

# Institutions, social entrepreneurship, and individual economic well-being: an exploratory study

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**Institutions, social entrepreneurship, and individual economic well-being: An exploratory study**

**Instituciones, emprendimiento social y bienestar económico individual: Un estudio exploratorio**

**Instituições, empreendedorismo social e bem-estar económico individual: um estudo exploratório**

**Abstract**

**Purpose** – This study evaluates the influence of institutions on the probability of becoming a social entrepreneur and the effect of this choice on individual economic well-being. We also analyze the effects of gender (male versus female entrepreneurship) and type (traditional versus social entrepreneurship).

**Design/methodology/approach** – Institutional economics framed our analysis, and hypotheses were tested using two-stage probit least squares (2SPLS) models in a sample of 69,236 individuals from 57 countries during the 2010-2014 wave from the World Values Survey.

**Findings** – Our results showed that, for most variables, institutions significantly explained the probability of becoming a social entrepreneur. Our analyses also indicated that social entrepreneurship is highly associated with individual economic well-being.

**Originality** – This research brings insights into the discussion of social and economic benefits of socially oriented entrepreneurs. Likewise, the modelling approach overcomes the interplay between entrepreneurship and economic outcomes, in which institutions become key factors.

**Keywords:** social entrepreneurship, well-being, institutional economics, gender, female entrepreneurship.

## Resumen

**Objetivo** – Este estudio evalúa la influencia de las instituciones en la probabilidad de convertirse en un emprendedor social y el efecto de esta elección en el bienestar económico individual. También se analizan los efectos del género (emprendimiento masculino versus femenino) y del tipo (emprendimiento tradicional versus social).

**Diseño/metodología/enfoque:** la economía institucional es el marco para el análisis e hipótesis, las cuales se evaluaron utilizando modelos probit de mínimos cuadrados de dos etapas (2SPLS) en una muestra de 69.236 personas de 57 países durante la ola 2010-2014 de la Encuesta Mundial de Valores.

**Hallazgos** – Los resultados mostraron que, para la mayoría de las variables, las instituciones explicaron significativamente la probabilidad de convertirse en un emprendedor social. El análisis también indicó que el emprendimiento social está altamente asociado con el bienestar económico individual.

**Originalidad** – esta investigación aporta información sobre el debate alrededor de los beneficios sociales y económicos de los emprendedores con orientación social. Asimismo, el enfoque de modelización resuelve la interdependencia entre el emprendimiento y variables económicas, en la que las instituciones son factores claves.

**Palabras clave:** emprendimiento social, bienestar, economía institucional, género, emprendimiento femenino.

## Resumo

**Objetivo** – Este estudo avalia a influência das instituições na probabilidade de se tornar um empreendedor social e o efeito desta escolha no bem-estar econômico individual. Os efeitos do gênero (empreendedorismo masculino versus feminino) e do tipo (empreendedorismo tradicional versus social) também são analisados.

**Design/metodologia/abordagem** – A economia institucional é a estrutura para a análise e hipóteses, que foram avaliadas usando modelos probit de mínimos quadrados em dois estágios (2SPLS) em uma amostra de 69.236 pessoas de 57 países durante a onda 2010-2014 dos Valores Mundiais Pesquisa.

**Resultados** – Os resultados mostraram que, para a maioria das variáveis, as instituições explicaram significativamente a probabilidade de se tornar um empreendedor social. A análise também indicou que o empreendedorismo social está altamente associado ao bem-estar econômico individual.

**Originalidade** – Esta investigação fornece informações sobre o debate em torno dos benefícios sociais e econômicos dos empreendedores de orientação social. Da mesma forma, a abordagem de

modelização resolve a interdependência entre o empreendedorismo e as variáveis económicas, nas quais as instituições são fatores-chave.

**Palavras-chave:** empreendedorismo social, bem-estar, economia institucional, género, empreendedorismo feminino.

## 1. Introduction

The transition towards racial and gender equality, enhancement of opportunities for marginalized and under-represented groups and alleviation of poverty requires new and innovative societal policies (Acs and Szerb, 2007; Aparicio *et al.*, 2022; Bruton *et al.*, 2021; Ibáñez, 2022). As we propose in this paper, social entrepreneurship could play a crucial role in creating new initiatives that positively affect local communities and economies (Hall *et al.*, 2012; Saebi *et al.*, 2019). By definition, social entrepreneurial activity differs from traditional entrepreneurship as it considers both exploration, evaluation, and exploitation of business opportunities in which social value creation is at the missional core of the new venture (Bacq and Janssen, 2011). It is worth mentioning that studies on new initiative generation have been done at the local and country levels in both developing and developed countries (e.g., Bradshaw, 2000; Korsching and Allen, 2004).

Estrin *et al.* (2016) distinguish between social and traditional (or commercial) entrepreneurship, which is useful for analyzing the social impact and social value creation of these activities. A growing section of the literature argues that social entrepreneurs tend to distribute welfare more evenly across all of society than traditional entrepreneurship, which is concerned more with productivity and economic growth (Manetti, 2014; Pathak and Muralidharan, 2018). On the one hand, traditional entrepreneurship typically drives economic value, often independent of social value; on the other hand, social value is the

capacity to create and enhance well-being for each individual in society as well as for society as a whole (Acs *et al.*, 2013). This implies not only increases in the income levels of entrepreneurs, workers, and their families but also in social mobility and income distribution (Aparicio *et al.*, 2022; Manetti, 2014). Although there exists little evidence on entrepreneurship and subjective well-being (cf. Amorós *et al.*, 2021; Pathak, 2020), little is known about entrepreneurial activity and individual economic well-being. According to Ferrer-i-Carbonell (2005), individual economic well-being is a complex multidimensional factor that encompasses life satisfaction. Yet, this individual realization also depends on the financial capacity people have to satisfy economic preferences. In this regard, life satisfaction as economic well-being is closely related to the income level of individuals and families. Similarly, Mullis (1992) suggests that both subjective and economic well-being are related, but the former embraces psychological aspects of individual decision-making, whereas the latter may be the net labor income of the household (Masterson *et al.*, 2019).

From a social value viewpoint, the economic value of a venture depends on the context in which it is produced and its distribution throughout society. Unfortunately, however, a growing amount of new literature is discussing the necessity of traditional entrepreneurship for achieving economic growth (Acs *et al.*, 2012; Aparicio *et al.*, 2016; Audretsch and Keilbach, 2004; Liñán and Fernandez-Serrano, 2014). But as Saebi *et al.* (2019) point out, empirical literature analyzing the social and economic impact of traditional entrepreneurs is needed.

Moreover, McMullen (2018) and Ogundana *et al.* (2021) discuss how the effectiveness of policies for promoting social entrepreneurship depends on the context in which the entrepreneurs are making decisions concerning economic growth and social development. Weak regulations might explain why some countries encourage male and

female entrepreneurship to differing degrees (Langowitz and Minniti, 2007). Despite efforts, no solid evidence has arisen on one of the most interesting aspects of social entrepreneurship: how institutional factors influence (promote or inhibit) the emergence of social entrepreneurship (Hechavarría *et al.*, 2023; Urbano *et al.*, 2010, 2019). While identification of the main institutional factors affecting new entrepreneurial ventures is a topic of growing interest in the literature, little attention has yet been devoted to these relationships (Bruton *et al.*, 2010). Carlsson *et al.* (2013) analyze the institutional factors that affect entrepreneurship, and the role of entrepreneurship in generating well-being, and suggest combining these two lines of research in entrepreneurial research.

Thus, we attempt to fill this lacuna by empirically evaluating the influence of institutions on the probability of becoming a social entrepreneur and the effect of this choice on individual economic well-being. We explore these effects on female versus male, and on traditional versus social, entrepreneurship. We support our hypotheses on a conceptual framework of institutional economics that explains what factors promote social entrepreneurship in women and men and the relative importance of these factors for well-being. Using one of the datasets from the World Values Survey (WVS) – specifically, the WVS sixth wave (WVS-6; 2010–2014) – we find that post-materialism and altruism encourage social individuals of both genders to become self-employed, though the impact is higher in male than female entrepreneurship. Similarly, male social entrepreneurship has a greater effect on well-being than female entrepreneurs, and as we expected, in social terms, this type of entrepreneurship achieves greater income distribution than traditional entrepreneurship.

Thanks to these results, we bring a series of insights into the discussion around institutions, social entrepreneurial activity, and well-being. First, a potential bidirectional

association between entrepreneurship types and economic outcomes might exist. In this regard, we suggest that well-being can be enhanced through social entrepreneurship as long as institutions are considered. This contributes to the discussion offered by Hechavarria *et al.* (2019) and Urbano *et al.* (2019). Second, we also offer evidence about the importance of post-materialistic values in incentivizing women to become social entrepreneurs. Thanks to this, we add this cultural characteristic to the extant evidence (cf. Hechavarría and Brieger, 2022). Third, while the encountered effects of women’s social entrepreneurship on individual well-being (as an economic aspect) is smaller than that of men, we present empirical evidence for the narrative around women’s contribution to economic growth (cf. Dean *et al.*, 2019). All these findings can be translated into the implications for theory, policy, and practice.

Apart from this introduction, the paper has the following structure. Section 2 presents the theoretical framework of institutions, with a particular emphasis on cultural factors. Section 3 operationalizes those variables analyzed in the theory-building process. As endogeneity problems between social entrepreneurship and economic well-being might exist, we present the empirical strategy through the utilization of 2SPLS, model, and variables. Section 4 provides and describes the results, while Section 5 analyzes the obtained findings comparing them with the extant literature. Section 6 concludes and offers future research directions.

## **2. Theoretical framework**

### ***2.1. Institutions and entrepreneurship***

North (1990, p. 3) defines institutions as “rules of the game in a society, or more formally, [...] the constraints that shape human interaction”. He distinguishes between formal institutions such as regulations, contracts, and procedures and informal ones such as culture and the values or social norms of a particular society. As North (1990) suggests, formal

institutions intend to reduce transaction costs through regulation, whereas informal institutions reduce the uncertainty that is a by-product of individual decision-making (North, 2005). This framework also illustrates how formal and informal institutions relate to each other, where some regulations could be considered efficient depending on the cultural values and intentionality of a society. Thus, the actions of one institution constrain the nature of the other. Also, formal institutions are more flexible and able to implement changes in a shorter period; informal institutions change more slowly (Williamson, 2000).

According to Bruton *et al.* (2010), institutional economics is particularly helpful in entrepreneurship research; the intentionality of the individuals behind entrepreneurial decisions depends on the context of the situation and affects the patterns of growth (Bruton *et al.*, p. 426). Thus, in line with Hechavarría *et al.* (2023), Stenholm *et al.* (2013), Urbano *et al.* (2019), and Welter (2011), institutional factors influence the economic and social values generated through entrepreneurial decisions; these factors are individual values (cognitive and knowledge characteristics) and common values (normative and regulative settings), which are recursively reinforced and either encourage or discourage economic activity (North, 2005). While the institutional context tends to be captured with upper-level elements such as country or regional characteristics, Bruton *et al.* (2010) suggest that institutions are also perceived and values and beliefs that characterize individuals, who make decisions based on what they think. This belongs to a cognition process, in which individuals observe reality and reflect upon it to create their own paradigm, which ultimately guides their actions. In entrepreneurial terms, both formal and informal institutions could either constrain or foster the decision to create a new business based on perceptions of opportunity (Bjørnskov and Foss, 2016). Some scholars are thus proposing the use of institutional economics in



management (Krug and Falaster, 2022) and entrepreneurial analyses (Aidis *et al.*, 2008; Audretsch *et al.*, 2024; Chowdhury *et al.*, 2019; Urbano *et al.*, 2019).

