespread. Put in terms of Hofstede, we expect social entrepreneurship to be more widespread in individualistic countries than in collectivistic countries. Despite the observation that social organizations may provide product and services other than the social services mentioned by Borzaga and Defourny, which may lead to other assumptions, we postulate the following hypotheses:

H5: The prevalence rate of social entrepreneurship is higher in individualistic societies.

Before testing these hypotheses, we introduce the data used and the measures of social entrepreneurship applied.

4. Data

This section consists of three subsections. The first subsection describes our main data source. Next, we introduce several measures of social entrepreneurship as used throughout the remainder of this paper. Since our data provide unique insights to the level of social entrepreneurship across countries, we end this section by exploring national level prevalence rates of social entrepreneurship in more detail.

4.1. Data source

The Adult population Survey (APS) from the global Entrepreneurship Monitor (GEM) 2009 is used as our main data source to provide insight into the level of social entrepreneurial activity across countries and explain the variation between countries. GEM is an international research program providing harmonized annual data on entrepreneurial activity at the national level with samples of at least 2,000 randomly selected adults in each participating country. The main objectives of the GEM research program are enabling a cross-country analysis of the level of entrepreneurial activity, uncovering determinants of entrepreneurial activity, measuring the economic impact of entrepreneurship, identifying policies that may stimulate the level of entrepreneurial activity, and examining special topics of common concern and/or those that are specific to an individual country. 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 are actively involved in creating a new business that they will (partly) own. 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. In total, 49 nations that participated in GEM 2009 APS collected additional data on social

entrepreneurial activity.[16]

4.2. Measures of social entrepreneurship

Within the GEM annual survey the entrepreneurially active adult population is 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*". When social entrepreneurship is involved, the question used to identify this type of entrepreneur reads as follows: "*Are you, alone or with others, currently trying to start or currently owning and managing any kind of activity, organization or initiative that has a particularly social, environmental or community objective?*" Whether an objective is considered social or not, depends on a respondent's perception. Referring to "*activity, organization or initiative*" is broader than new business creation. If a respondent answers positively to both above mentioned questions, a control question which checks if both initiatives are the same allows us to distinguish between two categories of social entrepreneurs: (1) those that overlap with commercial entrepreneurs and, we assume, start a social business and (2) those who are involved in a social activity but do not necessarily start a new business.

Because of the heterogeneity of activities that may be captured by these questions, in particular in relation to the broad international context, we introduce two conceptual notions of social entrepreneurship and use them as measures of social entrepreneurship to explore our data. These measures are based on the distinction between social entrepreneurs who start/own-manage a social business and those who are not involved in business creation. We will refer to the former group as "social business entrepreneur" (i.e. percentage of the adult population that is actively involved in starting or owning-managing *a business* with a particularly social, environmental or community objective) and to the latter as "social initiator" (i.e. percentage of the adult population that is actively involved in starting or owning-managing *any kind of activity or initiative* that has a particularly social, environmental or community objective). We believe this distinction is relevant because we expect these groups and their underlying antecedents to be different.

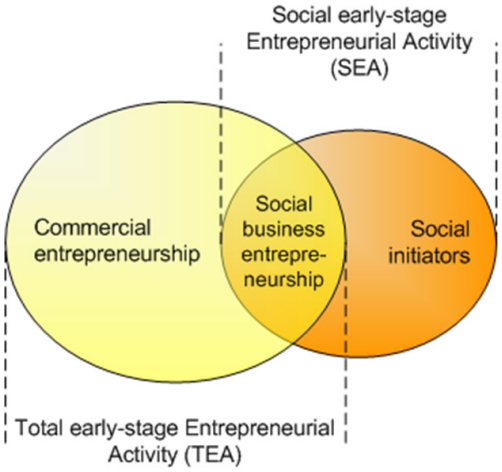
In addition to these two measures and in line with the case for commercial entrepreneurship as described in the previous subsection, social entrepreneurship can be identified at different phases of the entrepreneurial life cycle i.e. nascent, young and established social entrepreneurial activity. Social early-stage entrepreneurial activity (SEA) refers to the aggregate of nascent entrepreneurship and young business entrepreneurship up to 3.5 years. In this sense, SEA is

[16] 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, United Kingdom, United Arab Emirates, United States, Uruguay, Venezuela, and West Bank & Gaza Strip.
No data on the special topic were collected in Japan and Tunisia (which did participate in 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 other countries. Finally, data were collected in Tonga and Yemen but are also excluded in this analysis since these countries reveal extraordinarily high prevalence rates of social entrepreneurship and are therefore considered as outliers.

comparable to the principle GEM measure Total early-stage Entrepreneurial Activity (TEA).

Figure 2 visualizes our measures of social entrepreneurship (i.e. social business entrepreneurship and social initiators) in relation to the measures derived from the phases of the entrepreneurial life-cycle (i.e. TEA and SEA). It will be apparent from Figure 2 that entrepreneurs that do not overlap with the social business entrepreneurs nor with the social initiators are referred to as "commercial entrepreneur".

Figure 2 Conceptual notions of entrepreneurship: commercial entrepreneurship, social business entrepreneurship and social initiators



