UNIVERSIDADE DE LISBOA
INSTITUTO SUPERIOR TÉCNICO

Social Entrepreneurship:
A conceptual framework and empirical evidence

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Co-Supervisor: Doctor António Miguel Areias Dias Amaral

Thesis approved in public session to obtain the PhD Degree in

Engineering and Management

Jury final classification: Pass With Distinction

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Funding Institution

Fundação para a Ciência e Tecnologia

2016

Resumo:

O empreendedorismo social desempenha um papel relevante na atenuação de problemas sociais e no fornecimento de bens essenciais não assegurados nem pelo setor privado nem pelo setor público. Enquanto campo científico tem ganho relevância em função do crescente número de organizações sem fins lucrativos e de formas organizacionais inovadoras que combinam características de organizações com e sem fins lucrativos para responder a uma missão social. Apesar do impulso do empreendedorismo social, esta área ainda se encontra numa fase inicial e carece de um enquadramento coerente. Esta tese tem o objetivo de explorar o empreendedorismo social enquanto campo de pesquisa, relativamente a como, porquê e por quem são criadas organizações com uma missão social. Propõe-se um quadro conceptual baseado numa tipologia de organizações, centrado na identidade organizacional, que clarifica o modo como os indivíduos criam as suas organizações, explorando diferentes formas de organização e desafios estratégicos. A análise convergiu em quatro tipos de organizações: sociais sem fins lucrativos, híbridas (ou empresas sociais com fins lucrativos), sem fins lucrativos não-sociais e empresas com fins lucrativos. Utilizou-se uma combinação de métodos qualitativos e quantitativos para validar a tipologia proposta, tanto ao nível da organização como do empreendedor. Adotando uma definição mais ampla de missão social que engloba os valores ambientais, analisou-se a forma como as organizações incorporam esses valores investigando práticas ambientais relacionadas com processos de produção, produtos e serviços. Os resultados demonstram que características diferentes têm uma influência distinta sobre os dois tipos de práticas ambientais, tais como o tipo de clientes e o rigor da legislação ambiental no país. Além disso, a ideia dominante de que as pequenas empresas se mostram relutantes em investir em práticas ambientais não é assim tão evidente: a dimensão importa, todavia apenas quando estão em causa processos *green*. A resposta à questão por que os indivíduos criam organizações com uma missão social foi obtida colocando o foco nas motivações dos empreendedores. Os resultados revelam que motivações como a missão social, a empatia, a proximidade com os problemas sociais e a realização, influenciam na criação de organizações com uma missão social explícita e intencional. O estudo conclui ainda que certas motivações dos empreendedores, como a sustentabilidade ou o foco na criação de valor económico ou social, estão relacionadas com a forma organizacional e podem influenciar o tipo de organização criada. A fim de compreender quem se envolve no empreendedorismo que prioriza a criação de valor social e não económico, analisámos os determinantes que levam o indivíduo a optar pelo empreendedorismo sem fins lucrativos ao invés de com fins lucrativos. Mais especificamente, foi abordado o papel que o capital humano desempenha na probabilidade de um indivíduo ser um empreendedor sem fins lucrativos, concluindo que o capital humano na sua componente geral, englobando educação e experiência no mercado de trabalho, afeta positivamente a probabilidade de um indivíduo se envolver numa organização sem fins lucrativos. Além disso, os indivíduos com formação em ciências sociais e humanas são mais propensos a ser empreendedores sem fins lucrativos, quando comparados com os formados em engenharia/tecnologias ou ciências empresariais. A experiência na indústria e a experiência empresarial no setor sem fins lucrativos estão também associadas positivamente com a probabilidade de envolvimento no empreendedorismo sem fins lucrativos. O quadro conceptual proposto estabelece uma base comum para futura pesquisa empírica, contribuindo assim para a consolidação do campo científico do empreendedorismo social. O estudo contribui para a literatura existente com pesquisa empírica, combinando metodologias qualitativas e quantitativas para conceber e testar hipóteses que fornecem resultados fiável e extrapoláveis.

