Conference Name: Australian Centre for Entrepreneurship Research Exchange Conference 2013
Conference Location: Queensland University of Technology, Gardens Point
Conference Date: 6 – 8 February, 2013
ISBN: 978-1-921897-55-9
Editor: Per Davidsson

Paper Title: National context and prevalence of social entrepreneurship: a global perspective

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National context and prevalence of social entrepreneurship – a global perspective

Abstract
The paper explores the roles of culture, socio-economic development, and development of governance institutions on the prevalence of social entrepreneurship. The empirical results are based on cross-sectional analysis of 49 countries across the globe. The results indicate that the negative effect of the level of development holds for entrepreneurial activity in general, but there is no such effect on social entrepreneurship. Of the four Hofstede cultural dimensions, power distance is negatively related to all types of entrepreneurship.

Keywords: social entrepreneurship, entrepreneurial activity, cross-country study, culture, Global entrepreneurship monitor,

Introduction

Several researchers (e.g. Short et al. 2009; Zahra et al. 2009; Zahra et al. 2008; Mair and Martí 2006) have pointed out that social entrepreneurship has led to an emerging research stream of interest to academic researchers and scholars in management and entrepreneurship. According to Nicholls (2009) also business press has become increasingly interested in social entrepreneurship. In many developed and developing countries social entrepreneurship is recognized as important in boosting the economic, environmental and cultural wealth and also social change (Danko et al. 2011).

However, despite the emerging importance of social entrepreneurship and social ventures, scholarly interest in this subject has been limited (Danko et. al. 2011; Nicholls 2009; Short 2009 et al.). Moss et al. (2011) stated that social entrepreneurship studies have primarily often utilized small samples and case study methodologies to understand social enterprises. They emphasized that the generalizability of findings may be in question, and called for more theory driven empirical studies that explore the distinctiveness of social entrepreneurship or that explain the motivations behind these distinctions.

The emergence and prevalence of any type of entrepreneurship is context-dependent, driven by the socioeconomic and cultural environment as well as the individuals (Hayton et al. 2002). The distinct nature of social entrepreneurship (which by definition deals with social pains not adequately solved by the state, civil society or market) implies the assumption, that contextual drivers of social entrepreneurship are partly different from those of entrepreneurial activity in general (Lepoutre et al. 2011). Yet there are only a handful of studies examining the link between contextual characteristics and social entrepreneurship. Some cross country comparative studies exist (Kerlin 2010), but the number of countries in those studies is typically so low that only qualitative tentative conclusions about the effects of country characteristics can be made. A notable exception is the study by Lepoutre et al. (2011), who developed a measure for the prevalence of social entrepreneurship and collected data from 49 countries using the GEM methodology. To our knowledge, quantitative analysis of the determinants is still lacking and our study is attempting to fill this gap by using country level socioeconomic and cultural indicators as predictors of social entrepreneurship. The effects of contextual determinants on social entrepreneurship will be compared with the contextual effects on entrepreneurial activity in general.

Our paper is structured as follows: the theoretical background section first covers the concept of social entrepreneurship, and then examines the previous literature on the national

contextual determinants of entrepreneurial activity in general, concluding with discussion of the potential effects on the level of development and culture on social entrepreneurship. The next section describes our data sources and measures, followed by description of the results. The study concludes with discussion and implications for further research.

Theoretical background

The understanding of the concept of social entrepreneurship is not yet unified among scholars. Trexler (2008) states that social entrepreneurship is a simple term which have a complex range a meaning. Zahra et al. (2009) emphasized that lack of a unified understanding of the concept is one of the major barriers to the advancement of academic research of social entrepreneurship area. During the latest years entrepreneurship researchers have started to find common view about the concept of social entrepreneurship but there are still multiple definitions of the concept from scholars pertaining to other disciplines as for example accounting, economics or social science (Short et al. 2009). According to Lepoutre et al. (2011) despite the unsettled definition debate there seem to be several characteristics that distinguish social entrepreneurs from traditional commercial entrepreneurs and also from traditional charities. They stated that in particular three selection criteria seem to stand out from previous literature: 1) the predominance of a social mission, 2) the importance of innovation and 3) the role of earned income.