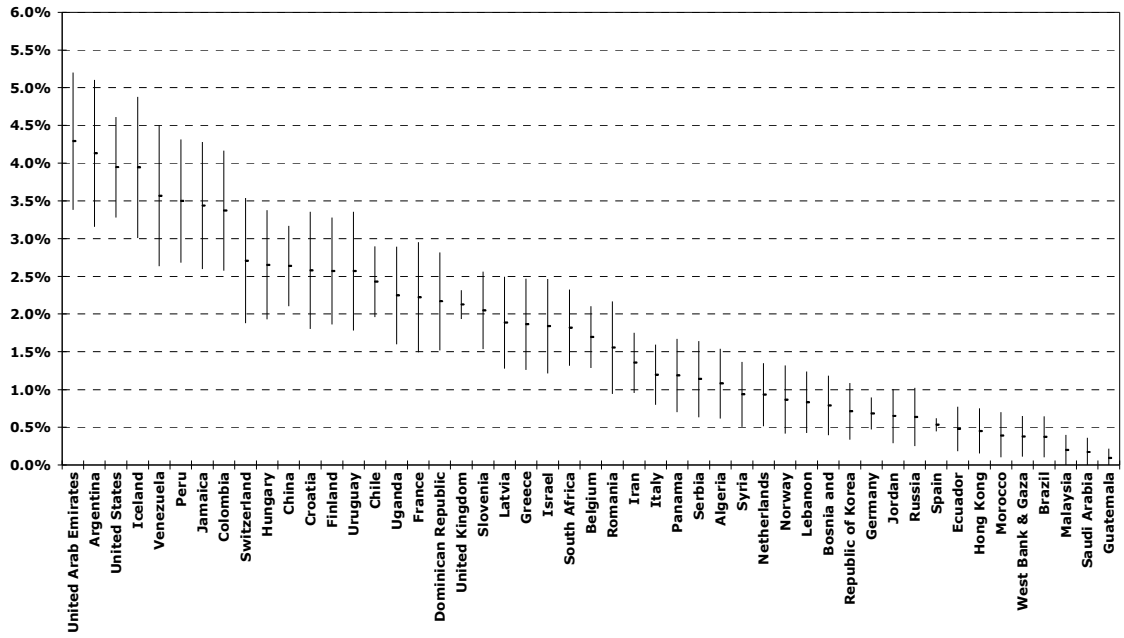
Since our data is the first harmonized large-scale dataset available providing insights into the prevalence of social entrepreneurship across the globe, the next sub-section is devoted to exploring the data through descriptive statistics.

4.3. Prevalence of social entrepreneurship

Prevalence rates of Social early-stage Entrepreneurial Activity (SEA) in all participating GEM 2009 countries are shown in Figure 3.[17] The prevalence rates of social entrepreneurship range from 0.1% in Guatemala to 4.3% in the United Arab Emirates. Also, Argentina (4.1%), the United States (3.9%) and Iceland (3.9%), Venezuela (3.6%), Peru (3.5%), and Jamaica and Colombia (3.4%) have high SEA-rates. At the other end of the spectrum, Guatemala (0.1%), Saudi Arabia and Malaysia (0.2%), and Brazil, West Bank & Gaza Strip and Morocco (0.4%) all reveal low prevalence rates.

[17] The vertical bars represent 95% confidence intervals of the point estimates for SEA. If these vertical bars for any two countries do not overlap, this means that they have statistically different SEA rates.

Figure 3 Prevalence of Social early-stage Entrepreneurial Activity (SEA) by country, GEM 2009, percentage of the adult population (18-64 years of age).



Source: Global Entrepreneurship Monitor, 2009.

Table 1[18] presents the prevalence rates of social entrepreneurial activity (columns 1 and 2) as well as conventional measures of entrepreneurship (columns 3 and 4).

Table 1 Prevalence rates of social entrepreneurship versus conventional measures, by stage of economic development[19], GEM 2009, percentage of the adult population (18-64 years of age).

	Social early-stage Entrepreneurial Activity (SEA)	*Established social entrepreneurial activity*	*Total early-stage Entrepreneurial Activity (TEA)*	*Established entrepreneurial activity*
Low income countries	1.3	0.2	16.9	10.2
Middle income countries	1.8	0.4	11.3	7.8
High income countries	1.9	0.7	6.6	6.8
Overall (unweighted) average	1.8	0.5	10.7	8.0

Source: Global Entrepreneurship Monitor, 2009.

It follows that the prevalence rate of total early-stage entrepreneurship (10.7%) is more than five times the prevalence rate of social early-stage entrepreneurship (1.8%). Focusing on prevalence rates by stage of economic development shows that, mainly in countries with relatively low levels of national wealth TEA rates, are quite high while SEA rates are quite low – such as Algeria, Guatemala,

[18] For an overview of the prevalence rates of social and conventional entrepreneurship by country we refer to Table 6 in the Appendix.

[19] Countries with per capita income levels below 3,000 US$ are classified as 'low income countries'. Countries for which GDP per capita in US$ lies between the income thresholds of 3,000 and 17,000 US$ are classified as 'middle income countries'. 'High income countries' are all countries with a per capita income level of at least 17,000 US$.

Jamaica, Lebanon, Morocco, Uganda, and Venezuela (see Table 6 in the Appendix). The gap between prevalence rates of TEA and SEA is, on average, smaller for high income countries as opposed to low income countries. In addition, *established* entrepreneurship (i.e. activities that have been in existence for more than 3.5 years) reveals a similar gap between social and commercial entrepreneurship (columns 2 and 4) which also decreases by stage of economic development.

Table 1 also suggests that social entrepreneurship is mainly an early-stage phenomenon, whereas 'conventional' entrepreneurship is also widely prevalent in established businesses. A possible explanation could be that social entrepreneurship may be such a young field that there are relatively few established organizations in this area. This suggests that it is a matter of time for the percentage of established activities to increase. Alternatively, it may imply that starting a social initiative or social business is somehow difficult to turn into lasting action. A third explanation concerns the intentions of the social entrepreneurs to turn their initiatives into lasting businesses or activities. It may well be that the social initiators organize their initiatives as a project possible for the duration of assigned subsidies and grants (i.e. temporary initiatives). These explanations are likely to vary between the different socio-economic contexts of the countries in our sample.

Table 2 Prevalence rates of commercial entrepreneurship, social business entrepreneurship and social initiators as well as SEA as a percentage of commercial entrepreneurship, by stage of economic development, GEM 2009, percentage of the adult population (18-64 years of age).