Some entrepreneurship researchers have used institutional frameworks to analyze the emerging social aspects of entrepreneurship in varying contexts (Anderson *et al.*, 2006; Dhesi, 2010; Di Domenico *et al.*, 2010; Ibáñez, 2022; Mair and Marti, 2009). In particular, the relationship between institutions and social entrepreneurship has received increasing attention (Austin *et al.*, 2006; Kibler *et al.*, 2018; Kistruck and Beamish, 2010; Mair and Marti, 2006; Mair *et al.*, 2006). The literature suggests that the social aspect of entrepreneurial activity is embedded in a social context, as its main purpose is accomplishing social change. Thus, Peredo and McLean (2006) identify collective cultural settings as having a substantial influence on social entrepreneurs.

Another aspect of the institutional environment to consider is the gender of the entrepreneur (BarNir, 2012; Hechavarría and Brieger, 2022; Langowitz and Minniti, 2007; Marlow and Patton, 2005). Dean *et al.* (2019) suggest that theory and literature often tip the balance in favor of men as compared to women as it is thought that entrepreneurship is a male-oriented activity. Nevertheless, Brush *et al.*'s (2019) conceptual model offers foundations around those factors explaining why some institutions (within ecosystems) incentivize entrepreneurial activity among women more than their male counterparts. As a result, community aspects supporting women, public policies closing gender gaps, and family configuration towards work-life balance, among others, suggest that the institutional environment is considering potential disparities in society. For example, researchers have identified important differences between female and male entrepreneurship. Griffiths *et al.* (2013) studied the influence of socio-cultural factors on gender patterns. These authors suggest that individual and common values (culture) could influence labor decisions and

career opportunities for women. Although the proportion of females in entrepreneurship continues to grow, gender issues and cultural stereotypes continue to persist in some countries and regions, limiting business growth (Gatewood *et al.*, 2009). Hence, as Baughn *et al.* (2006) noted, countries that foster female entrepreneurs, by encouraging respect as well as gender equality, are likely to achieve higher levels of female entrepreneurship than countries that do not.

The literature has also shown that social ties unrelated to the actual venture are an important means of overcoming existing problems during the start-up phase of a new business (Davidsson and Honig, 2003), and also provide needed opportunities and resources (Haugh, 2007). Cultural and individual values are important for female entrepreneurs in developed and developing countries (Aparicio *et al.*, 2019; Caputo and Dolinsky, 1998; Hechavarría and Brieger, 2022; Manolova *et al.*, 2007; Manolova *et al.*, 2012). Some studies, such as Aparicio *et al.* (2019) and Welter and Smallbone (2008), have indicated that entrepreneurship may represent a way for women to increase their independence and self-expression, especially in years of crisis or political transition, such as in Middle Eastern countries when Islamic ideas are becoming more widespread (Hanks, 2007). Likewise, a growing number of scholars in entrepreneurship research are recognizing the important role of family context (Aldrich and Cliff, 2003; Bruni *et al.*, 2004), especially in work-life balance (Jennings and McDougald, 2007). Indeed, they find that family characteristics or household contexts may have a greater impact on female decisions than on males. Various studies in this area have suggested that the quality of family life is a key element in female entrepreneurship (Klofsten *et al.*, 2021).

Generally speaking, Urbano *et al.* (2016) have identified socio-cultural characteristics of entrepreneurship across countries; namely, post-materialism, altruism, and social ties

among members in a community explain the social progress orientation of societies. Stephan *et al.* (2015) have explored similar elements in the social entrepreneurship arena. Yet, the people's pro-social behavior (especially women as compared to men), as well as their consequence on economic outcomes such as individual well-being remain unexplored. Indeed, it has been suggested that the intersection between social entrepreneurship and women's entrepreneurship is a significant area of research that sheds light on how women are engaging in entrepreneurial activities with a social impact. Women's involvement in social ventures is on the rise, with a growing focus on how women-led social enterprises can contribute to positive social change through the values they embody (Borquist and Bruin, 2019). Research indicates that women entrepreneurs play pivotal roles in societal development by creating jobs, generating wealth, and fostering innovation (Dean *et al.*, 2022). Moreover, the success and stability of women's micro-enterprises are closely tied to cultural values (e.g., post-materialism and altruism) and social relations, emphasizing the importance of social capital in supporting women entrepreneurs (Hechavarría and Brieger, 2022; Stephan *et al.*, 2015).

In this regard, a cultural value coming from the primary socialization process is post-materialism. According to Inglehart and Abramson (1999), this consists of values emphasizing the importance of political liberties, active engagement in governance, self-fulfillment, meaningful personal connections, fostering creativity, and prioritizing environmental stewardship. Contrary to this, materialistic values encompass the pursuit of economic and financial stability, societal order, personal safety, and adherence to legal frameworks. Past evidence has suggested that the higher the levels of post-materialism in a country, the more likely a population will consider the well-being of others as a worthy goal, finding its expression in activities such as entrepreneurship focused on issues of social

significance (Hoogendoorn and Hartog, 2011). The relationship between post-materialism and entrepreneurial activity is not always positive, however. Some researchers have observed a negative relationship between traditional and social entrepreneurship. For instance, Uhlaner and Thurik (2007) argue that material gains, which are a secondary goal for post-materialist individuals, are key issues in traditional entrepreneurship. Morales and Holtschlag (2013) also evidence of how post-materialism decreases the likelihood of individuals choosing to become entrepreneurs. These authors suggest that countries dependent on high rates of entrepreneurship suffer most from this effect. When it comes to the evidence about women and men entrepreneurs, extant literature suggests that post-materialistic values have been shown to significantly influence pro-social behavior among women entrepreneurs. Research indicates that in societies where post-materialistic values are prevalent, there is a positive impact on pro-environmental venturing goals among women entrepreneurs (Hechavarría, 2016). These values prioritize pro-social norms, leading to a higher likelihood of engaging in social entrepreneurship to promote social well-being (Deng *et al.*, 2019). Additionally, societies with post-materialistic values and an emphasis on femininity tend to foster the creation of social entrepreneurship (Gerlach, 2021). This view would imply that the impact of post-materialism will be greater on social than on traditional entrepreneurs (Kruse *et al.*, 2021; Stephan *et al.*, 2015), influencing women more than men. Thus, the following hypotheses are proposed:

*Hypothesis 1a: Post-materialism has a positive effect on the probability of becoming a social entrepreneur.*

*Hypothesis 1b: The positive effect of post-materialism is higher on the probability of females than males becoming social entrepreneurs.*

As part of the cultural roots in a society, Inglehart and Baker (2000) discuss that the persistence of some values stems from the primary socialization process, which takes place at home among family members. From here, it is possible to understand why altruism emerges in a place where there is unconditional care, resource sharing, and knowledge transfer. This idea is aligned with Smithian's theory of moral sentiments, in which it is exemplified how a mother has a stronger connection with offspring as compared to that by a father. Perhaps, because of this, values and skills are transmitted from generation to generation. In this regard, authors such as Arenius and Kovalainen (2006) and Shinnar *et al.* (2012) have observed that personal values and characteristics are important for entrepreneurial skills and distinguished between female and male entrepreneurs. To explain why some individuals in society are predisposed to becoming social entrepreneurs, van Ryzin *et al.* (2009) looked at individual behavior in geographical areas. Their findings suggest that, in the US, women in metropolitan areas are more likely to be entrepreneurs. The closeness of big cities with their attendant problems of big-city life seems to encourage a sense of solidarity and respect for the less fortunate and a greater willingness to contribute regularly to charity among women than among men (Hechavarría and Ingram, 2019). This seems to go in line with MacAskill (2019, p. 13), who has suggested altruism as a cultural value that "is about using evidence and reason to figure out how to benefit others as much as possible and taking action on that basis." Drawing on this idea, Korosec and Berman (2006) have found that non-white female entrepreneurs are more likely to become social entrepreneurs due to their own life experiences or a historical awareness of social injustice and inequality. The involvement of entrepreneurs in the social sector allows them to identify new opportunities as well as to become altruistic and more sensitive citizens who are dissatisfied

with the status quo and are motivated to act with social responsibility (Corner and Ho, 2010; Shepherd *et al.*, 2023). The following hypotheses are suggested:

*Hypothesis 2a: Altruism has a positive effect on the probability of becoming a social entrepreneur.*

*Hypothesis 2b: The positive effect of altruism is higher on the probability of females becoming social entrepreneurs than males.*

Beyond the primary socialization process, individuals also socialize with other people in their communities or associations they identify with each other (North, 1990). Nonetheless, in some cases, social networks might benefit a particular group more than another. For example, being part of a social organization can offer benefits to both male and female entrepreneurs due to various factors highlighted in the literature. Research indicates that social ventures, which integrate social welfare and commercial aims, are more likely to be initiated by males (Dong *et al.*, 2022). Additionally, in cultures with low gender egalitarianism, male entrepreneurs tend to benefit more from their larger social networks compared to female entrepreneurs (Batjargal *et al.*, 2019). Moreover, male entrepreneurs are perceived as having higher agency than commonality, which may contribute to their success in social organizations (Gupta *et al.*, 2018).

Studies also suggest that men and women entrepreneurs develop structurally different social networks, with women tending to build more "male-oriented" networks as they progress through venture phases (Klyver and Terjesen, 2007; Klyver and Grant, 2010). Partnering with men in male-dominated contexts can provide women entrepreneurs with enhanced legitimacy, access to more resources, and a stronger social network, potentially giving them an advantage in social organizations (Godwin *et al.*, 2006). Furthermore, the perception of social entrepreneurs as similar to both men and women may play a role in the

benefits experienced by male and female entrepreneurs in social settings (Gupta *et al.*, 2018). Hence, the following hypotheses are proposed:

*Hypothesis 3a: Membership in a social organization has a positive effect on the probability of becoming a social entrepreneur.*

*Hypothesis 3b: The positive effect of membership in a social organization is higher on the probability of males than of females becoming social entrepreneurs.*

## **2.2. Entrepreneurship and individual economic well-being**

In the history of economic thought, one researcher who explored this relationship between entrepreneurial decisions and economic growth was Schumpeter (1934); he stated that innovative entrepreneurs are capable of generating shocks in the economy, creating new and higher long-term equilibria. He also suggested that these innovations, when adopted by the markets, created new path dependencies and encouraged new entrepreneurs to continue and sustain the development process. Here, more inclusive entrepreneurship is needed to generate impact in terms of not only total outcome but also societal value (Bruton *et al.*, 2013).

Thus, entrepreneurship and its possible effects generate research questions for many scholars from different disciplines (Thornton *et al.*, 2011). In the eyes of Aparicio *et al.*, (2016) and Bosma *et al.* (2018), one important reason to study entrepreneurship is that it is a factor in mediating the growth and development process. According to these authors, one stream of entrepreneurship research explores the determinants that encourage this behavior. This contrasts with explanations of social entrepreneurship using an institutional approach, as the previous subsection discussed. A second stream is related to the effects of entrepreneurship. Some authors, like Bjørnskov and Foss (2016) and Urbano *et al.* (2019)

summarize the studies that empirically assess the effect of entrepreneurship on economic growth, job creation, and innovation.

Literature on the relationship between social entrepreneurship and well-being is sparse. Nega and Schneider (2014) have analyzed the influence of social entrepreneurial activity on economic development in Africa, in particular in Kenya. A common conclusion is that the decision to become an entrepreneur in these developing countries could alleviate poverty if there was an adequate context for creating societal value (McMullen and Bergman Jr, 2017). Nega and Schneider (2014) describe the context in terms of financial aid, support from the state, and democratic reforms. With such a context in place, social entrepreneurship could be a meaningful microeconomic strategy for social development. Manetti (2014) reached similar conclusions and added to the discussion with a new method for analyzing developed countries. Other authors, such as Gray *et al.* (2014), have explored how social entrepreneurship could help vulnerable communities such as climate-threatened people with disabilities and indigenous communities. Zahra *et al.* (2014) extend the analysis to international entrepreneurship. These authors consider the impact of entrepreneurship on a globally sustainable level of well-being and income that includes financial, social, and environmental wealth creation. Maclean *et al.* (2013) concluded in their case studies that social entrepreneurship creates economic and social value, whereas traditional entrepreneurship only targets economic value.