Mair and Marti (2006) define that the main difference with traditional commercial entrepreneurship is not that such entrepreneurship would be a-social, but that social entrepreneurs associate their top priority to the creation of social value. At the same time economic value creation is seen as a necessary condition to ensure financial viability. On the other words social entrepreneurs try to (and have to) seek optimal balance between social impact and market success in their business.

Lepoutre et al. (2011) defined that based on the previous literature the second criteria of social entrepreneurship is the importance of innovation. The literature underscores that the successful pursuit of social entrepreneurs' mission requires an innovative delivery of products and services (see e.g. Alvord et al. 2004; Chell e al. 2010; Mair and Marti 2006) Also traditional commercial entrepreneurs may set similar targets to their business but Lepoutre et al. (2010) emphasized that especially social enterprises have to actively engage in provision of innovative solutions to complex social issues. Otherwise social enterprises may fall outside the scope of social entrepreneurship. In our paper we follow the same scholars as Lepoutre et al. (2011) in their study.

Kerlin (2010) found in her study that there are still important regional differences in what the term social enterprise or entrepreneurship means, and how social entrepreneurship is supported and developed. According to her study differences in the regions appear to be explained at least in part by the variation in regional socioeconomic contexts. The results of Kelin's study indicates that social enterprises appears to draw on those socioeconomic factors that offer the most strength in a given region or country. Her findings suggest that the development of social enterprises follows along lines similar to those for development of nonprofit sectors.

Nissan et al. (2012) investigated drivers of non-profit activity in 38 countries and found that the strength of such environmental factors as trust, economic development and social care public expenditures in non-profit activity, demonstrating, a partnership relationship between

public sector activity and non-profit activity. Their model also indicates a positive relationship between economic development and non-profit activity; the greater the economic development is, the more the non-profit activity. Their model also showed a positive relationship between trust and non-profit activity. Furthermore their model presented a negative non-significant relationship between entrepreneurship and non-profit activity.

Bahmani et al. (2012) studied the activity of non-profit organizations (NPOs) effects on economic growth in 11 developed countries. They found that the effects of NPOs on the growth process are indirect, that is, they act mainly through two variables in their data: entrepreneurship-investment and human capital. On the other words NPOs improve the social environment that enhances the environmental activity and the investment process.

Culture and entrepreneurship

Power distance (*PDI)*, individualism (*IDV)*, masculinity (*MAS)* and uncertainty avoidance (*UAI)* indeces are the four Hofstede's (Hofstede, 1980) cultural dimensions. Based on surveys with over 88,000 employees from 72 countries, Hofstede's operationalization of culture is perhaps the most influential of all representations of culture, and it has inspired thousands of empirical studies (Kirkman et al, 2006).

Power distance dimension (PDI) expresses the degree to which the less powerful members of a society accept and expect that power is distributed unequally. The fundamental issue here is how a society handles inequalities among people. People in societies exhibiting a large degree of power distance accept a hierarchical order in which everybody has a place and which needs no further justification. In societies with low power distance, people strive to equalise the distribution of power and demand justification for inequalities of power (http://geert-hofstede.com/countries.html). Earlier studies on the effects of power distance to entrepreneurship, economic creativity or innovativeness have usually found a negative effect (Williams & McGuire, 2010; Shane 1992, 1993).

Individualism (IDV) can be defined as a preference for a loosely-knit social framework in which individuals are expected to take care of themselves and their immediate families only. Its opposite, collectivism, represents a preference for a tightly-knit framework in society in which individuals can expect their relatives or members of a particular in-group to look after them in exchange for unquestioning loyalty. A society's position on this dimension is reflected in whether people's self-image is defined in terms of "I" or "we."