	TEA	SEA		
	Commercial entrepreneurs *(i.e. part of TEA that does not overlap with SEA)*	***Social business entrepreneurs*** *(i.e. TEA - SEA overlap)*	***Social initiators*** *(i.e. part of SEA that does not overlap with TEA)*	*Social initiators as % of all entrepreneurs**
Low income countries	16.5	0.4	0.9	4.9
Middle income countries	10.7	0.6	1.2	9.7
High income countries	6.1	0.4	1.5	18.3
Overall (unweighted) average	10.2	0.5	1.2	10.4

** TEA plus SEA minus the overlap*

Source: Global Entrepreneurship Monitor, 2009.

Table 2 presents the prevalence rates of the refined entrepreneurial concepts: commercial entrepreneurs, social business entrepreneurs and social initiators.[20] These results confirm the figures in Table 1: commercial entrepreneurship decreases with national wealth while social activities increase by stage of economic development. More specifically, the prevalence rate of commercial entrepreneurship falls from 16.5% in low income countries to 6.1% in high income

[20] For an overview of the prevalence of commercial entrepreneurship, social business entrepreneurship and social initiators as well as SEA as a percentage of commercial entrepreneurship by country we refer to Table 7 in the Appendix.

countries whereas social initiatives rise from 0.9% in low income countries to 1.5% in high income countries. Social initiators as a percentage of all entrepreneurs (i.e. social initiators divided by TEA plus SEA minus the overlap) (column 4) substantially increases by stage of economic development. In multivariate analyses in the next section, we use this particular measure of social entrepreneurship as our dependent variable.

The differences in involvement in social versus commercial entrepreneurship also find their expression in demographic characteristics, i.e. gender and age (Table 3). With respect to gender, Table 3 reveals that males are more actively involved in both types of entrepreneurship than females. This pattern is similar at all stages of economic development (not displayed in Table 3). The gender gap is, however, smaller for social entrepreneurial activity than for commercial entrepreneurial activity. This suggests that women are proportionally more likely to become social entrepreneurs compared to commercial entrepreneurs. With respect to age, on average people in the age category 25-44 years seem to be most likely to become engaged in early-stage entrepreneurial activity (both social and commercial). A closer look reveals that commercial entrepreneurship most likely includes individuals aged between 25-34 years, while social entrepreneurship relatively more often includes people in the age category 35-44 years. In addition, the average age of social entrepreneurs in high income countries tends to be higher compared to low income countries.

Table 3 Demographic characteristics of social and total early-stage entrepreneurs worldwide, GEM 2009, percentage of the adult population (18-64 years of age) involved in SEA/TEA.

		SEA	*TEA*
Gender	Male	55.7	62.0
	Female	44.3	38.0
Age	18-24 years	13.5	16.7
	25-34 years	24.1	28.1
	35-44 years	27.3	24.1
	45-54 years	21.9	19.1
	55-64 years	13.3	12.0

After having explored the data, we now turn to the methodology applied and the results of our attempt to find what drives a country's level social entrepreneurship.

5. Methodology and results

5.1. Dependent variable

To test our hypotheses we use our main data source as described in the previous section, we use various additional sources, including World Value Survey, IMF World Economic Outlook Forum Database and WHO Global Health Observatory Dataset. As our primary measure for social entrepreneurship we take social initiators as a percentage of all entrepreneurs (i.e. in terms of Figure 2,

social initiators divided by TEA plus SEA minus the overlap)[21]. Put differently, our dependent variable is the 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 an entrepreneur. For this purpose we take a dynamic perspective focusing on the creation of new businesses, organizations and initiatives (i.e. taking into account the nascent and young entrepreneurs).[22,23] This measure is also used as our dependent variable in the rest of this paper.[24]

5.2. Independent variables and data analysis

To test our hypothesis we take a multivariate approach by means of multiple regression analyses. A series of models are carried out to determine the effects of different variables on the prevalence of social entrepreneurship.

Given the relationship between a country's level of economic development and its level of entrepreneurial activity (Carree, Van Stel, Thurik, & Wennekers, 2002; Carree, Van Stel, Thurik, & Wennekers, 2007; Sternberg & Wennekers, 2005; Wennekers, Van Stel, Thurik, & Reynolds, 2005; Wennekers, Van Stel, Carree, & Thurik, 2010) and a suggestive positive relationship between the level of economic development and social entrepreneurship stemming from our descriptive statistics in section 4.3, we start our analyses by exploring this relationship in more detail (hypotheses 2a and 2b). We use Gross Domestic Product (GDP) per capita in purchasing power parity (PPP) as indicator for a country's level of income. Whereas past research provided accumulating and consistent evidence for a U-shaped relationship, we include both the linear term (Model I) and squared term (Model II) for GDP per capita in order to account for these curvilinear effects. Since both the linear and the squared term are significant and as the model fit substantially increases with the inclusion of the squared term, we further improve our model from this base model. To test hypotheses 1a and 1b, government expenditure on health per capita is added to the base model as a proxy for government spending on welfare. Hypothesis 3 is tested by using Inglehart's four-item postmaterialism index.[25] In order to test hypothesis 4, the entrepreneurial spirit of a country is measured as the level of TEA. Finally, hypothesis 5 is tested using Hofstede's index on individualism. We refer to Table 8 in the Appendix for a description and source reference of the variables used to test our hypotheses.

[21] We chose to exclude the social business entrepreneurs from our multivariate analysis because of the low prevalence rate. Moreover, focusing only on social entrepreneurs that do not overlap with regular entrepreneurs provides a straighter and less ambiguous picture.

[22] A static perspective relates to the number of business owners. See Wennekers (2006) for more details on this distinction.

[23] Due to data limitations, the overlap category for established social entrepreneurs cannot be separated from the non-overlap categories.

[24] The values for this variable for each country are provided in the last column of Table 7.

[25] The World Value Survey also provides a twelve-item index for postmaterialism but, since this index is available for fewer countries in our sample than is the four-item index, we take the more concise version.

Two important aspects of our data need to be addressed before we move to the results: (1) correlation of independent variables with per capita level of income and (2) lack of complete data.