Although research on gender, social entrepreneurship, as well as its effects on well-being and income level is a new field, emerging evidence points to a positive effect on social value creation. Social entrepreneurship, regardless of gender, plays a crucial role in addressing market failures with innovative solutions (Terjesen *et al.*, 2015). Both male and female social entrepreneurs contribute to the economy and society, with their activities



influenced by similar factors at the country level (Verheul *et al.*, 2006). While male and female entrepreneurs may face disparities in outcomes and benefits due to various determinants, both genders have the potential to drive impactful social change.

However, male and female social entrepreneurship show differences in various aspects. Research indicates that males tend to have higher perceived entrepreneurial self-efficacy, influencing their attitude towards entrepreneurship, while females are more influenced by perceived social norms (Arshad *et al.*, 2016). Social ventures are reported to be more likely initiated by males, although the gender gap in later entrepreneurial stages is less pronounced (Dong *et al.*, 2022).

Female entrepreneurs prioritize social value creation more than male entrepreneurs (Hechavarría and Brieger, 2022). Hegemonic masculinity has been found to decrease the incidence of social entrepreneurship, while emphasized femininity increases it (Hechavarría and Ingram, 2016). Although in social entrepreneurship the participation of men and women tends to be more similar compared to other forms of entrepreneurship (Parra *et al.*, 2020), one might suspect that the existing gender gap in the number of social new ventures explains a more pronounced effect of male social entrepreneurs on economic outcomes than their female counterparts. For instance, entrepreneurship education affects feasibility, desirability, and intentions for technology entrepreneurship among STEM students, with males showing higher entrepreneurial intentions when both genders receive entrepreneurship education (Pergelova *et al.*, 2023). That leads to the following hypotheses:

*Hypothesis 4a: Both social and traditional entrepreneurship have a positive effect on individual economic well-being, although the effect of social entrepreneurship is higher.*

*Hypothesis 4b: Both female and male social entrepreneurs have a positive effect on individual economic well-being, though the effect of male entrepreneurship is higher.*

### **3. Methods**

#### ***3.1. Data and variables***

The World Values Survey Association (WVSA), led by a global network of social scientists focused on the study of changing values, surveyed the populace of 97 countries that represent about 90% of the world's population (see Inglehart, 2000b, 2004). The WVSA has published six waves of its survey (WVS-1: 1981–1984; WVS-2: 1989–1993; WVS-3: 1994–1999; WVS-4: 1999–2004; WVS-5: 2005–2009; and WVS-6: 2010–2014), which explores the basic values and attitudes of individuals across a broad range of issues, including politics and economics, family and religious values, gender issues, and environmental awareness.

For the present study, several questions from the WVSA database were used. Researchers have made active use of this database to analyze topics such as economic and political change (Inglehart, 1997), trust in large organizations, trust and well-being across nations (Inglehart, 2000a), post-materialism (Inglehart and Abramson, 1999), and values and cultural change (Inglehart and Baker, 2000). Specifically, we used data from WVS–6, which queried 85,070 respondents from 59 countries across five continents. The final sample size in the present paper is smaller (57 countries and 69,236 individuals) because we excluded countries that were not queried on all the variables we were researching, and we excluded responders with missing survey values. Appendix 1 lists the included countries.

One of the dependent variables consists of social entrepreneurship (female and male) and traditional entrepreneurship. We measured social entrepreneurship as self-employed individuals who work for voluntary organizations (Mort *et al.*, 2003). Traditional entrepreneurship was defined as a labor status of self-employment with no volunteer work (Aparicio *et al.*, 2022). Although these measures could be problematic, the literature

considers self-employment to be an accurate indicator of entrepreneurial activity, since this labor status is an individual (and autonomous) occupational choice that might or might not create jobs (Vinogradov and Kolvereid, 2007). In our case, we assume that part of the individual's job consists of providing services for voluntary organizations with social purposes. This assumption is similar to Urbano *et al.* (2017). The other dependent variable is individual economic well-being, which was measured through deciles of income. To approximate this measure of well-being, we followed Ferrer-i-Carbonell (2005), who found that a high-income level is associated with individual happiness. This scale is also useful to understand the level of income inequality, in which individuals belong to a certain level depending on their family income.

By following Inglehart and Abramson (1999), we approached post-materialism through 12 items, which include: Maintaining order in the nation, giving people more say in important government decisions, fighting rising prices, protecting freedom of speech, maintaining a high level of economic growth, making sure that this country has strong defense forces, trying to make our cities and countryside more beautiful, a stable economy, progress towards a less impersonal and more humane society, progress towards a society in which ideas count more than money, the fight against crime. This variable is measured through a 5-point Likert scale (higher values represent post-materialistic behavior whereas less values represent materialist ones), which has also been utilized in other studies exploring entrepreneurship (Aparicio *et al.*, 2022). Altruism is a dichotomous variable equal to 1 if the respondent actively participates in self-help groups or mutual aid groups; zero otherwise. This follows Krueger *et al.*'s (2001) to capture the individual behavior in helping others. Member of a social organization is also a dummy variable equal to 1 if the respondent belongs to a church or religious organization; zero otherwise. Audretsch *et al.* (2013) analyze how

religious characteristic is formed thanks to the association with other people around common beliefs. Accordingly, these sorts of groups help entrepreneurs to better identify opportunities with social purposes by enhancing their alertness.

Control variables are helpful to check whether unobservable characteristics also affect the decision of women and men to become social entrepreneurs. In this regard, we included gender (equal to 1 if the respondent is male; 0 otherwise), savings (equal to 1 if the family could save in the past year; zero everything else), education (equal to 1 if the respondent completed secondary school, as well as university or higher degree level; zero otherwise). With these controls, we cover the multidimensional aspects of well-being related to income, education, and household characteristics (Ferrer-i-Carbonell, 2005). Table 1 presents a summary of these variables as well as the control variables used in the present study.

*Table 1 about here*

### **3.2. Empirical strategy**

Given the reliance on cross-sectional data for the analysis, concerns could be raised about the potential endogenous relationships between dependent variables (individual economic well-being and social entrepreneurship) and explanatory variables. It is likely that entrepreneurship is driven by enhancing economic performance and that entrepreneurs contribute to well-being and income distribution as a result of social value creation. Social entrepreneurship only accounts for a small percentage of employment in most countries, and this may attenuate its feedback on individual well-being.

Since social entrepreneurship is measured as a dummy variable, using 2SPLS (Maddala, 1983; Keshk *et al.*, 2004), a dummy variable version of Two Stage Least Squares

(2SLS), may capture a simultaneous structure, which contains a limited dependent variable in one equation and continuous variable in another equation. Hence, the following structural equations are used in the analyses:

$$P(SOSE_i = 1) = f(IF_i, CV_i) \quad (\text{Eq. 1})$$

$$EW_i = f(\widehat{SOSE}_i, X_i) \quad (\text{Eq. 2})$$

where  $SOSE_i$  corresponds to social entrepreneurship (female and male);  $IF_i$ , institutional factors; and  $CV_i$ , the control variables for Equation 1. In Equation 2,  $EW_i$  is individual economic well-being;  $\widehat{SOSE}_i$ , is social entrepreneurship (female and male), estimated in Equation 1; and  $X_i$ , the control variables for Equation 2. All these variables are for each individual  $i$ .

The estimation follows a two-stage process with an additional step of standard error correction to avoid heteroskedastic results. Equation 1 is estimated with probit and Equation 2, with OLS. From each model, the predicted values  $\widehat{SOSE}_i$  and  $\widehat{EW}_i$  are used in the second stage, where  $\widehat{SOSE}_i$  replaces the original endogenous variable in Equation 1. The final step is the correction of standard errors. These estimations were done using the `cdsimeq` command developed by Keshk (2003) in Stata.

#### 4. Results

Table 2 presents the means, standard deviations, and a correlation matrix for the variables of the econometric model presented previously. On average, 0.4% of all entrepreneurial activity was social entrepreneurship; male social entrepreneurial activity (0.3%) was higher than female (0.1%). Entrepreneurism accounted for 12.4% of all employment. On average,

entrepreneurs were members of the middle class (4.92; Table 2) (see Appendix 1 for the number of respondents by country and year).

*Table 2 about here*

To test for multicollinearity, we calculated the VIF for each predictor; all VIFs were low (below 1.02). To test for heteroskedasticity and autocorrelation among observations in the same country, we estimated corrected standard errors (Keshk, 2003). Table 3 presents the two-stage probit least squares regression analysis where we report estimated coefficients, marginal effects (probit models), and corrected standard errors for all models. All models were highly significant ( $p \leq 0.000$ ).

Model 1 presents the regression results for institutional factors and social entrepreneurship (Equation 1) and the link between social entrepreneurs and individual economic well-being (Equation 2). Model 2 shows the results for female social entrepreneurs. Also, for purposes of comparison, Model 3 presents the results for male social entrepreneurs, and Model 4 shows the results for traditional entrepreneurship. Finally, in line with Arin *et al.* (2015), and Langowitz and Minniti (2007), we include control variables related to socio-demographic factors in all models estimated (gender and income in Equation 1; and savings, education, and age squared in Equation 2) to analyze the probability of a social individual becoming self-employed, and its effect on individual well-being. To avoid collinearity problems, we did not include gender in Models 2 and 3.

*Table 3 about here*

Hypotheses 1a and 1b proposed that post-materialism would have a positive effect on the probability of becoming a social entrepreneur. We found significant, positive support for Hypothesis 1a (due to the marginal effect of post-materialism) in Model 1 ( $p < 0.001$ ). This agrees with evidence that a higher level of post-materialism is related to a higher level of

social entrepreneurial activity (Hoogendoorn and Hartog, 2011). Furthermore, our results suggest that post-materialism has a positive influence on social entrepreneurship, being higher for females than for males (Model 2;  $p \leq 0.001$ ). Hence, if post-materialism affects female entrepreneurship positively, as we hypothesized, and according to previous studies (Manolova *et al.*, 2012), this effect is significant (see Model 2); however, post-materialism is not significant in Model 3. Note that these findings support Hypothesis 1b. Women tend to put the non-materialistic values of society higher on their list of goals than men, which could explain why women tend to be more driven by social projects. Thus, our analysis supports Hypothesis 1b; and for women, the decision to start up a social organization may be highly dependent on the values of the society they live in.

Hypotheses 2a and 2b proposed positive effects of altruism on social entrepreneurship (Harris *et al.*, 2009). Our first three models found the coefficient of the variable for altruism to be significant, which agrees with the literature. The magnitude of the coefficients demonstrated how altruistic attitudes in both female and male entrepreneurs have a positive influence on social entrepreneurship. This effect, however, is marginally stronger in male social entrepreneurship than in females. Contrary to van Ryzin *et al.* (2009), our results do not support the idea that altruistic attitudes are more embedded in female than male entrepreneurs. Instead, the marginal difference suggests that this attitude is important for becoming a social entrepreneur, whether female or male.

Our data do not support Hypothesis 3a concerning the value of membership in a social organization for social entrepreneurship. The analyses also reject Hypothesis 3b; it seems that women who actively participate in church-related social organizations have a greater influence on social entrepreneurship than men. In general, the literature suggests that being a member of a social organization is another characteristic of social entrepreneurs (Alvord *et*

*al.*, 2004; Certo and Miller, 2008). We decided, however, to investigate this characteristic by looking at a specific type of social organization, religious organizations. The literature suggests that religion has a negative influence on entrepreneurship (Audretsch *et al.*, 2013). Arguments have been made that religions such as Hinduism and Buddhism have a negative impact on the decision to be an entrepreneur while Christianity does not (Audretsch *et al.*, 2013). Some religious beliefs do not condone certain types of productive activities, and followers of these beliefs do not participate in such business practices (Parboteeah *et al.*, 2009). Here, Audretsch *et al.* (2013) and Hoogendoorn *et al.* (2016) argue that religion influences institutional systems that affect decisions to pursue entrepreneurship by prohibiting some choices and discouraging wealth accumulation, or by placing prohibitive sanctions on those who pursue entrepreneurial activities.