Earlier studies on the effects of individualism on entrepreneurship have provided somewhat mixed results: Some researchers find empirical evidence supporting the idea that individualism favours new firm creation (McGrath et al. 1992; Shane 1993; Wennekers et al. 2002), although other authors have also offered empirical evidence to suggest that it is, in fact, a lesser degree of individualism (in other words, collectivism) that is positively related to entrepreneurial activity (Hunt and Levie 2003). Pinillos and Reyes (2011) found the effect of individualism to be moderated by the level of economic development: The relationship was positive for the relatively rich countries and negative for the relatively poor ones. This result was consistent regardless of the type of entrepreneurial activity (necessity vs. opportunity driven). Our proposition is that the effect of individualism may be different for social entrepreneurship. More collectivist values could drive social entrepreneurial activity also in richer countries.

The third cultural dimension or *MAS* (masculinity vs. femininity) refers to whether the dominant value in a society is assertiveness as opposed to caring. The masculinity side of this dimension represents a preference in society for achievement, heroism, assertiveness and material reward for success. Society at large is more competitive. Its opposite, femininity, stands for a preference for cooperation, modesty, caring for the weak and quality of life. Society at large is more consensus-oriented.

At the individual level, entrepreneurs are often characterized as having a high need of achievement (McClelland, 1961). Heroism and material rewards are also characteristics that are often connected to successful entrepreneurs, and thus it could be expected that the prevalence of entrepreneurship is higher in more masculine cultures. Femininity could be characterized by concerns about others' well-being (Mearns and Yule, 2009), and thus the prevalence of social entrepreneurship is expected to be higher in less masculine cultures (with a low *MAS* index).

Uncertainty avoidance (*UAI*) refers to the degree to which the members of a society feel uncomfortable with uncertain and ambiguous situations. The fundamental issue here is how a society deals with the fact that the future can never be known: should we try to control the future or just let it happen? Countries exhibiting strong UAI maintain rigid codes of belief and behaviour and are intolerant of unorthodox behaviour and ideas. Weak UAI societies maintain a more relaxed attitude in which practice counts more than principles.

As risk taking and creative desctruction (Schumpeter, 1934) are essential elements in entrepreneurship, it is more likely to have high prevalence of entrepreneurship in societies with weak uncertainty avoidance. However, some evidence of the opposite relationship has also been suggested, as Wennekers et al (2007) found a positive correlation between uncertainty avoidance and business ownership rate using panel data from 21 OECD countries.

To sum up, earlier research seems to suggest that a) the level of socio-economic development has a negative or a U-shaped effect on entrepreneurial activity (Freytag & Thurik, 2007) and b) entrepreneurship is facilitated in cultures that are high in individualism, low in uncertainty avoidance, low in power distance, and high in masculinity (Hayton et al., 2002). Due to the specific nature of social entrepreneurship, we propose that some of these effects may differ: e.g. the positive effect of individualism and masculinity could be the opposite for social entrepreneurship.

Research design

Sampling and data collection

Our country level analysis is built upon the results reported in Lepoutre et al. (2011). Their study reports the prevalence of social entrepreneurship in 49 countries from all continents. Their results were based on the 2009 GEM (Global Entrepreneurship Monitor) data collection.

Measures

The measures for country level prevalence of social entrepreneurship applied in our study were early-stage and established social entrepreneurship activity (SE) as % of population. The general level of entrepreneurial activity (EA) was measured by total early-stage entrepreneurial activity and established business ownership rate in 2009, taken from GEM website.

The cultural context was measured by Hofstede's (1980) dimensions: power distance (PDI), individualism vs. collectivism (IDV), masculinity vs. femininity (MAS), and uncertainty avoidance (UAI). The scores were collected from http://geert-hofstede.com/countries.html . The fifth and sixth dimension (LTO and indulgence) were not used in our study due to missing values for many of the countries.