First, strong bivariate correlations can be observed between per capita level of income and the other independent variables (i.e. per capita government expenditure on health, entrepreneurial spirit, degree of individualism, and degree of postmaterialism) (see Table 9 of the Appendix). With the exception of the degree of individualism, literature indicates a relationship between the level of entrepreneurship and economic development (Wennekers et al. 2010), welfare state expansion and economic growth (Pierson, 1996), and the degree of postmaterialism and the level of economic development (Inglehart, 2000; Inglehart, 2003). Hence, we correct our independent variables for per capita income and include these corrected variables in our analyses.[26] For instance, for entrepreneurial spirit this correction involved performing a linear regression $T_i = T(GDP_i) + u_i$, where T_i is the level of entrepreneurship expressed as TEA for country *i*, $T(GDP_i)$ is a function of GDP (including intercept), and u_i denotes the error term. Because of the curvilinear relationship between TEA and per capita income, $T(GDP_i)$ is a *quadratic* function and hence, $T(GDP_i) = \alpha + \beta(GDP_i) + \gamma(GDP)^2$. Next, entrepreneurial spirit corrected for GDP is defined as the residuals $\hat{u}_i = T_i - \hat{T}(GDP_i)$ of the linear regression, where $\hat{T}(GDP_i) = \hat{\alpha} + \hat{\beta}(GDP_i) + \hat{\gamma}(GDP)^2$ and $\hat{\alpha}$, $\hat{\beta}$ and $\hat{\gamma}$ are the estimated coefficients. We consider $\hat{u}_i$, entrepreneurial spirit corrected for GDP, as a country's 'true' entrepreneurial spirit. For the other independent variables, that is per capita government expenditure on health, individualism and postmaterialism, the estimated residuals are calculated as a *linear* function in GDP, that is $\hat{T}(GDP_i) = \hat{\alpha} + \hat{\beta}(GDP_i)$.

Second, due to use of different datasets, we lack complete data for all countries in our dataset. In order to address this point, we added three seemingly identical models that differ only in the number of countries included (Model III, V and VII in Table 4). These models allow taking account of the independent contribution of several variables in more detailed analyses.

5.3. Results

Table 4 presents a summary of the regression analyses carried out. An initial test of hypotheses 2a and 2b reveals that GDP per capita positively relates to the level of social entrepreneurship (Model I). When adding a squared term for per capita income to take account of a curvilinear effect, it appears that this term is negatively associated with social entrepreneurship (Model II). This implies an inverted U-shaped relationship between per capita income and social initiators as a share of all entrepreneurs (i.e. commercial entrepreneurship, social business entrepreneurship plus social initiators). So from a certain level of economic

[26] See Table 10 in the Appendix for bivariate correlations between the dependent and independent variables *corrected* for per capita income.

development onwards, social entrepreneurship indeed decreases for higher levels of wealth. This supports hypothesis 2b and rejects hypothesis 2a.

As model III shows, per capita government expenditure on health corrected for per capita income is positively related to social entrepreneurship. This suggests that the relationship between government and non-profit organizations is one of partnership and cooperation rather than competition. Thus, model III supports the interdependence theory (hypothesis 1b) and contrasts the failure thesis (hypothesis 1a).

Model IV reveals that a country's entrepreneurial spirit is negatively associated with social entrepreneurship although this effect is not significant. Moreover, extending our model with a country's entrepreneurial spirit neither substantially change the total variation explained nor does it substantially change other effects. Hence, it seems that a country's level of entrepreneurial spirit does not influence the level of social entrepreneurship. Therefore, the model rejects hypothesis 4 and this variable is excluded from further analyses.

Table 4 Explaining social entrepreneurship (i.e. social initiators as a percentage of all entrepreneurs) using aggregate level conditions

	I	*II*	*III*	*IV*	*V*	*VI*	*VII*	*VIII*
Intercept	5.754***	0.256	-1.155	-1.051	-2.789	-1.806	-2.789	-2.708
	(3.00)	(0.08)	(-0.39)	(-0.35)	(-0.62)	(-0.48)	(-0.62)	(-0.58)
GDP per capita / 1,000	0.335***	1.025***	1.199***	1.185***	1.326***	1.034***	1.326***	1.316***
	(4.23)	(3.49)	(3.90)	(3.85)	(3.01)	(2.85)	(3.01)	(2.91)
(GDP per capita / 1,000)^2		-0.014**	-0.018***	-0.017***	-0.020**	-0.014*	-0.020**	-0.020**
		(-2.36)	(-2.89)	(-2.83)	(-2.41)	(-2.00)	(-2.41)	(-2.30)
Per cap. gov. exp. on health corr. for GDP			4.577*	4.273*	5.729	0.522	5.729	5.182
			(1.89)	(1.75)	(1.03)	(0.18)	(1.03)	(0.80)
Entrepr.spirit corr. for GDP				-0.189				
				(-0.91)				
Individualism corr. for GDP						0.181**		
						(-0.48)		
Postmaterialism corr. for GDP								5.280
								(0.18)
R^2	0.2434	0.3404	0.4135	0.4249	0.3823	0.5207	0.3823	0.3831
Adj. R^2	0.2270	0.3111	0.3725	0.3701	0.3050	0.4589	0.3050	0.2758
N	47[a]	47[a]	47[a]	47[a]	36[b]	36[b]	28[c]	28[c]

*Note: * Significant at 10% level; ** Significant at 5% level; *** Significant at 1% level; t-values are between brackets*

a. Countries excluded from total sample due to incomplete data: Hong Kong and West Bank & Gaza Strip

b. Countries excluded from total sample due to incomplete data: Algeria, Bosnia and Herzegovina, Croatia, Dominican Republic, Hong Kong, Iceland, Jordan, Latvia, Serbia, Slovenia, Syria, Uganda, West Bank & Gaza Strip.

c. Countries included: Argentina, Brazil, Chile, China, Colombia, Finland, France, Germany, Guatemala, Iran, Italy, Jordan, Korea, Malaysia, Morocco, Netherlands, Norway, Peru, Romania, Russia, Serbia, Slovenia, South Africa, Spain, Switzerland, United Kingdom, United States, and Uruguay.