Similarly, prior literature suggests that an entrepreneurial career would be a desirable occupation, particularly for women if management were participative, communicative, empathetic, and flexible in an environment where information is shared, values are common, and members work together as a team (Eddleston and Powell, 2008; Hechavarria *et al.*, 2019). The literature also discusses other factors that make entrepreneurship desirable, such as prior experience and collaborative networks; these are valuable elements for females who use their contacts at a business level to develop more personal, rather than operational, support (Ceesay *et al.*, 2022; Sorenson *et al.*, 2008). In line with this, The National Foundation for Women Business Owners (2000) found that 92% of female entrepreneurs supported charitable and community organizations. Likewise, various studies provide evidence that female entrepreneurs prefer using collaborative networks with high proportions of friends and family members (Ogunrinola, 2011). Meanwhile, those people who have been members of associations or foundations and have socialized with other entrepreneurs are



more likely to create a new venture (Dufays and Huybrechts, 2014). Entrepreneurs with experience in such associations and contact with successful role models can reduce the uncertainty associated with starting a business (Gnyawali and Fogel, 1994). Women in particular appreciate the experiences shared by entrepreneurial role models; and such contacts seem to have a more positive effect on women than men (Hechavarria *et al.*, 2019; Langowitz *et al.*, 2006).

Our data support Hypotheses 4a and 4b concerning the effect of social entrepreneurship on well-being. Models 1, 2, and 3 found the effect of social entrepreneurship on individual economic well-being to be positive and significant ( $p < 0.01$  for Models 1 and 3;  $p < 0.05$  for Model 2). The literature suggests that social entrepreneurship could be a key mechanism in creating social value. As Martin and Novicevic (2010) pointed out, the entrepreneurial activity of social individuals' benefits entrepreneurs as well as society at large. Here, Model 4 demonstrates how generating an adequate context for creating social value is more valuable than economic value. Although traditional entrepreneurship is relevant for economic growth (Bosma *et al.*, 2018; Urbano *et al.*, 2019), researchers such as Audretsch *et al.* (2008) have highlighted that social entrepreneurship is most relevant in social terms, given its ability to involve all of society in the productive process.

To explain the results of Models 1 and 4 in the second stage, prior literature has suggested that social entrepreneurship is a crucial component of society and the economy as it focuses on creating social value rather than solely pursuing personal or shareholder wealth (Austin *et al.*, 2006). Social entrepreneurs are motivated by innovation and creating new solutions to social issues, rather than replicating existing practices (Austin *et al.*, 2006). In contrast to commercial entrepreneurship, social entrepreneurship often requires strong political and relationship management skills as social entrepreneurs rely heavily on external

resources such as donors, partners, and volunteers for success (Austin et al., 2012). Unlike commercial entrepreneurship that focuses on economic performance, social entrepreneurship emphasizes delivering social value and social wealth to the community (Tien et al., 2020). Social entrepreneurship is not solely about excluding profit but rather shifting the primary goal of activities towards social impact while recognizing the importance of financial sustainability (Estrin *et al.*, 2013). The establishment of new social values through social entrepreneurship is considered essential across public, private, and non-profit sectors (Saebi *et al.*, 2019). Notice that this result holds when comparing female and male commercial entrepreneurship (see Appendix 2) to female and male social entrepreneurship. Here, it is also observed that the effect of male commercial entrepreneurial activity is higher than that of their counterparts.

Looking at female social entrepreneurship, we see that the higher activity by men may partially explain the lower impact of social entrepreneurship on well-being. However, as researchers such as Datta and Gailey (2012), and Desivilya (2010) suggest, female social entrepreneurship is becoming more important for economic welfare, which implies that programs encouraging female entrepreneurial activity should receive additional support. In the eyes of Coleman (2004), as women gain importance in economic development, social opportunities may be improving due to advances in social and gender equality.

Concerning the controls, we see that all variables exhibit the expected behavior, though well-being was not significant for Model 2 (Equation 1). Comparing this control in Models 1 and 4, it is observed that the higher the well-being, the larger the probability of becoming a social entrepreneur. The opposite is observed when it comes to commercial entrepreneurship. This can be explained by the fact that social entrepreneurs not only use their resources, but they are also able to raise external capital to move forward their projects

in favor of the society (Estrin *et al.*, 2013). As education is closely linked to entrepreneurship, Austin *et al.* (2006) suggest that social entrepreneurs tend to be wealthier than commercial entrepreneurs due to the political and management skills required to get funding and managing it fulfilling stakeholder expectations. The other variables in Equation 1 help explain the variability of individual well-being: savings, occupation, education, and age squared (as a proxy of experience).

In general terms, our main findings indicate that institutional factors have a significant impact on social entrepreneurship (Model 1). However, their influence on gender issues is not clear (Models 2 and 3). As we mentioned, we found that post-materialism and being a member of a social organization affect females more than male social entrepreneurship, and in contrast, an altruistic attitude is significant and marginally higher for males than females. Also, social entrepreneurship is fully relevant for generating social value and achieving well-being. Table 4 provides a summary of the suggested hypotheses alongside the obtained results.

*Table 4 about here*

## **5. Discussion**

Our analyses found that post-materialism and altruism were general, positive determinants of social entrepreneurship. The gender analyses revealed that, aside from post-materialism, the determinants we tested had a similar impact on female and male entrepreneurial activity. Post-materialism had a significant, positive impact on the probability of female social entrepreneurs becoming self-employed compared with men. Nonetheless, our models appear to be well specified because female and male entrepreneurial activity rates seem to be generally influenced by the same determinants in the same direction. Hence, conditions for

female entrepreneurship in a country tend to be similar to those needed for social entrepreneurship in general.

We found that, effectively, becoming a social entrepreneur was relevant for women as well as men, and for all of society (McMullen and Bergman Jr, 2017); it thus had an effect on individual well-being. We also found that social entrepreneurship has a broader influence on well-being than traditional entrepreneurship, which some argue is an important driver of economic growth. Furthermore, although male entrepreneurship has a higher impact on well-being than females, generating incentives that encourage female entrepreneurship is still relevant, especially in the field of gender equality.

These results may help advance the analysis of entrepreneurial activity from an institutional point of view (Ibáñez, 2022), giving greater robustness to social environmental factors as determinants of entrepreneurship focused on social goals. By overcoming potential endogeneity between these elements, we suggest that (informal) institutions are important factors for individuals, but above all, for women when making an entrepreneurial decision that can help communities overcome societal issues (Hechavarría *et al.*, 2023). In this regard, cultural values associated with characteristics that transcend economic purposes, encourage them to overcome the existing uncertainty involved in the entrepreneurial processes and undertake social projects. This, in turn, helps an increase in well-being, which supports the discussion about male-oriented literature when it comes to economic outcomes (Dean *et al.*, 2019).

Our results suggest several implications at academic and policy levels for developing research on relevant institutional factors. From a policy viewpoint, courses and support programs (at all educational levels) that foster a more positive perception of entrepreneurial

skills and that showcase female role models to encourage female social entrepreneurship, could be increased.

We agree with the idea of Arshed *et al.* (2014), Ogundana *et al.* (2021) and Shane (2009) on policy implications, that strategies to promote entrepreneurship should pursue social benefits. In the eyes of these authors, entrepreneurial activity that promotes middle- and long-term development should focus on generating opportunities for all individuals in all countries. Accordingly, social entrepreneurship should also be encouraged for the social value that it provides: that is, not simply for development purposes, but also for inclusive goals. This type of entrepreneurship seeks to raise income levels and improve the well-being of all individuals; involving both female and male social entrepreneurs provides benefits for all of society. Thus, inclusive entrepreneurship policies should consider strategies that close gender gaps and promote more dynamic participation of women in activities that create social value.

Although the policies to promote social entrepreneurship are essentially the same as those that encourage traditional entrepreneurship, a specific focus on increasing social entrepreneurial activity across all countries should be considered. The 2014 OECD report cites the reduction of barriers to new business creation in some ethnic minority groups as a necessary prerequisite for social improvement. Public support, however, believes that entrepreneurship creates mutual benefits in these groups as well as the rest of society. For instance, Ålund (2003) and Ram and Smallbone (2003) argue that overcoming the challenges that ethnic minority entrepreneurs face makes new benefits available in previously less accessible markets. Thus, when individuals of a social group work together to bring an entrepreneurial project to fruition, they generate advantages for consumers and employees and promote community support.

Furthermore, policies to promote social entrepreneurship should not have too narrow of a vision, with a focus solely on social missions. Social entrepreneurs can also have financial goals as long as their goals include a social mission. Thus, benefits may be economic as well as social when sustainable social entrepreneurship is supported and encouraged (Ansari *et al.*, 2012).

In general, social entrepreneurship was born of societal needs for economic empowerment, redistribution of resources, and economic and social development (Thiru *et al.*, 2015). Only when informed by an entrepreneurship education designed to allow the constant creation, innovation, and exploitation of ideas can entrepreneurial policy alleviate and potentially solve social problems. The steady pursuit of social benefits through these activities should be a matter for all agents in the economy: government, incumbent firms, and households. Social entrepreneurship as a function of these agents creates social change and development. Thus, it is fundamental to understand its relative importance to entrepreneurs, which on the one hand, could bridge gaps such as gender and social inequality, and on the other, engender social responsibility by enhancing the earnings of all (Aparicio *et al.*, 2022; Thiru *et al.*, 2015).

Authors like Vachani and Smith (2008) argue that social entrepreneurs deserve special attention since they potentially are the solution to improving the living standards of those with the lowest socio-economic status. The first step is for society to articulate a social purpose. Governments as well as incumbent firms must take the next steps by providing, for example, financial services, entrepreneurial training, support of women, infrastructure, access to communication, cost and price controls (to avoid aggressive competitors), distribution leverage, market access, and technology advantages (Khavul and Bruton, 2013; Wilson and Liguori, 2022). As Acs *et al.* (2013) conclude, social entrepreneurs could be the

solution that fosters inclusive development and social value. This goes in line with Dean et al. (2019), who suggest that women are creating important effects on countries' development. Our results also support this idea. While the effect is higher for men social entrepreneurs as compared to women, the positive and statistically significant effect shows the relevance of enhancing confidence and support for productive activities that pursue social goals.

## **6. Conclusions**

This paper used cross-sectional data from WVS-6 (2010–2014) to evaluate the influence of institutions on the probability of becoming a social entrepreneur and the effect of this choice on individual economic well-being. By achieving this, we treated the reverse causality problem, which increases understanding of the interrelationship between these variables. Using a conceptual framework of institutional economics (North, 1990), we analyzed the influence of institutional factors (post-materialism, altruism, and membership in a social organization) on social entrepreneurship, which promotes higher well-being and broader income distribution. We also considered this simultaneity in female and male social entrepreneurs and traditional entrepreneurship. Here, for both females and males, social entrepreneurship has a higher impact in terms of economic value (household income) than traditional entrepreneurship.

Despite the importance of our findings, this study also suffers from a series of limitations that might encourage further research. For example, we rely on individual-level data that captures both cultural aspects as well as socioeconomic characteristics. While there is rich information across countries, the cross-sectional structure does not enable longitudinal analyses. Similarly, it is important to understand the respondent's income level (i.e., well-being) before and after becoming self-employed. We are aware that other earnings from self-

employment (i.e., household income) could have impacted the respondents' wealth, which is something that we cannot account for. Future research might be interested in exploring if the social entrepreneurship-household income nexus holds over the years. To this end, we are aware that the WVS works with waves. In our case, we employ the 2010-2014 period. Future research can check if the subsequent waves create similar or different results. In this regard, further explorations can consider if time plays a role in the hypotheses we tested (Lévesque and Stephan, 2020). As suggested by Urbano *et al.* (2019), cultural characteristics change slowly (as compared to regulations and procedures). Therefore, pseudo-panels can be utilized to include other waves in future research and move on to a dynamic approach. This would entail another technique as the 2SPLS is too sensitive to variables at a different level of analysis. In this regard, the two stages might require a separate approach.