The level of development was measured from economic, social, and governance point of view. The measure for economic development was Gross national income per capita (GNI PPP adjusted, in US dollars, year 2009) collected from United Nations statistics database http://data.un.org/ . The Human Development Index (HDI) measures the average achievements in a country in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. HDI was used as an indicator of social development, and was obtained from United Nations statistics database. The level of governance or institutional development was measured using the Worldwide Governance Indicators (WGI) developed by the World Bank (http://info.worldbank.org/governance/wgi/sc_country.asp). The Worldwide Governance Indicators report on six broad dimensions of governance for over 200 countries over the period 1996-2011. We included three dimensions which were considered most relevant for entrepreneurship, and took the scores of year 2009. The first dimension, government effectiveness (GE), captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Dimension two, regulatory quality (RQ), captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. The third dimension, rule of law (RL), captures 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 the courts, as well as the likelihood of crime and violence.

Results

Cluster analysis results, descriptive statistics and correlations

The descriptive analysis was initiated by profiling the 49 countries based on the levels of early-stage and established social entrepreneurship, and general entrepreneurial activity, respectively. The profiling was done by hierarchical cluster analysis applying the Ward clustering method within the IBM SPSS software. The distances between countries were calculated as squared Euclidean distance from the standardized scores of the four entrepreneurship prevalence indicators. Four clusters were retained based on the changes in the agglomeration coefficient, and the results are shown in Table 1.

Table 1. Means of entrepreneurship prevalence in country clusters*

	Social entrepreneurship SE			Entrepreneurship EA		
Cluster	Early	Established	Total	Early	Established	Total
low EA & SE (N=22)	1.11	.44	1.55	7.44	4.96	12.40
	(.64)	(.38)	(.87)	(4.30)	(2.05)	(5.30)

very high EA & SE (N=6)	3.30 (.68)	1.88 (1.11)	5.18 (1.65)	21.67 (6.65)	15.53 (3.80)	37.20 (9.96)
high EA, but low SE (N=7)	.89 (.57)	.47 (.30)	1.36 (.84)	11.79 (4.71)	13.73 (2.43)	25.51 (6.59)
low EA, but high SE (N=14)	3.20 (.90)	1.21 (.73)	4.40 (.96)	10.29 (5.12)	6.54 (1.37)	16.84 (5.60)
Total (N=49)	1.94 (1.29)	.84 (.78)	2.78 (1.85)	10.62 (6.53)	7.96 (4.62)	18.58 (10.26)
ANOVA F (p value)	36.48 (.000)	11.70 (.000)	39.08 (.000)	13.36 (.000)	54.60 (.000)	28.20 (.000)

**Standard deviations in parentheses*

The total mean values for all 49 countries indicate that the prevalence of social entrepreneurship is on average less than one-sixth of entrepreneurship prevalence in general, as the mean for social entrepreneurship is 2.78 percent of the population and the respective value for entrepreneurship is 18.58 percent. Early-stage entrepreneurship is more common than established entrepreneurship, and this difference is especially seen in social entrepreneurship where early-stage prevalence is more than twice as large as established one.

The first cluster includes 22 countries (e.g. Hong Kong, Russia, Belgium, Malaysia, see a list of all countries in Appendix 1.) which have low levels on both social and overall entrepreneurship. Only about 1.5 percent of the population in these countries is involved in social entrepreneurship, and entrepreneurial activity in general is the lowest of all clusters, 12%.

The second cluster consists of six countries with a high prevalence of all entrepreneurial activities (e.g. China, Jamaica, Uganda). Especially the general entrepreneurship prevalence is on average more than twice as high as in other clusters. Also the prevalence of established social entrepreneurship stands out as clearly larger than in any other cluster.

Cluster three includes seven countries where overall entrepreneurial activity is higher than average, but the social entrepreneurship scores are very low (e.g. Brazil, Korea, Morocco). Early-stage social entrepreneurship is especially low in these countries, while established business ownership rate is clearly above average.