The estimation results of Model VI show that a country's degree of individualism positively affects social entrepreneurship. This result is in line with hypothesis 5 and suggests that in countries where ties between individuals are loose, social entrepreneurship is more widespread.

Finally, Model VII and VIII are used to test hypothesis 3 which predicts a positive relationship between the degree of postmaterialism and the level of social entrepreneurship. Although Model VIII does indeed suggest a positive effect, this effect is not significant and as a result including postmaterialism does have a negligible contribution compared to Model VII. Since the degree of postmaterialism is corrected for per capita income, it seems that a presumed effect of postmaterialism is completely captured by the level of income. Indeed, when explaining the share of social entrepreneurship in all entrepreneurship by postmaterialism only (i.e. uncorrected for per capita income and without per capita income as explanatory variable), postmaterialism reveals a significant and positive effect. Even when extending this model with GDP per capita corrected for postmaterialism (in a similar way postmaterialism is corrected for GDP per capita) postmaterialism is still significantly positive. However, the number of countries for which the degree of postmaterialism is available is limited (n=28) and drawing conclusions is a tricky pursuit.[27]

The hypothesized effects of our independent variables on social entrepreneurship and the results from our analyses are collected in Table 5.

Table 5 Overview of the hypotheses, their proposed effect and whether the results support hypotheses or not.

	Hypothesis	Effect	Supported
Effect of government expenditure on welfare	1a	-	
	1b	+	Yes
Effect of per capita income	2a	-	
	2b	+	Yes
Effect of a society's degree postmaterialism	3	+	
Effect of a society's entrepreneurial spirit	4	+	
Effect of a society's degree of individualism	5	+	Yes

Before we move on to the conclusions, we discuss the results of our analyses in the next section including a discussion of the limitations of this study and suggestions for future research.

6. Discussion

This section is divided into two subsections: an actual discussion of the results and one which covers some of the limitations of this study. In both subsections directions are provided for future research.

[27] Models that combine both the degree of individualism and postmaterialism are excluded because only 25 countries had complete data available.

6.1. Discussion of the results

Overall, the regression results imply that social entrepreneurship is a phenomenon strongly driven by a country's level of wealth. Interestingly, the association between per capita income and social entrepreneurship is positive whereas the opposite holds for commercial entrepreneurship. More specifically, whereas the relationship between economic development in terms of per capita income and entrepreneurial activity has been shown to be U-shaped (Carree et al., 2002; Carree et al., 2007; Sternberg & Wennekers, 2005; Wennekers et al., 2005), our data seems to suggest an inverted U-shape for the case of social entrepreneurial activity.[28] Put differently, while in low income countries often people have no alternative source of income and are forced to turn to entrepreneurship (also referred to as necessity entrepreneurship), social entrepreneurship seems a wealth phenomenon to which one can turn in case one can afford to do so. These contrasting shapes may favor Baumol's argument (1990) that as a result of changes in institutions, rules and norms in society, one form of entrepreneurship is (partly) substituted by another. With respect to our hypotheses derived from the welfare state theory, it may be concluded that even though the demand for social entrepreneurial activities may indeed be lower in wealthier countries (as suggested by hypothesis 2a) or social and ecological issues may be addressed by other institutions such as philanthropy or charity, the prevalence of social entrepreneurship is positively affected by the level of economic development, supporting hypothesis 2b.

Inglehart (Inglehart, 2000) analyzed the relationship between a country's economic development and survival strategies. He describes that certain basic values change in societies that have passed a certain threshold of economic development. Beyond this threshold, a shift towards more postmaterialistic values occurs. Our results suggest that a presumed effect of postmaterialism is completely captured by per capita income. Interestingly, as explained earlier, postmaterialism and per capita income both have a positive and significant effect on social entrepreneurship when per capita income is corrected for postmaterialism. Clearly, a rather complex interrelationship between social entrepreneurship, per capita income and postmaterialism exist. Uhlaner and Thurik (2007) studying the association between postmaterialism and entrepreneurial activity conclude that mediating relationships are possibly at play. Whether postmaterialism mediates the relationship between economic development and entrepreneurship or if economic development mediates the relationship between postmaterialism and entrepreneurship, remains unanswered.

In addition, intergenerational differences at the individual level might also play a role here. Inglehart (1997; 2000; 2003) suggests that the hypothesis of postmaterialism is based on two sub-hypotheses: socialization and scarcity. The socialization hypothesis assumes that one's values reflect to a great extent the prevailing circumstances during one's formative years. The scarcity hypothesis assumes that someone's priorities reflect his socio-economic circumstances and hence one attaches greatest value to relatively scarce goods (Inglehart, 2000).

[28] This suggestion should be interpreted with caution though because omitting some countries (Norway in particular) influences the curve towards a more linear relationship.

Taken together, these two hypotheses may increase our understanding of social entrepreneurship. The hypothesis of socialization implies that younger birth cohorts that have experienced unprecedented prosperity are more likely to value non-material goals such as the desire for meaningful work. On the one hand, this may suggest that young people turn to social entrepreneurship because of different values compared to older birth cohorts. On the other hand, older birth cohorts may turn to social entrepreneurship because they have the financial means to do so. This suggestion resonates with Parker's "neoclassical life-cycle theory" of social entrepreneurship which predicts two dominant types to engage in social entrepreneurship: idealistic individuals who operate social enterprises when they are young and wealthy individuals who engage in social entrepreneurship later in life (Parker, 2008). Exploring the association between the intergenerational differences in the degree of postmaterialism and the occurrence of social entrepreneurship is a highly relevant research option. Even more so because the shift from materialistic to postmaterialistic 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). As such, understanding this relationship will allow us to anticipate changes in social entrepreneurial activity.