The use of WVS can also limit the nuances existing in our variables of interest. For example, altruism considers the way people help others. In this sense, having a dichotomous variable might hinder the potential of this factor in explaining an individual decision such as becoming a social entrepreneur. Altruistic personality aspects can also be considered in future attempts to understand social entrepreneurial activity and its link to economic development (Krueger *et al.*, 2001).

Similar to Hechavarría *et al.* (2023), we believe that studying the overall effects of socio-cultural factors is a worthwhile endeavor. Future research should focus on including more countries in the analysis and investigating more explanatory factors, as well as other control variables, at the individual and country levels. Formal and informal institutional factors should be included to rule out country differences in these areas, as North (1990, 2005) discusses. Additionally, future studies should analyze other variables to capture income level and distribution or social value (Hechavarria *et al.*, 2019). Also, other economic



impacts of social entrepreneurship such as job creation, community development, and regional performance could extend the extant literature on social entrepreneurship and individual well-being. The study of these two variables could open up new avenues in entrepreneurship, economics, and their endogeneity feature.

## References

- Acs, Z.J., Audretsch, D.B., Braunerhjelm, P. and Carlsson, B. (2012), "Growth and entrepreneurship", *Small Business Economics*, Vol. 39 No. 2, pp. 289–300.
- Acs, Z.J. and Szerb, L. (2007), "Entrepreneurship, Economic Growth and Public Policy", *Small Business Economics*, Vol. 28 No. 2–3, pp. 109–122.
- Aidis, R., Estrin, S. and Mickiewicz, T. (2008), "Institutions and entrepreneurship development in Russia: A comparative perspective", *Journal of Business Venturing*, Vol. 23 No. 6, pp. 656–672.
- Aldrich, H.E. and Cliff, J.E. (2003), "The pervasive effects of family on entrepreneurship: Toward a family embeddedness perspective", *Journal of Business Venturing*, Vol. 18 No. 5, pp. 573–596.
- Ålund, A. (2003), "Ethnic entrepreneurs and other migrants in the wake of globalization", *International Review of Sociology/Revue Internationale de Sociologie*, Vol. 13 No. 1, pp. 77–87.
- Alvord, S.H., Brown, L.D. and Letts, C.W. (2004), "Social entrepreneurship and societal transformation an exploratory study", *The Journal of Applied Behavioral Science*, Vol. 40 No. 3, pp. 260–282.
- Amorós, J.E., Cristi, O. and Naudé, W. (2021), "Entrepreneurship and subjective well-being: Does the motivation to start-up a firm matter?", *Journal of Business Research*, Vol. 127, pp. 389–398.
- Anderson, R.B., Dana, L.P. and Dana, T.E. (2006), "Indigenous land rights, entrepreneurship, and economic development in Canada: 'Opting-in' to the global economy", *Journal of World Business*, Vol. 41 No. 1, pp. 45–55.
- Ansari, S., Munir, K. and Gregg, T. (2012), "Impact at the 'bottom of the pyramid': the role of social capital in capability development and community empowerment", *Journal of Management Studies*, Vol. 49 No. 4, pp. 813–842.
- Aparicio, S., Urbano, D. and Audretsch, D. (2016), "Institutional factors, opportunity entrepreneurship and economic growth: Panel data evidence", *Technological Forecasting and Social Change*, Vol. 102, pp. 45–61.
- Aparicio, S., Urbano, D., Audretsch, D. and Noguera, M. (2019), "Female and male entrepreneurship during the economic crisis: An institutional tale of European countries", *Revista de Economía Mundial*, Vol. 51, pp. 163–184.

- Aparicio, S., Audretsch, D., Noguera, M. and Urbano, D. (2022), "Can female entrepreneurs boost social mobility in developing countries? An institutional analysis", *Technological Forecasting and Social Change*, Vol. 175, p. 121401.
- Arenius, P. and Kovalainen, A. (2006), "Similarities and differences across the factors associated with women's self-employment preference in the Nordic countries", *International Small Business Journal*, Vol. 24 No. 1, pp. 31-59.
- Arin, K.P., Huang, V.Z., Minniti, M., Nandialath, A.M. and Reich, O.F. (2015), "Revisiting the determinants of entrepreneurship: A Bayesian approach", *Journal of Management*, Vol. 41 No. 2, pp. 607-631.
- Arshad, M., Farooq, O., Sultana, N. and Farooq, M. (2016), "Determinants of individuals' entrepreneurial intentions: a gender-comparative study", *Career Development International*, Vol. 21 No. 4, pp. 318-339.
- Arshed, N., Carter, S. and Mason, C. (2014), "The ineffectiveness of entrepreneurship policy: is policy formulation to blame?", *Small Business Economics*, Vol. 43 No. 3, pp. 639-659.
- Audretsch, D.B., Belitski, M., Chowdhury, F. and Desai, S. (2024), "Regulating entrepreneurship quality and quantity", *Research Policy*, Vol. 53 No. 2, pp. 104942.
- Audretsch, D.B., Bönte, W. and Keilbach, M. (2008), "Entrepreneurship capital and its impact on knowledge diffusion and economic performance", *Journal of Business Venturing*, Vol. 23 No. 6, pp. 687-698.
- Audretsch, D.B., Bönte, W. and Tamvada, J.P. (2013), "Religion, social class, and entrepreneurial choice", *Journal of Business Venturing*, Vol. 28 No. 6, pp. 774-789.
- Audretsch, D.B. and Keilbach, M. (2004), "Does entrepreneurship capital matter?", *Entrepreneurship Theory and Practice*, Vol. 28 No. 5, pp. 419-429.
- Austin, J., Stevenson, H. and Wei-Skillern, J. (2006), "Social and commercial entrepreneurship: same, different, or both?", *Entrepreneurship Theory and Practice*, Vol. 30 No. 1, pp. 1-22.
- Bacq, S. and Janssen, F. (2011), "The multiple faces of social entrepreneurship: A review of definitional issues based on geographical and thematic criteria", *Entrepreneurship & Regional Development*, Vol. 23 No. 5-6, pp. 373-403.
- BarNir, A. (2012), "Starting technologically innovative ventures: reasons, human capital, and gender", *Management Decision*, Vol. 50 No. 3, pp. 399-419.
- Batjargal, B., Webb, J., Tsui, A., Arrègle, J., Hitt, M. and Miller, T. (2019), "The moderating influence of national culture on female and male entrepreneurs' social network size and new venture growth", *Cross Cultural & Strategic Management*, Vol. 26 No. 4, pp. 490-521.
- Baughn, C.C., Chua, B.L. and Neupert, K.E. (2006), "The normative context for women's participation in entrepreneurship: a multicountry study", *Entrepreneurship Theory and Practice*, Vol. 30 No. 5, pp. 687-708.

- Bjørnskov, C. and Foss, N. (2013), "How strategic entrepreneurship and the institutional context drive economic growth", *Strategic Entrepreneurship Journal*, Vol. 7 No. 1, pp. 50–69.
- Bjørnskov, C. and Foss, N.J. (2016), "Institutions, entrepreneurship, and economic growth: what do we know and what do we still need to know?", *The Academy of Management Perspectives*, Vol. 30 No. 3, pp. 292–315.
- Borquist, B. and Bruin, A. (2019), "Values and women-led social entrepreneurship", *International Journal of Gender and Entrepreneurship*, Vol. 11 No. 2, pp. 146-165.
- Bosma, N., Sanders, M. and Stam, E. (2018), "Institutions, entrepreneurship, and economic growth in Europe", *Small Business Economics*, Vol. 51 No. 2, pp. 483–499.
- Bradshaw, T.K. (2000), "Complex community development projects: collaboration, comprehensive programs, and community coalitions in complex society", *Community Development Journal*, Vol. 35 No. 2, pp. 133–145.
- Bruni, A., Gherardi, S. and Poggio, B. (2004), "Entrepreneur-mentality, gender and the study of women entrepreneurs", *Journal of Organizational Change Management*, Vol. 17 No. 3, pp. 256–268.
- Brush, C., Edelman, L. F., Manolova, T., and Welter, F. (2019), "A gendered look at entrepreneurship ecosystems", *Small Business Economics*, Vol. 53, pp. 393-408.
- Bruton, G., Sutter, C. and Lenz, A.K. (2021), "Economic inequality–Is entrepreneurship the cause or the solution? A review and research agenda for emerging economies", *Journal of Business Venturing*, Vol. 36 No. 3, p. 106095.
- Bruton, G.D., Ahlstrom, D. and Li, H.L. (2010), "Institutional theory and entrepreneurship: where are we now and where do we need to move in the future?", *Entrepreneurship Theory and Practice*, Vol. 34 No. 3, pp. 421–440.
- Bruton, G.D., Ketchen, D.J. and Ireland, R.D. (2013), "Entrepreneurship as a solution to poverty", *Journal of Business Venturing*, Vol. 28 No. 6, pp. 683–689.
- Caputo, R.K. and Dolinsky, A. (1998), "Women's choice to pursue self-employment: The role of financial and human capital of household members", *Journal of Small Business Management*, Vol. 36 No. 3, pp. 8–17.
- Carlsson, B., Braunerhjelm, P., McKelvey, M., Olofsson, C., Persson, L. and Ylinenpää, H. (2013), "The evolving domain of entrepreneurship research", *Small Business Economics*, Vol. 41 No. 4, pp. 913–930.
- Ceesay, L.B., Rossignoli, C. and Mahto, R.V. (2022), "Collaborative capabilities of cause-based social entrepreneurship alliance of firms", *Journal of Small Business and Enterprise Development*, Vol. 29 No. 4, pp. 507–527.
- Certo, S.T. and Miller, T. (2008), "Social entrepreneurship: Key issues and concepts", *Business Horizons*, Vol. 51 No. 4, pp. 267–271.
- Chowdhury, F., Audretsch, D.B. and Belitski, M. (2019), "Institutions and entrepreneurship quality", *Entrepreneurship Theory and Practice*, Vol. 43 No. 1, pp. 51–81.

- Coleman, I. (2004), "The payoff from women's rights", *Foreign Affairs-New York*, Vol. 83 No. 3, pp. 80–95.
- Commission, O.E.C.D. /The E. (2014), "The missing entrepreneurs: Policies for inclusive entrepreneurship in Europe, OECD Publishing", doi: [10.1787/9789264213593-en](https://doi.org/10.1787/9789264213593-en).
- Corner, P.D. and Ho, M. (2010), "How opportunities develop in social entrepreneurship", *Entrepreneurship Theory and Practice*, Vol. 34 No. 4, pp. 635–659.
- Datta, P.B. and Gailey, R. (2012), "Empowering women through social entrepreneurship: Case study of a women's cooperative in India", *Entrepreneurship Theory and Practice*, Vol. 36 No. 3, pp. 569–587.
- Davidsson, P. and Honig, B. (2003), "The role of social and human capital among nascent entrepreneurs", *Journal of Business Venturing*, Vol. 18 No. 3, pp. 301–331.
- Dean, H., Larsen, G., Ford, J. and Akram, M. (2019), "Female entrepreneurship and the metanarrative of economic growth: A critical review of underlying assumptions", *International Journal of Management Reviews*, Vol. 21 No. 1, pp. 24-49.
- Deng, W., Liang, Q., Fan, P. and Cui, L. (2019), "Social entrepreneurship and well-being: the configurational impact of institutions and social capital", *Asia Pacific Journal of Management*, Vol. 37 Vol.4, pp. 1013-1037.
- Dhesi, A.S. (2010), "Diaspora, social entrepreneurs and community development", *International Journal of Social Economics*, Vol. 37 No. 9, pp. 703–716.
- Domenico, M., Haugh, H. and Tracey, P. (2010), "Social bricolage: Theorizing social value creation in social enterprises", *Entrepreneurship Theory and Practice*, Vol. 34 No. 4, pp. 681–703.
- Dong, J., Wang, X., Cao, X. and Higgins, D. (2022), "More prosocial, more ephemeral? the role of work-related wellbeing and gender in incubating social entrepreneurs' exit intention", *International Journal of Environmental Research and Public Health*, Vol. 19 No. 7, pp. 3999.
- Dufays, F. and Huybrechts, B. (2014), "Connecting the dots for social value: A review on social networks and social entrepreneurship", *Journal of Social Entrepreneurship*, Vol. 5 No. 2, pp. 214–237.
- Eddleston, K.A. and Powell, G.N. (2008), "The role of gender identity in explaining sex differences in business owners' career satisfier preferences", *Journal of Business Venturing*, Vol. 23 No. 2, pp. 244–256.
- Estrin, S., Mickiewicz, T. and Stephan, U. (2013), "Entrepreneurship, social capital, and institutions: social and commercial entrepreneurship across nations", *Entrepreneurship Theory and Practice*, Vol. 37 No. 3, pp. 479-504.
- Estrin, S., Mickiewicz, T. and Stephan, U. (2016), "Human capital in social and commercial entrepreneurship", *Journal of Business Venturing*, Vol. 31 No. 4, pp. 449–467.
- Ferrer-i-Carbonell, A. (2005), "Income and well-being: an empirical analysis of the comparison income effect", *Journal of Public Economics*, Vol. 89 No. 5, pp. 997–1019.