Palavras-Chave: Empreendedorismo Social, Missão Social, Motivações, Capital Humano, Práticas Ambientais

Abstract:

Social entrepreneurship plays a relevant role on the alleviation of social problems and provision of essential goods that are not addressed by the private neither by the public sector. It has gained awareness on academia compelled by the growing number of non-profit organizations and the emergent innovative organizational structures that combine elements of for-profit and non-profit to attend a social purpose. Despite this growth, the field of social entrepreneurship is in an early stage, and lacks a coherent framework. The present thesis aims to enlighten the social entrepreneurship research field concerning how and why organizations with an embedded social mission are created and who are their creators. We propose a conceptual framework based on a typology of entrepreneurial ventures, centered on organizational identity, which clarifies how individuals are creating their organizations, exploring different organizational forms and strategic challenges. Analysis led to the proposal of four types of organizations: social non-profit organizations, hybrids (or social for-profit firms), non-social non-profit organizations and for-profit firms. We use a mixture of qualitative and quantitative methods to validate the proposed typology at both the firm and entrepreneur levels of analysis. Following a broader definition of social mission that encompasses environmental values, we access how organizations are embedding such values by investigating environmental practices related to production processes and to products and services, showing that different characteristics have dissimilar influences on both types of environmental practices such as the type of customers served and the stringency of environmental legislation at the country level. Moreover, the dominant idea that small firms are reluctant to invest in environmental practices is clearly more nuanced: size indeed matters however only when greening processes are concerned. The answer of why individuals create an organization with a social mission was attained by focusing on the entrepreneurs' motivations. The findings reveal that motivations as: social mission, empathy, proximity with social problems and accomplishment, influence individuals to create organizations with an intended social mission. In addition, the study concludes that different combination of social entrepreneurs' motivations related to intended social mission with motivations related to organizational form (sustainability, social or economic values) can influence the entrepreneurs to create distinct type of organizations within the typology presented. In order to understand who engages in entrepreneurship that prioritizes social value creation rather than economic value creation, we research the determinants driving an individual to choose non-profit entrepreneurship over for-profit. In particular, we focus on the role human capital has on the probability of an individual to engage in non-profit entrepreneurship, concluding that education and labor market experience affect positively the probability of an individual to engage in a non-profit organization. In addition, individuals with social sciences and humanities degrees are more prone to be non-profit entrepreneurs, when compared with those in engineering/technologies and business sciences. Also, previous industry experience and previous entrepreneurial experience in the non-profit sector are positively associated with the probability to engage in non-profit entrepreneurship. The conceptual framework sets a common ground for future empirical research, thus contributing to social entrepreneurship as a field. The study contributes to the existing literature with empirical research combining qualitative and quantitative methodologies to generate and test hypothesis that provide reliable and generalizable results.

Keywords: Social Entrepreneurship, Social Mission, Entrepreneurial Motivations, Human Capital, Environmental Practices

Agradecimentos

Nesta viagem de quatro anos, este doutoramento deu-me a oportunidade de explorar um mundo global, cheio de simetrias e desigualdades, com pessoas inspiradoras que me fizeram crescer, aprender novas maneiras de pensar, de sentir e acima de tudo de me conhecer melhor. Estes foram anos vividos ao máximo e que culminam muito sumariamente aqui. Agradeço a ti, essa pessoa especial que se cruzou comigo e desde aí segura a minha mão com o amor mais incondicional que conheço. Carlos, o meu companheiro de tantas viagens e desafios, a minha cara-metade. Quero agradecer à minha família, esta base incrível que me criou, me viu crescer e me deixou voar para onde eu quis. Aos meus pais, Anabela e Higino, duas pessoas que se superam a cada desafio que a vida traz, estabelecendo um exemplo e que são um apoio eterno. À minha avó Helena, essa inspiração maravilhosa, a mulher mais excecional que eu já conheci, que me desafia e me dá muita alegria. Ao meu avô Nelson, que infelizmente não pode assistir a este final mas que eu sei que torce por mim lá ao pé das estrelas. Aos meus tios e à minha "caçulinha" Iolanda, que pertencem a este núcleo duro que faz parte de mim. Obrigada também à minha nova família que me recebe sempre de braços e coração abertos. A todos os meus amigos, que partilharam comigo as mais diversas emoções.