With respect to the effect of government expenditure on welfare on social entrepreneurship, our results suggest that the relationship between government and social entrepreneurial organizations is one of partnership and interdependence. However, despite the observation that the effect remains positive, when fewer countries are included in the different models, the effect becomes insignificant. Whereas the relationship between social organizations and governments was presented as a duality (i.e. a relationship of competition reflecting the failure thesis *or* a relationship of partnership reflecting the interdependence theory) this may be a false duality. Governments are not the only source of demand for social entrepreneurship implying that low levels of government expenditure on welfare and high levels of social entrepreneurship do not necessarily indicate a failing government. Other sources of demand for social entrepreneurship may stem from consumers of commercial products who prefer purchasing from social enterprise providers and corporations seeking strategic benefits by association with social organizations such as cause related marketing (Young, 2008). Nevertheless, our results are not significant in all models and future research including more or other countries may alter our current insights.

Our results reveal a positive and significant effect of the degree of individualism on social entrepreneurship as was predicted by hypothesis 5. Such a positive association is in line with the association between the degree of individualism and entrepreneurship (Mitchell et al., 2000; Mueller & Thomas, 2001). As suggested by Hayton, et al. (2002), cultural values may influence the level of entrepreneurship directly via individual characteristics or indirectly via individual needs and motives. In addition, cultural values are also believed to influence the institutional context such as the regulatory and legal system and social institutions. The suggestion made by Borzaga and Defourny (2001)that social enterprises are not widespread in countries where social services are to a

large extent provided by informal sources such as families, refers to the latter indirect effect of cultural values. To what extent our results are indeed the result of this indirect effect via society remains unanswered. Further research is needed to analyze these separate direct and indirect effects.

6.2. Limitations

Our study is not without limitations. *First*, as described in the introduction, social entrepreneurship is an ill-defined and not well understood concept representing different models throughout the globe. Using the GEM harmonized dataset on social entrepreneurship including 49 countries involves the risk of comparing apples with oranges and therefore it is very unlikely to find a single set of determinants that is able to explain such a wide range of activities. Although this is inherent to many cross-country studies with a global scope, it is especially true for an ill-defined concept such as social entrepreneurship. Our study covers a wide variety of socio-economic contexts and we know very little to date on how to make a meaningful distinction between these contexts with respect to social entrepreneurship. A suggestion may be to distinguish between countries that are characterized by 'institutional support' and 'institutional void'. Where the support or the lack thereof may concern the role of the government both as a source of demand and performing a 'correcting' role of the government in case of market failure but also cultural values shaping an (un)favorable institutional context such as the two cultural values used in this exploratory study.

Second, we use the first and only large scale survey available to date on social entrepreneurship and, although the questionnaire is based on earlier versions used in the UK and the US, what the data measures remains ambiguous. We tried to address this by introducing two different measures that distinguish between those social entrepreneurs that are actively starting or own-manage a business (i.e. 'social business entrepreneurs') and those who do not and are involved in any activity, organization or initiative with a social, environmental or community objective ('social initiators'). The former group was too small to include as a separate group in the regression analyses and for the latter group it remains unclear what these social entrepreneurs are involved in and whether they can be considered *entrepreneurial* as described in section 2.2. Additional qualitative research at the country level may be insightful.

A *third* limitation of our study concerns its small number of observations (i.e. 49 countries). In some regression models, this number is even more restricted due to unavailable data for variables from additional data sources. Moreover, potential drivers such as volunteering, strength of the civil society, and institutional support for social entrepreneurship could not be included due to lack of (harmonized) data. Furthermore, while the rich diversity in socio-economic contexts as mentioned above necessitates a considerable number of determinants to be included, we are restricted by the small sample size.

Finally, it may be possible that results will change if other proxies are chosen to test the hypotheses. For example, government expenditure on health is chosen as an indicator for government expenditure on welfare whereas another indicator such as public expenditure as a percentage of GDP might alter the results. Moreover, all

variables are measured at one point in time and although a certain time lag is taken into account (e.g. we regress social entrepreneurial activity of 2009 on GDP per capita of 2008), we do not know what may be considered a realistic time lag.

7. Conclusions

Social entrepreneurship attracts attention from practitioners, academics, and increasingly from policy-makers. An ever growing number of cases showing the potential of social entrepreneurs to alleviate society's troubles are subject to scholarly and media attention. Yet, our understanding of the prevalence of social entrepreneurial activity at a country level and our comprehension of factors of influence on the prevalence rate are still limited. Hence, the main purpose of this exploratory paper is to increase our understanding of the prevalence and drivers of social entrepreneurship at the macro-level using large-scale and internationally comparable data in a research domain dominated by case-study designs.

As regards the occurrence of social entrepreneurial activity the data reveals that worldwide 1.8% (unweighted average) of the adult population (18-64 years of age) is involved in Social early-stage Entrepreneurial Activity (SEA), opposed to 10.7% in Total early-stage Entrepreneurial Activity (TEA). Social entrepreneurship seems mainly an early-stage phenomenon (i.e. entrepreneurial activities in existence for less than 3.5 years), whereas 'conventional' entrepreneurship is also widely operationalized in established businesses (i.e. activities that have been in existence for more than 3.5 years).

As regards the drivers of social entrepreneurship at a country level, hypotheses are tested, drawing on various theoretical perspectives (i.e. failure thesis, interdependence theory, welfare state theory and supply-side theory). First and foremost we conclude that social entrepreneurship is a wealth phenomenon: the higher per capita income, the higher the level of social entrepreneurship. In particular, the relationship between per capita income and social entrepreneurship an inverted U-shape. This result sharply contrasts accumulating evidence for a U-shaped relationship between the level of economic development and commercial entrepreneurship. Given the strong and contrasting effect of economic development on both types of entrepreneurship we also conclude that social entrepreneurship is indeed a phenomenon different from commercial entrepreneurship with its own characteristics and dynamics. Furthermore, we found no support for the failure thesis, which assumes that a malfunctioning market or state creates opportunities for social entrepreneurs and thus influences the prevalence rate. Instead, we find some evidence supporting the interdependence theory which assumes a relation of partnership between the government and social organization whereby the latter delivers social services on behalf of and financed by the government. When it comes to cultural values, no support is found that the prevalence of social entrepreneurship is related to a society's entrepreneurial spirit. As is also the case for postmaterialism corrected for the level of economic development, the effect of a society's entrepreneurial spirit on social entrepreneurship disappears when TEA is corrected for the level of economic development. On the contrary, a society's level of individualism can indeed be

considered a driver for social entrepreneurship. This latter finding suggests that in societies where ties between individuals are loose, social entrepreneurship is more widespread and in more collectivist societies social services are provided by informal sources such as extended families.