- Friedman, V.J. and Desivilya, H. (2010), "Integrating social entrepreneurship and conflict engagement for regional development in divided societies", *Entrepreneurship And Regional Development*, Vol. 22 No. 6, pp. 495–514.
- Gatewood, E.J., Brush, C.G., Carter, N.M., Greene, P.G. and Hart, M.M. (2009), "Diana: a symbol of women entrepreneurs' hunt for knowledge, money, and the rewards of entrepreneurship", *Small Business Economics*, Vol. 32 No. 2, pp. 129–144.
- Gerlach, M. (2021), *Female Social Entrepreneurship: Challenging boundaries and reframing gender and economic structures*, Verlag Barbara Budrich, Berlin.
- Gnyawali, D.R. and Fogel, D.S. (1994), "Environments for entrepreneurship development: key dimensions and research implications", *Entrepreneurship Theory and Practice*, Vol. 18, pp. 43–43.
- Godwin, L., Stevens, C. and Brenner, N. (2006), "Forced to play by the rules? theorizing how mixed-sex founding teams benefit women entrepreneurs in male-dominated contexts", *Entrepreneurship Theory and Practice*, Vol. 30 No. 5, pp. 623-642.
- Gray, B.J., Duncan, S., Kirkwood, J. and Walton, S. (2014), "Encouraging sustainable entrepreneurship in climate-threatened communities: a Samoan case study", *Entrepreneurship & Regional Development*, Vol. 26 No. 5–6, pp. 401–430.
- Griffiths, M.D., Gundry, L.K. and Kickul, J.R. (2013), "The socio - political, economic, and cultural determinants of social entrepreneurship activity: An empirical examination", *Journal of Small Business and Enterprise Development*, Vol. 20 No. 2, pp. 341-357.
- Gupta, V., Wieland, A. and Turban, D. (2018), "Gender characterizations in entrepreneurship: a multi-level investigation of sex-role stereotypes about high-growth, commercial, and social entrepreneurs", *Journal of Small Business Management*, Vol. 57 No. 1, pp. 131-153.
- Hall, J., Matos, S., Sheehan, L. and Silvestre, B. (2012), "Entrepreneurship and innovation at the base of the pyramid: a recipe for inclusive growth or social exclusion?", *Journal of Management Studies*, Vol. 49 No. 4, pp. 785–812.
- Hanks, R.R. (2007), "Dynamics of Islam, identity, and institutional rule in Uzbekistan: Constructing a paradigm for conflict resolution", *Communist And Post-Communist Studies*, Vol. 40 No. 2, pp. 209–221.
- Harris, J.D., Sapienza, H.J. and Bowie, N.E. (2009), "Ethics and entrepreneurship", *Journal of Business Venturing*, Vol. 24 No. 5, pp. 407–418.
- Haugh, H. (2007), "Community-led social venture creation", *Entrepreneurship Theory and Practice*, Vol. 31 No. 2, pp. 161–182.
- Hayhurst, L.M. (2014), "The 'Girl Effect' and martial arts: social entrepreneurship and sport, gender and development in Uganda", *Gender, Place & Culture*, Vol. 21 No. 3, pp. 297–315.

- Hechavarría, D.M. (2016), "Mother nature's son? The impact of gender socialization and culture on environmental venturing", *International Journal of Gender and Entrepreneurship*, Vol. 8 No. 2, pp. 137-172.
- Hechavarría, D., Bullough, A., Brush, C. and Edelman, L. (2019), "High-growth women's entrepreneurship: Fueling social and economic development", *Journal of Small Business Management*, Vol. 57 No. 1, pp. 5-13.
- Hechavarría, D.M. and Brieger, S.A. (2022), "Practice rather than preach: cultural practices and female social entrepreneurship", *Small Business Economics*, Vol. 58 No. 2, pp. 1131-1151.
- Hechavarría, D.M., Brieger, S.A., Levasseur, L. and Terjesen, S.A. (2023), "Cross-cultural implications of linguistic future time reference and institutional uncertainty on social entrepreneurship", *Strategic Entrepreneurship Journal*, Vol. 17 No. 1, pp. 61-94.
- Hechavarría, D. and Ingram, A. (2016), "The entrepreneurial gender divide", *International Journal of Gender and Entrepreneurship*, Vol. 8 No. 3, pp. 242-281.
- Hechavarría, D.M. and Ingram, A.E. (2019), "Entrepreneurial ecosystem conditions and gendered national-level entrepreneurial activity: A 14-year panel study of GEM", *Small Business Economics*, Vol. 53 No. 2, pp. 431-458.
- Hoogendoorn, B. and Hartog, C.M. (2011), "Prevalence and determinants of social entrepreneurship at the macro-level", *H201022*, EIM Business and Policy Research, Netherlands.
- Hoogendoorn, B., Rietveld, C.A. and Stel, A. (2016), "Belonging, believing, bonding, and behaving: the relationship between religion and business ownership at the country level", *Journal of Evolutionary Economics*, Vol. 26 No. 3, pp. 519-550.
- Ibáñez, M.J. (2022), "Social entrepreneurship review: a gap in the Latin American context", *Management Research*, Vol. 20 No. 1, pp. 6-24.
- Inglehart, R. (1997), *Modernization and Postmodernization*, Princeton University Press, New York.
- Inglehart, R. (2000a), "Globalization and postmodern values", *The Washington Quarterly*, Vol. 23 No. 1, pp. 215-228.
- Inglehart, R. (2000b), *World Values Surveys and European Values Surveys 1981-1984, 1990-1993, 1995-1997*, Inter-University Consortium for Political and Social Research, Ann Arbor.
- Inglehart, R. and Abramson, P.R. (1999), "Measuring postmaterialism", *American Political Science Review*, Vol. 93 No. 03, pp. 665-677.
- Inglehart, R. and Baker, W.E. (2000), "Modernization, cultural change, and the persistence of traditional values", *American Sociological Review*, Vol. 65 No. 1, pp. 19-51.

- Jennings, J.E. and McDougald, M.S. (2007), "Work-family interface experiences and coping strategies: Implications for entrepreneurship research and practice", *Academy of Management Review*, Vol. 32 No. 3, pp. 747–760.
- Keshk, O.M. (2003), "CDSIMEQ: A program to implement two-stage probit least squares", *The Stata Journal*, Vol. 3 No. 2, pp. 1–11.
- Keshk, O.M., Pollins, B.M. and Reuveny, R. (2004), "Trade still follows the flag: The primacy of politics in a simultaneous model of interdependence and armed conflict", *Journal of Politics*, Vol. 66 No. 4, pp. 1155–1179.
- Khavul, S. and Bruton, G.D. (2013), "Harnessing innovation for change: sustainability and poverty in developing countries", *Journal of Management Studies*, Vol. 50 No. 2, pp. 285–306.
- Kibler, E., Salmivaara, V., Stenholm, P. and Terjesen, S. (2018), "The evaluative legitimacy of social entrepreneurship in capitalist welfare systems", *Journal of World Business*, Vol. 53 No. 6, pp. 944–957.
- Kistruck, G.M. and Beamish, P.W. (2010), "The interplay of form, structure, and embeddedness in social intrapreneurship", *Entrepreneurship Theory and Practice*, Vol. 34 No. 4, pp. 735–761.
- Klofsten, M., MacEachen, E. and Ståhl, C. (2021), "New and small firms in a modern working life: how do we make entrepreneurship healthy?", *Small Business Economics*, Vol. 57 No. 2, pp. 755–763.
- Klyver, K. and Grant, S. (2010), "Gender differences in entrepreneurial networking and participation", *International Journal of Gender and Entrepreneurship*, Vol. 2 No. 3, pp. 213–227.
- Klyver, K. and Terjesen, S. (2007), "Entrepreneurial network composition", *Women in Management Review*, Vol. 22 No. 8, pp. 682–688.
- Koehne, F., Woodward, R. and Honig, B. (2022), "The potentials and perils of prosocial power: Transnational social entrepreneurship dynamics in vulnerable places", *Journal of Business Venturing*, Vol. 37 No. 4, p. 106206.
- Korosec, R.L. and Berman, E.M. (2006), "Municipal support for social entrepreneurship", *Public administration review*, Vol. 66 No. 3, pp. 448–462.
- Korsching, P.F. and Allen, J.C. (2004), "Locality based entrepreneurship: A strategy for community economic vitality", *Community Development Journal*, Vol. 39 No. 4, pp. 385–400.
- Krueger, R.F., Hicks, B.M. and McGue, M. (2001), "Altruism and antisocial behavior: Independent tendencies, unique personality correlates, distinct etiologies", *Psychological Science*, Vol. 12 No 5, pp. 397–402.
- Krug, J. and Falaster, C. (2022), "An institutional approach on the effects of diversification type", *Management Research*, Vol. 20 No. 4, pp. 358–379.

- Kruse, P., Wach, D. and Wegge, J. (2021), "What motivates social entrepreneurs? A meta-analysis on predictors of the intention to found a social enterprise", *Journal of Small Business Management*, Vol. 59 No. 3, pp. 477–508.
- Langowitz, N. and Minniti, M. (2007), "The entrepreneurial propensity of women", *Entrepreneurship Theory and Practice*, Vol. 31 No. 3, pp. 341–364.
- Langowitz, N., Sharpe, N. and Godwyn, M. (2006), "Women's business centers in the United States: Effective entrepreneurship training and policy implementation", *Journal of Small Business & Entrepreneurship*, Vol. 19 No. 2, pp. 167–182.
- Lévesque, M. and Stephan, U. (2020), "It's time we talk about time in entrepreneurship", *Entrepreneurship Theory and Practice*, Vol. 44 No 2, pp. 163-184.
- Liñán, F. and Fernandez-Serrano, J. (2014), "National culture, entrepreneurship and economic development: Different patterns across the European Union", *Small Business Economics*, Vol. 42 No. 4, pp. 685–701.
- MacAskill, W. (2019), "The Definition of Effective Altruism", in Hilary Greaves and Theron Pummer (eds), *Effective Altruism: Philosophical Issues, Engaging Philosophy* (Oxford), pp. 10-28. <https://doi.org/10.1093/oso/9780198841364.003.0001>
- Maclean, M., Harvey, C. and Gordon, J. (2013), "Social innovation, social entrepreneurship and the practice of contemporary entrepreneurial philanthropy", *International Small Business Journal*, Vol. 31 No. 7, pp. 747–763.
- Maddala, G.S. (1983), *Limited Dependent and Qualitative Variables in Econometrics*, Cambridge University Press, Cambridge.
- Mair, J. and Marti, I. (2006), "Social entrepreneurship research: A source of explanation, prediction, and delight", *Journal of World Business*, Vol. 41 No. 1, pp. 36–44.
- Mair, J. and Marti, I. (2009), "Entrepreneurship in and around institutional voids: A case study from Bangladesh", *Journal of Business Venturing*, Vol. 24 No. 5, pp. 419–435.
- Mair, J., Robinson, J. and Hockert, K. (2006), *Social Entrepreneurship*, Palgrave Macmillan, New York.
- Manetti, G. (2014), "The role of blended value accounting in the evaluation of socio-economic impact of social enterprises", *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, Vol. 25 No. 2, pp. 443–464.
- Manolova, T.S., Brush, C.G., Edelman, L.F. and Shaver, K.G. (2012), "One size does not fit all: Entrepreneurial expectancies and growth intentions of US women and men nascent entrepreneurs", *Entrepreneurship & Regional Development*, Vol. 24 No. 1–2, pp. 7–27.
- Manolova, T.S., Carter, N.M., Manev, I.M. and Gyoshev, B.S. (2007), "The differential effect of men and women entrepreneurs' human capital and networking on growth expectancies in Bulgaria", *Entrepreneurship Theory and Practice*, Vol. 31 No. 3, pp. 407–426.
- Marlow, S. and Patton, D. (2005), "All credit to men? Entrepreneurship, finance, and gender", *Entrepreneurship Theory and Practice*, Vol. 29 No. 6, pp. 717–735.