Ao Instituto Superior Técnico, universidade que nos testa e nos leva a ser sempre mais exigentes e melhores, e ao IN+, minha segunda afiliação que proporcionou todas as trocas de conhecimento feitas naquele *open space*. Aos meus coordenadores, Joana Mendonça e Miguel Amaral, que sempre confiaram em mim e me motivaram para eu seguir o meu caminho, que foi de encontro ao empreendedorismo social. Obrigada por todo o apoio ao longo dos anos. A todos os empreendedores sociais que conheci e me concederam alguns dos dias mais estimulantes e motivantes deste percurso, sempre com um sorriso e uma vocação que ultrapassa as mais variadas dificuldades, foram sem dúvida conversas inspiradoras.

À Brigitte Hoogendoorn, que me acolheu em Roterdão e preencheu algum do espaço vazio motivado pela distância, obrigada por toda a amizade. Ao Peter van der Zwan e ao Professor Roy Turik, que tão generosamente participaram e me apoiaram neste percurso.

TABLE OF CONTENTS

LIST OF FIGURES

List of Tables

1. INTRODUCTION

1.1 Motivation

In recent decades there has been many changes in economic, social, political and environmental spheres that have questioned the role and relations between civil society, market and the state. Capitalist economy has shown that in spite of the prosperity and economic growth from the last decades, there is still a disparity in wealth distribution and the present economic decline has negatively affected local communities, who are in need for economic and social regeneration (Thompson et al. 2000; World Bank 2007). In developed industrial societies with welfare states and high income that assures the survival of their citizens, values as culture, quality of life, animal and environmental protection has gained relevance over economic values (Inglehart et al. 2008). Activities towards social change are mostly carried out by the public sector, with some contributions from the non-profit organizations and public-private partnerships. However the social welfare provided by governments cannot suppress all the social needs. The governments' adoption of free market ideologies, relying on market self-regulation for the distribution and redistribution of resources, has decreased their revenue and consequently diminishing of public funds availability (Nicholls 2006). As the public sector has fewer intervention on social change and the private sector does not find opportunities in the social context that are attractive and profitable enough to act upon, social enterprises fill this gap, complementing their actions and engaging in a process of opportunities discovery and exploitation in order to enhance social wealth (Zahra et al. 2009). Such social and economic context motivated an increasing number of organizations to perceive markets as an important social structure and a mechanism to foster social and economic development (Bahmani et al. 2012; Mair and Marti 2006; Soriano and Galindo 2012). Social organizations have an important role in economy, serving as private producers of services that have the character of public goods, at least for a limited segment of the public (Weisbrod 1977). These organizations alleviate social exclusion, poverty and improve social environment by representing an important source of work-integration, employing disadvantage individuals in the labor market (Perista and Nogueira 2002). Additionally, they have a positive impact on productivity by contributing to the development and equal access to education, promoting training that favors the technological catch-up process and making workers more able to use new machinery and innovation (Bahmani et al. 2012). Social organizations have a crucial role in social wealth creation, especially in contexts where social problems are copious. They change the paradigm of business as usual focusing not on their revenues or net profits but on their social mission and impact. Social entrepreneurship has received a growing recognition from multiple stakeholders as academia, policymakers and other supporting organizations, however the field is at an early stage and lacks a coherent framework that helps research to evolve from conceptual approaches to empirical research (Zahra et al. 2009). The present research develops a conceptual framework for social entrepreneurship focusing on what defines and distinguishes these organizations from others. The conceptual framework sets a common ground for future empirical research, making a theoretical contribution to the field of social entrepreneurship.