Although a quantitative approach at a macro-level may lack the depth of substance characteristic of case study research, in particular in the case of social entrepreneurship which covers a wide variety of socio-economic contexts, it does reveal useful clues for explanatory factors for the occurrence of social entrepreneurship. However, future research is needed to confirm the robustness of associations that we found and to be able to make a meaningful distinction between different groups of countries possibly with their own drivers.

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Appendix

Table 6 Prevalence rates of social entrepreneurship versus conventional measures, by stage of economic development[29], GEM 2009, percentage of the adult population (18-64 years of age).

	Country	*Social early-stage Entrepreneurial Activity (SEA)*	*Established social entrepreneurial activity*	*Total early-stage Entrepreneurial Activity (TEA)*	*Established entrepreneurial activity*
Low income countries	Algeria	1.1	0.0	16.7	4.7
	Guatemala	0.1	0.0	25.1	4.2
	Jamaica	3.4	0.6	22.7	16.3
	Lebanon	0.8	0.4	15.0	16.0
	Morocco	0.4	0.3	15.8	15.2
	Saudi Arabia	0.2	0.0	4.7	4.1
	Syria	0.9	0.0	8.5	6.7
	Uganda	2.2	0.8	33.7	21.9
	Venezuela	3.6	0.0	18.7	6.5
	West Bank & Gaza Strip	0.4	0.1	8.6	6.9
	(Unweighted) average	***1.3***	***0.2***	***16.9***	***10.2***
Middle income countries	Argentina	4.1	3.0	14.7	13.5
	Bosnia and Herzegovina	0.8	0.0	4.4	3.9
	Brazil	0.4	0.0	15.3	11.8
	Chile	2.4	0.2	14.9	6.7
	China	2.6	0.3	18.8	17.2
	Colombia	3.4	0.1	22.4	12.6
	Croatia	2.6	1.1	5.6	4.8
	Dominican Republic	2.2	0.8	17.5	11.4
	Ecuador	0.5	0.0	15.8	16.1
	Hungary	2.7	0.1	9.1	6.7
	Iran	1.4	0.2	12.1	6.5
	Jordan	0.6	0.1	10.2	5.3
	Latvia	1.9	0.7	10.5	9.0
	Malaysia	0.2	0.0	4.4	4.3
	Panama	1.2	0.1	9.6	4.2
	Peru	3.5	0.1	20.9	7.5
	Romania	1.6	0.1	5.0	3.4
	Russia	0.6	0.1	3.9	2.3
	Serbia	1.1	0.5	4.9	10.1
	South Africa	1.8	0.1	5.9	1.4
	Uruguay	2.6	0.3	12.2	5.9

[29] Countries with per capita income levels below 3,000 US$ are classified as 'low income countries'. Countries for which GDP per capita in US$ lies between the income thresholds of 3,000 and 17,000 US$ are classified as 'middle income countries'. 'High income countries' are all countries with a per capita income level of at least 17,000 US$.

	(Unweighted) average	***1.8***	***0.4***	***11.3***	***7.8***
High income countries	Belgium	1.7	0.9	3.5	2.5
	Finland	2.6	1.9	5.2	8.5
	France	2.2	0.4	4.3	3.2
	Germany	0.7	0.4	4.1	5.1
	Greece	1.9	0.8	8.8	15.1
	Hong Kong	0.5	0.3	3.6	2.9
	Iceland	3.9	1.5	11.4	8.9
	Israel	1.8	1.4	6.1	4.3
	Italy	1.2	0.5	3.7	5.8
	Korea	0.7	0.1	7.0	11.8
	Netherlands	0.9	0.4	7.2	8.1
	Norway	0.9	0.0	8.5	8.3
	Slovenia	2.0	1.1	5.4	5.6
	Spain	0.5	0.2	5.1	6.4
	Switzerland	2.7	0.1	7.7	8.4
	United Arab Emirates	4.3	0.4	13.3	5.7
	United Kingdom	2.1	1.8	5.7	6.1
	United States	3.9	0.5	8.0	5.9
	(Unweighted) average	***1.9***	***0.7***	***6.6***	***6.8***
Overall (unweighted) average		***1.8***	***0.5***	***10.7***	***8.0***

Source: Global Entrepreneurship Monitor, 2009.

Table 7 Prevalence rates of commercial entrepreneurship, social business entrepreneurship and social initiators as well as SEA as a percentage of commercial entrepreneurship, by stage of economic development, GEM 2009, percentage of the adult population (18-64 years of age).

	Country	***Commercial entrepreneurs*** *(i.e. part of TEA that does not overlap with SEA)*	***Social business entrepreneurs*** *(i.e. TEA - SEA overlap)*	***Social initiators*** *(i.e. part of SEA that does not overlap with TEA)*	*Social initiators as % of all entrepreneurs**
Low income countries	Algeria	16.7	0.0	1.1	6.1
	Guatemala	25.0	0.1	0.1	0.2
	Jamaica	20.8	2.0	1.5	6.0
	Lebanon	15.0	0.0	0.8	5.3
	Morocco	15.6	0.1	0.3	1.6
	Saudi Arabia	4.7	0.0	0.2	3.5
	Syria	8.5	0.0	0.9	10.0
	Uganda	33.2	0.5	1.7	4.9
	Venezuela	16.9	1.7	1.8	8.9
	West Bank & Gaza Strip	8.5	0.0	0.3	3.7
	(Unweighted) average	***16.5***	***0.4***	***0.9***	***4.9***
Middl	Argentina	14.1	0.6	3.6	19.5
	Bosnia and Herzegovina	4.4	0.0	0.8	14.6