The final cluster is the opposite case: it consists of 14 countries, where the level of social entrepreneurship ranks better in a global comparison than overall entrepreneurial activity (e.g. Croatia, Finland, Israel, UK and USA). The prevalence of early –stage social entrepreneurship is especially high, even though general entrepreneurial activity is a bit below average.

The differences in contextual variables between the four clusters are shown in Table 2. The analysis of variance (F-test) indicates that the differences in economic, social and institutional development are statistically significant, but the cultural indicators do not differ at 5% level of significance. The three governance indicators all show a similar pattern: The countries in Cluster 4 (high social entrepreneurship and lower than average entrepreneurship) have the most developed governance institutions, followed by Cluster 1 (low in both). The six countries with highest levels of entrepreneurship and social entrepreneurship in Cluster 2 are characterized by the weakest institutional support. The same differences across clusters apply for the Human development index and GNI per capita.

The countries in Cluster 4, which are the leaders in socio-economic development, exhibit high levels of social entrepreneurship, and lower than average levels of entrepreneurial activity are characterized by low power distance and high individualism. The opposite case in terms of development, Cluster 2, is the leader in entrepreneurship prevalence, and their culture is very collectivistic, masculine and tolerant for uncertainty. Cluster 1 countries with low entrepreneurial activity are rather well developed countries with higher than average power distance and femininity. Cluster three had very low level of social entrepreneurship although general entrepreneurial activity was higher than average. These countries have cultures where power distance, collectivism and uncertainty avoidance are very high.

Table 2. Means of context variables in country clusters

	Mean (std.dev.)					
	low EA & SE (N=22)	very high EA & SE (N=6)	high EA, but low SE (N=7)	low EA, but high SE (N=14)	Total	ANOVA F (p value)
GE government efficiency	.41 (.93)	-.21 (.35)	.01 (.64)	.98 (.85)	.44 (.90)	3.86 (.015)
RQ regulatory quality	.45 (.95)	-.16 (.38)	.04 (.71)	.87 (.85)	.44 (.89)	2.78 (.052)
RL rule of law	.37 (.95)	-.52 (.17)	-.16 (.75)	.84 (1.01)	.32 (.97)	4.02 (.013)
HDI human development index	.77 (.11)	.67 (.12)	.75 (.10)	.83 (.06)	.77 (.11)	4.15 (.011)
GNI per capita PPP $	22100.48 (14872.77)	7795.00 (4173.37)	14594.29 (9544.89)	27295.00 (13924.24)	20732.71 (14208.51)	3.70 (.019)
PDI power distance	69.14 (22.28)	61.00 (14.20)	71.14 (9.46)	52.21 (22.76)	63.53 (21.31)	2.30 (.091)
IDV individualism	46.14 (22.81)	29.00 (13.51)	27.00 (11.58)	49.14 (27.75)	42.36 (23.52)	2.28 (.093)
MAS masculinity	44.19 (17.20)	59.00 (11.05)	52.71 (9.76)	47.07 (22.52)	47.89 (17.84)	1.14 (.345)
UAI uncertainty avoidance	70.86 (19.88)	52.20 (31.40)	78.57 (20.03)	70.86 (20.80)	70.02 (21.87)	1.53 (.220)

To uncover the relationships between entrepreneurship and contextual variables, we first present the correlation matrix (Table 3.) The correlations reveal that the prevalence of social entrepreneurship has a positive but not very strong association with overall entrepreneurial activity.

The level of socioeconomic and institutional development (indicated by HDI, GNI per capita, and three governance indicators) has a strong negative association with overall entrepreneurship prevalence like in numerous previous studies (Wennekers et al. 2007), but such

association does not apply in the context of social entrepreneurship. The correlations between development and social entrepreneurship are all positive, though most of them not statistically significant. The development indicators are also strongly associated with power distance and individualism. Low power distance seems to coincide with high individualism and high level of development. On the other hand, masculinity and uncertainty avoidance are not significantly associated with the development indicators. Power distance is negatively associated with social entrepreneurship while overall entrepreneurial activity is negatively linked with individualism.