A stream of literature argues that social entrepreneurship have the potential to provide solutions that are sustainable at a financial, social and environmental level (Cohen and Winn 2007; Dean and McMullen 2007; Thake and Zadek 1997). Other stream of literature state that the organizations that puts economic, social and environmental goals on equal footing (so-called 'triple bottom line') emerged from social entrepreneurship and environmental entrepreneurship developing the conception of sustainable entrepreneurship (Hockerts and Wüstenhagen 2010). Sustainable entrepreneurship differs substantially from social entrepreneurship by being profit-driven (Dean and McMullen 2007). To analyze the environmental behavior of organizations, we access how they are embedding such values by investigating environmental practices related to production processes and to products and services.

In entrepreneurship literature, authors have addressed the factors that influence entrepreneurial activity (Mair and Marti 2006). The entrepreneurial process is understood as a personal process and the expression of a particular attitude that derives from multiple factors such as their needs for accomplishment, autonomy, creativity, control and risk taking (Cromie 2000; Estay et al. 2013; Shane et al. 2003). While some aspects are common across every entrepreneurial endeavor as proactiveness, risk taking, innovativeness, perseverance, goal oriented, communication skills (Estay et al. 2013), social entrepreneurs are distinguished for their will to attain a social mission (Bornstein 1998; Boschee 1995; Alford et al. 2004). Social entrepreneurs are portrayed has change agents, creating innovative solutions to social problems, pursuing new opportunities to serve that mission, mobilizing ideas, capacities and resources for social transformations (Alford et al. 2004; Dees 1998). Motivations are relevant to understand a specific behavior like helping others (Lewin 1951) and can clarify why social entrepreneurs, which are in the basis of the process of enrolling in social entrepreneurship, create an organization to improve social wealth. Motives are forces within a force field that is constituted by goals and under particular circumstances motivational forces can be triggered and activate action (Lewin 1951). Although motivation of entrepreneurial behavior has been studied (Estay et al. 2013; Koh 1996; Shane and Venkataraman 2000), social entrepreneurs' motivations has received attention by a few authors (Yitshaki and Kropp 2015; Germak and Robinson 2014; Omorede 2014) however more evidence is needed. There is a gap in the literature regarding social entrepreneurs' motivations (Dorado 2006; Mort et al. 2003) and our study addresses it by examining the motivations of social entrepreneurs. By combining motivations that are linked with intended social mission and motivations that would influence individuals to choose a specific organizational form (non-profit or for-profit) we empirically test how these motivations influence the different types of organizations identified in the framework. In order to enhance the knowledge about social entrepreneurs few studies have drawn a portrait of these agents of change, however the data available is scarce and with several limitations leading to non-generalizable results. We aim to contribute to the literature by extending these studies beyond demographic characterization and focusing on the role that human capital plays in the choice to enroll in a non-profit organization rather than a for-profit one. Entrepreneurial endeavor has an interdisciplinary nature; new firm opportunities exist within almost all academic disciplines including engineering, management, finance, psychology, sociology, economics, political science and geography (Audretsch et al. 2007; Kupferberg 1998). Most studies on entrepreneurship are focused on business sciences and the literature claims for more attention to the relevance that non-business fields of education have on entrepreneurship (Kupferberg 1998; Teixeira 2007). Our study aims to address this need by analyzing the impact that diverse education fields as humanities, social sciences, business sciences and engineering have on the propensity of engaging in non-profit or in for-profit entrepreneurship. Engineering knowledge background has proven to be useful to create innovative technologic solutions that alleviate many social ills such as innovative solutions to water supply, technologies that transform solar energy into electricity and facilitating money transfer by mobile software (Bornstein 2007). To address global problems like natural and human disasters, the expected growth of 1.5 billion people in the planet in the next two decades, the majority of them in developing countries (United Nations 2012), it will call for the contribution of the engineering skills in a multidisciplinary context. They will face difficult challenges in order to supply energy, food, land, water, transportation, materials, waste disposal, environmental degradation, telecommunications and infrastructures (Amadei and Wallace 2009). The engineering profession will be pressured to contribute to a more sustainable and equitable reality, worldwide. There are several international organizations created by engineers dedicated to solve pressing social issues. Engineering for Change, is a platform by and for engineers to share resources and stimulate cooperation on solving social problems. It was founded by two civil engineers, which were inspired to create the platform to share the talents of engineers after perceiving that their counterparts were well succeeded when they were responsible for engineering projects as volunteers. Engineers Without Borders is another international federation whose mission is to partner with disadvantaged communities in developing countries, to improve their quality of life through education and implementation of sustainable engineering projects, while promoting global experience for engineers, engineering students, and similarly motivated non-engineers. They help to eradicate poverty around the world, through human capital talent, expertise and mentorship, drawn from its large network of volunteers, alumni and potential investors. Some engineering universities have integrated the social benefit of engineering as the central theme. Schools have started to prepare students for contributing to a global society through the development of courses, internships and extra-curricular activities focused on the socio-technical aspects of engineering, appropriate for the developing world (Saviz et al. 2012). The enrollment of students in organizations as Engineers Without Borders and Engineers for a Sustainable World, reflect students' growing interest in international development, eradication of poverty, environmental action, and application of technology for social benefit. Engineering students have the opportunity to apply their knowledge and skills, adapt to a different cultural and professional standards, while understanding the impact of engineering solutions in a global societal context. These activities provide significant motivation, know-how built on idealism, and a strong spirit of volunteerism in new engineering graduates (Saviz et al. 2012). The social organizations that have this cooperation with universities also benefit by having access to specialized human capital by working with engineering students due to theirs technical backgrounds and problem-solving skills (Ibidem). The increasing cooperation and knowledge transfer from engineering universities to social organizations makes the present work timely in order to raise awareness, include social entrepreneurship as a part of curriculum and research topics and stimulate future cooperation between the different organizations.