	Brazil	15.3	0.0	0.4	2.4
	Chile	14.6	0.2	2.2	13.0
	China	18.2	0.7	2.0	9.4
	Colombia	19.6	2.8	0.6	2.6
	Croatia	5.0	0.6	2.0	25.9
	Dominican Republic	17.3	0.2	2.0	10.1
	Ecuador	15.6	0.2	0.3	1.8
	Hungary	8.2	0.9	1.8	16.2
	Iran	11.5	0.6	0.8	6.1
	Jordan	10.1	0.1	0.5	5.1
	Latvia	10.3	0.2	1.7	13.8
	Malaysia	4.4	0.0	0.2	4.3
	Panama	9.0	0.6	0.6	5.9
	Peru	18.4	2.5	1.0	4.4
	Romania	4.5	0.5	1.0	17.3
	Russia	3.5	0.3	0.3	7.2
	Serbia	4.9	0.0	1.1	18.9
	South Africa	5.1	0.8	1.0	14.2
	Uruguay	11.5	0.7	1.9	13.3
	(Unweighted) average	***10.7***	***0.6***	***1.2***	***9.7***
High income countries	Belgium	3.2	0.3	1.4	28.4
	Finland	5.1	0.0	2.5	32.9
	France	3.8	0.6	1.7	27.6
	Germany	3.9	0.2	0.5	10.0
	Greece	8.3	0.5	1.4	13.8
	Hong Kong	3.5	0.2	0.3	7.5
	Iceland	10.7	0.8	3.2	21.7
	Israel	5.8	0.2	1.6	20.7
	Italy	3.4	0.3	0.9	19.1
	Korea	6.5	0.5	0.2	3.0
	Netherlands	7.1	0.1	0.9	10.9
	Norway	8.1	0.4	0.4	4.8
	Slovenia	5.2	0.1	1.9	26.4
	Spain	4.9	0.2	0.3	6.1
	Switzerland	6.4	1.3	1.4	15.4
	United Arab Emirates	11.8	1.5	2.8	17.5
	United Kingdom	5.5	0.3	1.9	24.5
	United States	7.4	0.6	3.4	29.7
	(Unweighted) average	***6.1***	***0.4***	***1.5***	***18.3***
Overall (unweighted) average		***10.2***	***0.5***	***1.2***	***10.4***

** TEA plus SEA minus the overlap*

Source: Global Entrepreneurship Monitor, 2009.

Table 8 Description of variables for the regression models.

Variable	Description	Source
Dependent variables		
Social entrepreneurship	The share of social initiators (i.e. Percentage of the adult population (aged between 18-64 years) that is actively involved in starting or owning and managing *any kind of activity or initiative* that has a particularly social, environmental or community objective) as part of total entrepreneurship (i.e. Total early-stage Entrepreneurial Activity (TEA) plus Total early-stage Social Entrepreneurial Activity (SEA) minus the overlap between these two categories.	Adult Population Survey (APS) of GEM 2009
Independent variables		
Per capita income	Gross domestic product per capita (year 2008) as expressed in (thousands of) purchasing power parities per international dollar	IMF World Economic Outlook Database, version April 2008
Per capita government expenditure on health	Per capita general government expenditure on health (year 2008) expressed in (thousands of) purchasing power parities per international dollar	WHO Global Health Observatory Dataset 2008
Entrepreneurial spirit	Total early-stage Entrepreneurial Activity (TEA) (i.e. the relative amount of nascent entrepreneurs and business owners of young firms in the adult population (18-64 years of age)) corrected for per capita income.	Adult Population Survey (APS) of GEM 2009 and IMF World Economic Outlook Database, version April 2008
Degree of individualism	The degree to which individuals are integrated into groups: everyone is expected to look after him/herself and his/her immediate family.	Institute for Training in International Management (ITIM)
Degree of postmaterialism	The degree to which a society favors non-materialistic life-goals such as personal development and self-esteem over material ones (year 2005-2008)	World Value Survey: Values Surveys Databank

Table 9 Bivariate correlations between the dependent and independent variables *uncorrected* for GDP per capita

Variables	1.	2.	3.	4.	5.	6.	7.
1. Share of social entr. in all entrepreneurship	1.00						
2. GDP per capita	0.49[a]	1.00					
3. (GDP per capita)^2	0.40[a]	0.97[a]	1.00				
4. Per cap. govern. exp. on health corr. for GDP	0.54[a]	0.92[a]	0.92[a]	1.00			
5. Entrepreneurial spirit corr. for GDP	-0.47[a]	-0.56[a]	-0.44[a]	-0.49[a]	1.00		
6. Individualism corr. for GDP	0.67[a]	0.66[a]	0.61[a]	0.78[a]	-0.58[a]	1.00	
7. Postmaterialism corr. for GDP	0.35	0.55[a]	0.54[a]	0.62[a]	-0.03	0.51[a]	1.00

[a] *Correlation is significant at the 0.01 level (two-tailed).*

Table 10 Bivariate correlations between the dependent and independent variables *corrected* for GDP per capita

Variables	1.	2.	3.	4.	5.	6.	7.
1. Share of social entr. in all entrepreneurship	1.00						
2. GDP per capita	0.49[a]	1.00					
3. (GDP per capita)^2	0.40[a]	0.97[a]	1.00				
4. Per cap. govern. exp. on health corr. for GDP	0.12	0.00	0.08	1.00			
5. Entrepreneurial spirit corr. for GDP	-0.12	0.00	0.00	-0.12	1.00		
6. Individualism corr. for GDP	0.44[a]	0.00	-0.03	0.41[b]	-0.23	1.00	
7. Postmaterialism corr. for GDP	0.10	0.00	0.00	0.44[b]	0.50[a]	0.20	1.00

Note: Independent variables 4-7 are corrected for GDP per capita.
[a] *Correlation is significant at the 0.01 level (two-tailed).*
[b] *Correlation is significant at the 0.05 level (two-tailed).*

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