- Martin, J.S. and Novicevic, M. (2010), "Social entrepreneurship among Kenyan farmers: A case example of acculturation challenges and program successes", *International Journal of Intercultural Relations*, Vol. 34 No. 5, pp. 482–492.
- Masterson, T., Zacharias, A., Rios-Avila, F. and Wolff, E.N. (2019), "The Great Recession and racial inequality: Evidence from measures of economic well-being", *Journal of Economic Issues*, Vol. 53 No. 4, pp. 1048–1069.
- McMullen, J.S. (2018), "Organizational hybrids as biological hybrids: Insights for research on the relationship between social enterprise and the entrepreneurial ecosystem", *Journal of Business Venturing*, Vol. 33 No. 5, pp. 575–590.
- Morales, C. and Holtschlag, C. (2013), "Postmaterialist values and entrepreneurship. A multilevel approach UK", *International Journal of Entrepreneurial Behavior and Research*, Vol. 19 No. 3, pp. 266–282.
- Mort, G.S., Weerawardena, J. and Carnegie, K. (2003), "Social entrepreneurship: Towards conceptualisation", *International Journal of Nonprofit and Voluntary Sector Marketing*, Vol. 8 No. 1, pp. 76–88.
- Mullis, R.J. (1992), "Measures of economic well-being as predictors of psychological well-being", *Social Indicators Research*, Vol. 26 No. 2, pp. 119–135.
- Nega, B. and Schneider, G. (2014), "Social entrepreneurship, microfinance, and economic development in Africa", *Journal of Economic Issues*, Vol. 48 No. 2, pp. 367–376.
- North, D.C. (1990), *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, Cambridge.
- North, D.C. (2005), *Understanding the Process of Economic Change*, Princeton University Press, Princeton.
- Ogundana, O.M., Simba, A., Dana, L.P. and Liguori, E. (2021), "Women entrepreneurship in developing economies: A gender-based growth model", *Journal of Small Business Management*, Vol. 59 No. sup1, pp. 42–72.
- Parboteeah, K.P., Hoegl, M. and Cullen, J. (2009), "Religious dimensions and work obligation: A country institutional profile model", *Human Relations*, Vol. 62 No. 1, pp. 119–148.
- Parra, J., González, A. and Ramírez-Montoya, M. (2020), "Social entrepreneurship competency: an approach by discipline and gender", *Journal of Applied Research in Higher Education*, Vol. 13 No. 5, pp. 1357-1373.
- Pathak, S. (2020), "Contextualizing Well-Being for Entrepreneurship", *Business & Society. In Press*, doi: [10.1177/0007650320927688](https://doi.org/10.1177/0007650320927688).
- Pathak, S. and Muralidharan, E. (2018), "Economic inequality and social entrepreneurship", *Business & Society*, Vol. 57 No. 6, pp. 1150–1190.
- Pergelova, A., Angulo-Ruiz, F., Manolova, T. and Yordanova, D. (2023), "Entrepreneurship education and its gendered effects on feasibility, desirability and

- intentions for technology entrepreneurship among stem students”, *International Journal of Gender and Entrepreneurship*, Vol. 15 No. 2, pp. 191-228.
- Peredo, A.M. and McLean, M. (2006), “Social entrepreneurship: A critical review of the concept”, *Journal of World Business*, Vol. 41 No. 1, pp. 56–65.
- Praag, C.M. and Versloot, P.H. (2007), “What is the value of entrepreneurship? A review of recent research”, *Small Business Economics*, Vol. 29 No. 4, pp. 351–382.
- Ram, M. and Smallbone, D. (2003), “Policies to support ethnic minority enterprise: the English experience”, *Entrepreneurship & Regional Development*, Vol. 15 No. 2, pp. 151–166.
- Ryzin, G.G., Grossman, S., DiPadova-Stocks, L. and Bergrud, E. (2009), “Portrait of the social entrepreneur: Statistical evidence from a US panel”, *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, Vol. 20 No. 2, pp. 129–140.
- Saebi, T., Foss, N.J. and Linder, S. (2019), “Social entrepreneurship research: Past achievements and future promises”, *Journal of Management*, Vol. 45 No. 1, pp. 70–95.
- Schumpeter, J. (1934), *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*, Transaction Publishers.
- Shane, S. (2009), “Why encouraging more people to become entrepreneurs is bad public policy”, *Small Business Economics*, Vol. 33 No. 2, pp. 141–149.
- Shepherd, D.A., Seyb, S. and Williams, T.A. (2023), “Empathy-driven entrepreneurial action: Well-being outcomes for entrepreneurs and target beneficiaries”, *Journal of Business Venturing*, Vol. 38 No. 2, p. 106290.
- Shinnar, R.S., Giacomini, O. and Janssen, F. (2012), “Entrepreneurial perceptions and intentions: The role of gender and culture”, *Entrepreneurship Theory and Practice*, Vol. 36 No. 3, pp. 465–493.
- Sorenson, R.L., Folker, C.A. and Brigham, K.H. (2008), “The collaborative network orientation: Achieving business success through collaborative relationships”, *Entrepreneurship Theory and Practice*, Vol. 32 No. 4, pp. 615–634.
- Stephan, U., Uhlaner, L.M. and Stride, C. (2015), “Institutions and social entrepreneurship: The role of institutional voids, institutional support, and institutional configurations”, *Journal of International Business Studies*, Vol. 46 No. 3, pp. 308–331.
- Terjesen, S., Bosma, N. and Stam, E. (2016), “Advancing public policy for high-growth, female, and social entrepreneurs”, *Public Administration Review*, Vol. 76 No. 2, pp. 230-239.
- Thiru, Y., Majumdar, S. and Guha, S. (2015), “Creating Social Change Through Entrepreneurship Education: An Effectuation Model at Tata Institute of Social Sciences (TISS), Mumbai, India”, in Majumdar, S., Guha, S. and Marakkath, N. (Eds.), *Technology and Innovation for Social Change*, Springer, India, pp. 85–106.

- Thornton, P., Ribeiro-Soriano, D. and Urbano, D. (2011), "Socio-cultural factors and entrepreneurial activity: an overview", *International Small Business Journal*, Vol. 29 No. 2, pp. 105–118.
- Tien, N., Hung, N., Duc, N., Vinh, P., Thuc, T. and Anh, D. (2020), "Strategic dimension of social entrepreneurship in Vietnam", *International Journal of Trade Economics and Finance*, Vol. 11 No. 1, pp. 7-12.
- Uhlaner, L. and Thurik, R. (2007), "Postmaterialism influencing total entrepreneurial activity across nations", *Journal of Evolutionary Economics*, Vol. 17 No. 2, pp. 161–185.
- Urbano, D., Aparicio, S. and Audretsch, D. (2019), "Twenty-five years of research on institutions, entrepreneurship, and economic growth: What has been learned?", *Small Business Economics*, Vol. 53 No. 1, pp. 21–49.
- Urbano, D., Aparicio, S., and Querol, V. (2016), "Social progress orientation and innovative entrepreneurship: An international analysis", *Journal of Evolutionary Economics*, Vol. 26 Vol. 5, pp. 1033-1066.
- Urbano, D., Ferri, E., Alvarez, C. and Noguera, M. (2017), "Social entrepreneurship and institutional conditions: An empirical analysis in Spain", In Peris-Ortiz, M., Teulon, F., Bonet-Fernandez, D. (Eds.), *Social Entrepreneurship in Non-Profit and Profit Sectors: Theoretical and Empirical Perspectives* (pp. 53-64), Springer International Publishing, Cham.
- Urbano, D., Toledano, N. and Soriano, D.R. (2010), "Analyzing social entrepreneurship from an institutional perspective: evidence from Spain", *Journal of Social Entrepreneurship*, Vol. 1 No. 1, pp. 54–69.
- Vachani, S. and Smith, N.K. (2008), "Socially responsible distribution: distribution strategies for reaching the bottom of the pyramid", *California Management Review*, Vol. 50 No. 2, pp. 52–84.
- Verheul, I., van Stel, A. and Thurik, R. (2006), "Explaining female and male entrepreneurship at the country level", *Entrepreneurship and Regional Development*, Vol. 18 No. 2, pp. 151-183.
- Vinogradov, E. and Kolvereid, L. (2007), "Cultural background, human capital and self-employment rates among immigrants in Norway", *Entrepreneurship & Regional Development*, Vol. 19 No. 4, pp. 359–376.
- Welter, F. and Smallbone, D. (2011), "Institutional perspectives on entrepreneurial behavior in challenging environments", *Journal of Small Business Management*, Vol. 49 No. 1, pp. 107–125.
- Wietzke, F.B. (2015), "Long-Term Consequences of Colonial Institutions and Human Capital Investments: Sub-National Evidence from Madagascar", *World Development*, Vol. 66, pp. 293–307.
- Williamson, O.E. (2000), "The new institutional economics: taking stock, looking ahead", *Journal of Economic Literature*, Vol. 38 No. 3, pp. 595–613.

Wilson, G.A. and Liguori, E. (2022), "Market orientation, failure learning orientation, and financial performance", *Journal of Small Business Management*. In Press, doi: [10.1080/00472778.2022.2051177](https://doi.org/10.1080/00472778.2022.2051177).

Zahra, S.A., Newey, L.R. and Li, Y. (2014), "On the frontiers: The implications of social entrepreneurship for international entrepreneurship", *Entrepreneurship Theory and Practice*, Vol. 38 No. 1, pp. 137–158.