1.2 Research question

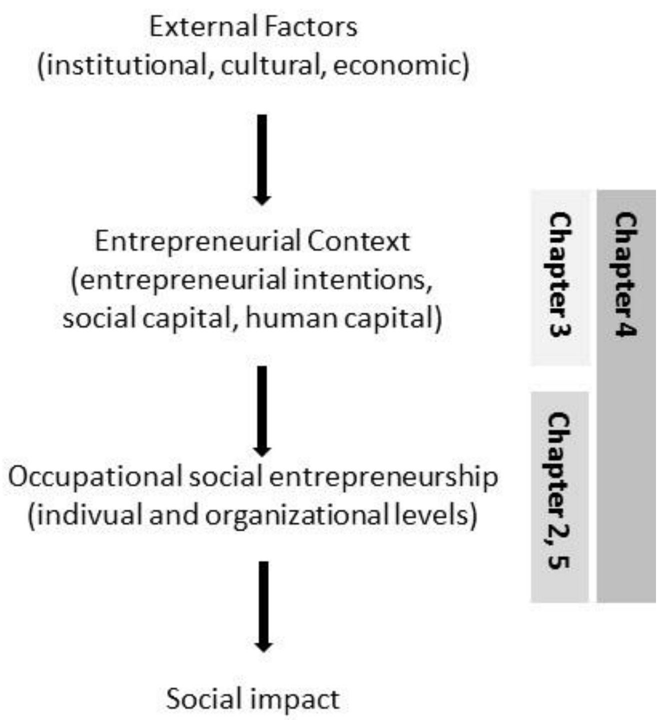
Mort et al. (2003) defined social entrepreneurship as a multidimensional concept comprising entrepreneurial virtuous behavior to accomplish a social mission. The central element of social organizations is the social mission, it shapes the overall strategy, the organizational structure and the opportunities that they pursue (Young 2001) to stimulate change and empower their costumers (Prabhu 1999). This thesis looks at entrepreneurship that is driven by a social mission, focusing on the determinants of entrepreneurial venture creation with an embedded social purpose. The analysis encompasses both the firm and entrepreneur levels to address the following research question: *what are the determinants of social entrepreneurship: why, how, and who creates an organization to pursue a social mission*?