Table 3. Correlation matrix

	Context variables					Culture variables				Entrepreneurship variables				
	GE	RQ	RL	HDI	GNI	PDI	IDV	MAS	UAI	e SE	est SE	tot SE	e EA	est EA
GE government efficiency	1													
RQ regulatory quality	.89**	1												
RL rule of law	.96**	.91**	1											
HDI human development index	.80**	.69**	.77**	1										
GNI per capita	.82**	.72**	.80**	.85**	1									
PDI power distance	-.60**	-.54**	-.61**	-.49**	-.48**	1								
IDV individualism	.62**	.57**	.67**	.54**	.59**	-.73**	1							
MAS masculinity	-.23	-.21	-.29*	-.17	-.13	.10	-.02	1						
UAI uncertainty avoidance	-.25	-.13	-.19	.02	-.13	.32*	-.28	-.11	1					
early SE	.15	.06	.06	.15	.14	-.32*	.15	.09	-.09	1				
established SE	.31*	.22	.22	.27	.22	-.52**	.29*	.05	-.28	.58**	1			
total SE	.23	.13	.13	.22	.18	-.45**	.23	.08	-.18	.94**	.82**	1		
early EA	-.51**	-.47**	-.54**	-.65**	-.55**	.10	-.44**	.11	-.15	.38**	.12	.32*	1	
established EA	-.27	-.26	-.27	-.34*	-.32*	-.11	-.23	.12	-.25	.16	.31*	.25	.68**	1
total EA	-.45**	-.41**	-.47**	-.57**	-.49**	.02	-.38**	.13	-.21	.31*	.22	.31*	.95**	.89**

***p<.01, **p<.05, *p<.10

Models

We applied multiple linear regression analysis to explain the entrepreneurship prevalence indicators with culture and development indicators. As was seen in Table 3, the development indicators correlate with each other very strongly (Pearson correlation coefficients range from .69 to .96), thus implying problems with multicollinearity if they were entered in a regression model as such. To avoid multicollinearity we used a principal component score instead of the original development indicators. In principal component analysis of the five development indicators, a single component emerged, with eigenvalue 4.29, explaining 85.9 percent of the variance. The component loadings were all in excess of .88.

The results of the linear regression analysis are presented in Table 4. The dependent variables are total entrepreneurial activity (EA), total social entrepreneurship (SE), early and established EA and SE, respectively. The explanatory variables are the four Hofstede cultural dimensions: power

distance (PDI), individualism vs. collectivism (IDV), masculinity vs. femininity (MAS), uncertainty avoidance (UAI), and a principal component score (DEV) indicating the level of human, economic, and institutional development.

Table 4. Regression analysis

	Total EA		Total SE	
	beta	t	beta	t
PDI	-.63***	-3.90	-.61***	-2.95
IDV	-.54***	-3.17	-.22	-1.00
MAS	.03	.25	.14	.96
UAI	-.24**	-2.14	-.03	-.21
DEV	-.56***	-3.78	-.00	-.02
	Rsq	F	Rsq	F
	.538	9.55***	.239	2.58**

Table 4. Regression analysis, cont.

	early EA		early SE		established EA		established SE	
	beta	t	beta	t	beta	t	beta	t
PDI	-.56***	-3.54	-.49**	-2.23	-.63***	-3.31	-.64***	-3.25
IDV	-.48***	-2.90	-.16	-.68	-.50**	-2.51	-.22	-1.06
MAS	-.01	-.06	.13	.85	.06	.47	.10	.77
UAI	-.21*	-1.90	.03	.19	-.24*	-1.83	-.12	-.88
DEV	-.64***	-4.47	-.06	-.27	-.38**	-2.22	.03	.17
	Rsq	F	Rsq	F	Rsq	F	Rsq	F
	.566	10.71***	.139	1.33	.372	4.86***	.317	3.80***

***p<.01, **p<.05, *p<.10

The F test indicates that all models are statistically significant at the 5% level, except for the early social entrepreneurship model. The R squares range from .139 (early SE) to .566 (early EA). In established businesses the difference between social entrepreneurship and general entrepreneurial activity R squares is not as large.