## **Institutions, social entrepreneurship, and individual economic well-being: An international study**

### **Tables**

**Table 1. Description of variables**

Equation 1	Variable	Description	Source*
<b>Dependent variables</b>	Social entrepreneur	Dummy variable: 1 if self-employed and works for volunteer organizations; 0 otherwise.	WVS-6
	Female social entrepreneur	Dummy variable: 1 if female, self-employed and works for volunteer organizations; else 0.	WVS-6
	Male social entrepreneur	Dummy variable: 1 if male, self-employed and works for volunteer organizations; else 0.	WVS-6
	Traditional entrepreneur	Dummy variable: 1 if self-employed; else 0.	WVS-6
<b>Independent variables</b>	Post-materialism	12-item Post-Materialist Index, 0–5 response scale. The 12 items include: Maintaining order in the nation, giving people more say in important government decisions, fighting rising prices, protecting freedom of speech, maintaining a high level of economic growth, making sure that this country has strong defence forces, making sure that this country has strong defence forces, trying to make our cities and countryside more beautiful, a stable economy, progress towards a less impersonal and more humane society, progress towards a society in which ideas count more than money, the fight against crime.	WVS-6
	Altruism	Dummy variable: 1 if participates actively in self-help groups or mutual aid groups; else 0.	WVS-6
	Member of a social organization	Dummy variable: 1 if belongs to a church or religious organization; else 0.	WVS-6
<b>Control variables</b>	Gender	Dummy variable: 1 if male; else 0.	WVS-6
	Well-being	Per decile, the proportion of overall household income/wealth, 1–10 response scale.	WVS-6
Equation 2	Variable	Description	Source
<b>Dependent variable</b>	Individual economic well-being	Per decile, the proportion of overall household income/wealth, 1–10 response scale.	WVS-6
<b>Independent variables</b>	Social entrepreneur	Dummy variable: 1 if self-employed and works for volunteer organizations; else 0.	WVS-6
	Female social entrepreneur	Dummy variable: 1 if female, self-employed and works for volunteer organizations; else 0.	WVS-6
	Male social entrepreneur	Dummy variable: 1 if male, self-employed and works for volunteer organizations; else 0.	WVS-6
	Traditional entrepreneur	Dummy variable: 1 if self-employed; else 0.	WVS-6
<b>Control variables</b>	Savings	Dummy variable: 1 if the family could save in the past year; else 0.	WVS-6
	Education	Dummy variable: 1 if complete secondary school**; else 0.	WVS-6
	Age-squared	The age of the respondent, squared.	WVS-6

\* WVS: World Values Survey; WVS-6: during 2010–2014 (<http://www.worldvaluessurvey.org>).  
\*\*university or higher degree level  
Source: Authors own work.

**Table 2. Descriptive statistics and correlation matrix**

Variable	Mean	SD	Min	Max	1	2	3	4
1 Individual economic well-being	4.917	2.092	1	10	1			
2 Social entrepreneurship	0.004	0.060	0	1	0.034*	1		
3 Female social entrepreneurship	0.001	0.030	0	1	0.009	0.509*	1	
4 Male social entrepreneurship	0.003	0.051	0	1	0.033*	0.859*	-0.002	1
5 Self-employed	0.124	0.329	0	1	-0.005	0.532*	0.098*	0.202*
6 Savings	0.296	0.457	0	1	0.300*	0.016*	0.007	0.014*
7 Education	0.431	0.495	0	1	0.209*	0.012*	0.002	0.013*
8 Age <sup>2</sup>	1981.764	1512.105	256	9801	-0.112*	-0.015*	-0.009	-0.012*
9 Post-materialism	1.938	1.161	0	5	0.052*	0.017*	0.017*	0.008
10 Altruism	0.054	0.225	0	1	-0.000	0.027*	0.014*	0.019*
11 Member of a social organization	0.399	0.000	1		0.018*	0.003	0.003	0.001
12 Gender	0.471	0.499	0	1	0.027*	0.035*	-0.029*	0.058*

  

	5	6	7	8	9	10	11	12
5 Self-employed	1							
6 Savings	-0.002	1						
7 Education	-0.087*	0.125*	1					
8 Age <sup>2</sup>	-0.029*	-0.027*	-0.128*	1				
9 Post-materialism	-0.003	0.066*	0.081*	-0.039*	1			
10 Altruism	0.086*	-0.001	-0.010*	-0.012*	0.037*	1		
11 Member of a social organization	0.075*	0.036*	-0.021*	-0.023*	0.054*	0.161*	1	
12 Gender	0.116*	0.038*	0.022*	-0.004	0.013*	0.017*	-0.026*	1

\* p&lt;0.01.

Source: Authors own work.

**Table 3. Results of simultaneous equation model**

	Social Entrepreneurship						(4) Traditional entrepreneurship	
	(1) Total		(2) Female		(3) Male		Estimation	dy/dx
	Estimation	dy/dx	Estimation	dy/dx	Estimation	dy/dx		
Post-materialism	0.063*** (0.019)	0.001*** (0.000)	0.139*** (0.035)	0.000*** (0.000)	0.026 (0.022)	0.000 (0.000)	-0.007 (0.006)	-0.001 (0.001)
Altruism	0.408*** (0.076)	0.006*** (0.002)	0.365*** (0.122)	0.002* (0.002)	0.369*** (0.084)	0.004*** (0.001)	0.419*** (0.024)	0.101*** (0.007)
Member of a social organization	-0.023 (0.059)	-0.000 (0.000)	-0.019 (0.099)	-0.000 (0.000)	-0.052 (0.065)	-0.000 (0.000)	0.273*** (0.015)	0.059 (0.004)
Well-being	0.130*** (0.031)		0.079 (0.052)		0.158*** (0.033)		-0.089*** (0.009)	
Gender	0.394*** (0.050)	0.004*** (0.000)					0.399*** (0.013)	0.079*** (0.003)
Constant	-3.736*** (0.161)		-3.871*** (0.271)		-3.669*** (0.174)		-1.004 (0.043)	
Probability	0.003		0.001		0.002		0.116	
Log likelihood	-1406.779		-451.149		-1127.647		-25039.771	
LR $\chi^2$	137.580		30.280		43.810		1774.510	
Pseudo R <sup>2</sup>	0.047		0.033		0.019		0.034	
<b>Individual economic well-being</b>								
Social entrepreneurship	0.186*** (0.038)							
Female social entrepreneur			0.182*** (0.055)					
Male social entrepreneur					0.223** (0.099)			
Traditional entrepreneurship							0.121*** (0.030)	
Savings	1.246*** (0.020)		1.254*** (0.023)		1.234*** (0.026)		1.268*** (0.016)	
Education	0.655*** (0.018)		0.684*** (0.021)		0.654*** (0.023)		0.732*** (0.018)	
Age <sup>2</sup>	-0.000*** (0.000)		-0.000*** (0.000)		-0.000*** (0.000)		-0.000*** (0.000)	
Constant	4.995*** (0.106)		5.039*** (0.169)		5.112*** (0.282)		4.589*** (0.033)	
No. observations	61445		66194		64487		69236	
R <sup>2</sup> -Adjusted	0.123		0.128		0.128		0.127	

\* p<0.10, \*\* p<0.05; \*\*\* p<0.01. Note: Corrected standard errors in parentheses.  
Source: Authors own work.



**Table 4. Summary of hypotheses**

<b>Hypothesis</b>	<b>Result</b>
H1a: Post-materialism has a positive effect on the probability of becoming a social entrepreneur.	Supported
H1b: The positive effect of post-materialism is higher on the probability of females than males becoming social entrepreneurs.	Supported
H2a: Altruism has a positive effect on the probability of becoming a social entrepreneur.	Supported
H2b: The positive effect of altruism is higher on the probability of females becoming social entrepreneurs than males.	Not supported
H3a: Membership in a social organization has a positive effect on the probability of becoming a social entrepreneur.	Not supported
H3b: The positive effect of membership in a social organization is higher on the probability of males than of females becoming social entrepreneurs.	Not supported
H4a: Both social and traditional entrepreneurship have a positive effect on individual economic well-being, although the effect of social entrepreneurship is higher.	Supported
H4b: Both female and male social entrepreneurs have a positive effect on individual economic well-being, though the effect of male entrepreneurship is higher.	Supported

Source: Authors own work.

## Appendix 1. Number of respondents by country and year

Country	2010	2011	2012	2013	2014	Total
1 Algeria	0	0	0	931	0	931
2 Azerbaijan	0	998	0	0	0	998
3 Australia	0	0	965	0	0	965
4 Bahrain	0	0	0	0	810	810
5 Armenia	0	972	0	0	0	972
6 Brazil	0	0	0	0	1,252	1,252
7 Belarus	0	593	0	0	0	593
8 Chile	0	835	0	0	0	835
9 China	0	0	1,706	0	0	1,706
10 Taiwan	0	0	1,094	0	0	1,094
11 Colombia	0	0	1,447	0	0	1,447
12 Cyprus	0	973	0	0	0	973
13 Ecuador	0	0	0	1,199	0	1,199
14 Estonia	0	1,408	0	0	0	1,408
15 Palestine	0	0	0	922	0	922
16 Germany	0	0	0	1,877	0	1,877
17 Ghana	0	0	1,552	0	0	1,552
18 Hong Kong	0	0	0	888	0	888
19 India	0	0	0	0	1,150	1,150
20 Iraq	0	0	1,097	0	0	1,097
21 Japan	1,372	0	0	0	0	1,372
22 Kazakhstan	0	1,500	0	0	0	1,500
23 Jordan	0	0	0	0	1,171	1,171
24 South Korea	1,038	0	0	0	0	1,038
25 Kyrgyzstan	0	690	0	0	0	690
26 Lebanon	0	0	0	955	0	955
27 Libya	0	0	0	0	1,608	1,608
28 Malaysia	0	0	1,282	0	0	1,282
29 Mexico	0	0	1,869	0	0	1,869
30 Morocco	0	790	0	0	0	790
31 Netherlands	0	0	1,510	0	0	1,510
32 New Zealand	0	420	0	0	0	420
33 Nigeria	0	1,759	0	0	0	1,759
34 Pakistan	0	0	1,182	0	0	1,182
35 Peru	0	0	1,041	0	0	1,041
36 Philippines	0	0	1,171	0	0	1,171
37 Poland	0	0	850	0	0	850
38 Qatar	608	0	0	0	0	608
39 Romania	0	0	1,344	0	0	1,344
40 Russia	0	2,076	0	0	0	2,076

	<b>Country</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Total</b>
41	Rwanda	0	0	1,517	0	0	1,517
42	Singapore	0	0	1,898	0	0	1,898
43	Slovenia	0	850	0	0	0	850
44	South Africa	0	0	0	3,380	0	3,380
45	Zimbabwe	0	0	1,493	0	0	1,493
46	Spain	0	963	0	0	0	963
47	Sweden	0	1,064	0	0	0	1,064
48	Thailand	0	0	0	1,013	0	1,013
49	Trinidad and Tobago	0	455	0	0	0	455
50	Tunisia	0	0	0	1,097	0	1,097
51	Turkey	0	1,469	0	0	0	1,469
52	Ukraine	0	626	0	0	0	626
53	Egypt	0	0	0	1,523	0	1,523
54	United States	0	2,063	0	0	0	2,063
55	Uruguay	0	774	0	0	0	774
56	Uzbekistan	0	1,231	0	0	0	1,231
57	Yemen	0	0	0	0	915	915
	<b>Total</b>	<b>3,018</b>	<b>22,509</b>	<b>23,018</b>	<b>13,785</b>	<b>6,906</b>	<b>69,236</b>

Source: Authors own work.

## Appendix 2. Results of simultaneous equation model female and male commercial entrepreneurship

	Female Commercial entrepreneurship		Male Commercial entrepreneurship	
	Estimation	dy/dx	Estimation	dy/dx
Post-materialism	-0.015*** (0.004)	-0.006*** (0.002)	0.011*** (0.004)	0.004*** (0.002)
Altruism	0.049** (0.022)	0.019** (0.008)	0.236*** (0.022)	0.093*** (0.008)
Member of a social organization	0.139*** (0.013)	0.053*** (0.005)	0.002 (0.012)	0.001 (0.005)
Well-being	-0.094*** (0.007)		0.051*** (0.006)	
Constant	0.732*** (0.033)		-0.242*** (0.032)	
Probability	0.607		0.517	
Log likelihood	-46220.826		-47848.784	
LR $X^2$	361.15		202.90	
Pseudo $R^2$	0.004		0.002	
	<b>Individual economic well-being</b>		<b>Individual economic well-being</b>	
Female Commercial entrepreneurship	0.102 (0.130)			
Male Commercial entrepreneurship			0.221* (0.134)	
Commercial entrepreneurship				
Savings	1.281*** (0.020)		1.249*** (0.022)	
Education	0.708*** (0.024)		0.699*** (0.016)	
Age <sup>2</sup>	-0.000*** (0.000)		-0.000*** (0.000)	
Constant	4.430*** (0.052)		4.459*** (0.016)	
No. Observations	69236		69236	
<i>R<sup>2</sup>-Adjusted</i>	0.127		0.127	

\* p<0.10, \*\* p<0.05; \*\*\* p<0.01. Note: Corrected standard errors in parentheses.

Source: Authors own work.