Literature on social entrepreneurship mostly consists of a conceptual setup to define key concepts. The few empirical studies are based on case-study designs and small sample sizes that cannot provide generalizable results (Short et al. 2009). Empirical research allows for the development of a testable and valid theory (Eisenhardt 1989) and is important for the development of social entrepreneurship as a field of scientific inquiry. The research uses a mixture of qualitative and quantitative methods. By mixing the qualitative with quantitative methods, we will have a pluralism of methods allowing us to access different facets of the same social phenomenon (Eisenhardt 1989). To acknowledge why individuals enroll in a social organization, we analyze individuals' motivation through a qualitative approach and gathered data from the individuals' interviews to understand their motivations and how they influence the type of organization that is created. Literature states that motives are central in the process of engaging in social actions and are more important and reliable to understand a specific behavior than the behavior itself (Lewin 1951). The answer on how entrepreneurs are creating their organizations was obtained through the elaboration of a conceptual framework based on a typology of entrepreneurial ventures. We draw on organizational identity to develop a typology that is centered on intended social mission and organizational form to access how individuals are creating their organizations, exploring different organizational forms and strategic challenges. Moreover we analyze how organizations are embedding environmental values in their practices, we use a quantitative approach using econometric models to investigate the conditions under which small and medium-sized firms embed these values on their production processes and the products and services. In order to recognize who are the individuals who engage in organizations that promote social value creation, we research the determinants driving an individual to choose to enroll in non-profit entrepreneurship over for-profit. Our analysis focus on the individual human capital because it has a relevant role in the decision to become an entrepreneur. Human capital is less person-centric than individual traits in the sense that people can acquire knowledge and experience, hence individuals could become non-profit entrepreneurs if more potential were identified and encouraged throughout the educational process. We examine the factors that influence an entrepreneur be a non-profit entrepreneur and the role that human capital play on that choice through a quantitative approach using econometric models. The empirical research provides generalizable results that are important to mature social entrepreneurship as a research field. The detailed description and analysis of the interviews should allow the construction of theoretical propositions, while quantitative data will allow for the use of econometric tools to test those propositions and develop new findings and policy implications.