The level of development has a strong negative effect on early EA, a bit weaker negative effect on established EA, and no effect at all on SE. Power distance has a strong negative and significant effect on all types and phases of entrepreneurship. Individualism has negative effects as well, but they are not significant for social entrepreneurship. Masculinity vs. femininity does not have any significant parameter estimates, but uncertainty avoidance has weak negative effects on EA.

To sum up, entrepreneurial activity in general is higher in countries where economic, social and institutional development is lower, people do not accept inequalities of power, are collectivistic rather than individualistic and have tolerance for uncertainty. However, social entrepreneurship does not seem to be affected by the level of development at all, and power distance is the only cultural variable that significantly explains its prevalence in the population.

Discussion and conclusions

The results of our study contribute to previous literature several ways and have also some implications for policy-makers. According to our results it can be said that the contextual effects on social entrepreneurship are partly different from the effects on entrepreneurship in general.

The most striking difference is the effect of socio-economic and institutional level of development. While previous studies have found a negative or a U-shaped effect on entrepreneurship, our analysis was able to repeat this result for entrepreneurial activity in general, but not for social entrepreneurship. There may be several reasons for this. First of all, it could be partly explained by the innovation diffusion theory. Social entrepreneurship is a relatively new phenomenon at it has yet to diffuse from more developed countries to the less developed ones. Secondly, it may have to do with the individual entrepreneurs' needs. In poorer countries entrepreneurial activity is more related to satisfying the basic material needs for income and living, whereas in more developed countries individuals are seeking ways to satisfy higher order needs through the social mission. In any case, the results do not support the argument that social entrepreneurship is more prevalent in contexts with more social problems or government failures.

The effects of culture on entrepreneurial activity in general are also well in line with previous studies. The negative effect of power distance on both types of entrepreneurship was expected. Surprisingly, our results show that neither collectivism, femininity, nor uncertainty avoidance is significantly associated with social entrepreneurship. Partly the lack of effects can be due to the research method (cross- sectional design and small sample size, and correlation between the dimensions of culture), but in future research it would also be worth testing alternative types of models, where the level of development acts as either a mediator between culture and entrepreneurship (Hayton et al. 2002), or a moderator of the culture-entrepreneurship relationship (Pinillos & Reyes 2011).

Appendix 1.

List of countries in each cluster

Cluster 1 low E & SE (N=22)	Cluster 2 very high E & SE (N=6)	Cluster 3 high E, but low SE (N=7)	Cluster 4 low E, but high SE (N=14)
ALGERIA	ARGENTINA	BRAZIL	CHILE
BELGIUM	CHINA	ECUADOR	CROATIA
BOSNIA- HERZEGOVINA	COLOMBIA	GREECE	FINLAND
FRANCE	DOMINICAN REPUBLIC	KOREA	HUNGARY
GERMANY	JAMAICA	LEBANON	ICELAND
GUATEMALA	UGANDA	MOROCCO	ISRAEL
HONGKONG		SERBIA	PERU
IRAN			SLOVENIA
ITALY			SWITZERLAND
JORDAN			UNITED ARAB EMIRATES
LATVIA			UK
MALAYSIA			USA
NETHERLANDS			URUGUAY
NORWAY			VENEZUELA

PANAMA
ROMANIA
RUSSIA
SAUDI ARABIA
SOUTH AFRICA
SPAIN
SYRIA
WESTBANK & GAZA

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