1.3 Framing social entrepreneurship research

Social entrepreneurship has been defined as the process of innovation, adaptation and recognition pursuing new opportunities to serve a social mission, with a strong sense of accountability to their stakeholders (Dees 1998). The term social entrepreneurship emerged recently as a new label for describing the work of community, and public organizations, as well as private firms working for social rather than for-profit objectives, but the practice of social entrepreneurship is far from new. What differs nowadays is that social entrepreneurship is established as a vocation and area of inquiry worldwide (Bornstein 2007). It has its origins in the 18th and 19th centuries when business owners and industrialists concerned with the welfare of employees engaged in philanthropic behavior, improving their working, education and cultural lives (Shaw and Carter 2007). Historically social organizations have been defined as non-profit or nongovernmental (Drucker 1995). The definition was focused on what they were not, meaning that, what they do was different from either business or government practices. While business supplies goods or services and governments provides regulation and control, the product that non-profit organizations deliver is a “changed human being” (Drucker 1995). Social entrepreneurship integrates two different concepts. First, social, refers to the generation of social wealth for the benefit of society, as opposed to commercial firms, that maximize individual private wealth (Zahra et al. 2009). The distinctive feature that sets social entrepreneurship apart from other entrepreneurial endeavor is the priority that is given to social value creation and the adoption of a social mission to create and sustain social value, instead of private financial gain (Leadbetter 1997, Dees et al. 2001). The mission of social organizations encompasses a vast array of activities as: creating employment to disable people, providing health care to excluded groups, alleviating social and economic exclusion, attenuating environmental problems. The second concept, entrepreneurship, is related to how social entrepreneurs accomplish the social mission engaging in an entrepreneurial activity. Entrepreneurship can be viewed as an occupation choice referring to individuals owning and managing a business accepting a certain risk. Even though the main goal is to attain that mission, organizations have to guarantee their financial sustainability and the priority that is given to social or economic value motivates different organizational structures and it varies according with different contexts (Defourny and Nyssens 2008). Due to this diversity of organizational forms, the definition of social enterprise does not gather consensus among scholars. Some authors’ state that social organizations apply market based knowledge to the non-profit sector in order to attain a social mission (Dees 1998; Boschee 1995). Another stream of literature views social entrepreneurship as a way to attenuate social problems without restricting social organizations to the non-profit legal structure, arguing that the organizational structure must be chosen according to what better suits the mission accomplishment (Mair and Martí 2006; Nicholls 2006; Peredo and McLean, 2006). Other authors discuss a broader concept of social entrepreneurship that also includes social responsible practices of for-profit firms (Waddock 1988). Given these different perspectives and disparity of concepts we address several gaps in the literature through the work developed in the four chapters of the present thesis. Each chapter elaborates on specific features and activities of entrepreneurs that focus on social or environmental aims in order to develop a coherent framework for social entrepreneurship. First, a conceptual framework, based on an organization's typology, was developed to distinguish the core characteristics of organizations with an intended social mission, comparing them with theirs counterparts, allowing to set a common ground for the following empirical research (Chapter 2). Subsequently individual level was embedded in the conceptual framework by researching entrepreneurs' motivations and empirically test the different types of organizations (Chapter 3). Additionally factors of influence on the propensity to engage in non-profit entrepreneurship were explored at the individual and organizational level (Chapter 4). Following a stream of literature that encompass environmental values as part of a social mission, the environmental practices of firms were explored (Chapter 5). Although the chapters present different research themes that can be read separately, they are closely related and they all contribute to the understanding of social entrepreneurship as a field of scientific enquiry. To frame and clarify the relatedness between the chapters of this thesis, a framework that describes the process of social entrepreneurship (Jiao 2011) was adapted (Figure 1).

Fig. 1. Framework for enclosing this thesis



Source: adapted from Jiao (2011)

Figure 1 describes the social entrepreneurship process from its antecedents to its outcomes. The factors that precedes the process encompass external factors such as social and institutional environments, as well as social entrepreneur intentions that are influenced by self-cognitive desirability and feasibility, human capital, social capital. The aftermath of social entrepreneurship results in social impact (Jiao 2011). The present thesis aims to understand the determinants of social entrepreneurship at different levels (individual and organizational). Entrepreneurial context is addressed by researching entrepreneurs' motivations and human capital, and social entrepreneurship as an occupational area is approached by exploring the factors that drive individuals to engage in it and how they create their organizations. A brief overview of the chapters is provided to introduce the objective, methodology applied and main conclusions.

Chapter 2 presents a conceptual framework based on a typology for entrepreneurial ventures built on two organizational identity dimensions: normative identity related to social mission, and utilitarian identity that characterizes entrepreneurial endeavor and in particular organizational structure (for-profit, non-profit and hybrid organizational form). Analysis led to the proposal of four types of organizations: Social Non-profit, Social For-Profit (Hybrids), Non-profit Organizations and Commercial Firms. Within the four types of organizations we explore differences on organizational level including revenue, employee structure and tax treatment. Each type of enterprise within the typology shows alternative organizational forms commonly in plays and face different strategic challenges. The framework was developed and validated using a combination of qualitative and quantitative methods. This chapter originated a paper that was presented in two international entrepreneurship conferences, and will be submitted to International Entrepreneurship and Management Journal, an international peer reviewed journal.

Chapter 3 focus on why social organizations are created using a qualitative approach. Literature has investigated why individuals become entrepreneurs, applying research on motivation to entrepreneurship theory, leading to the concept of entrepreneurial motivation (Baron 2008; Gartner 1985). Motivations are in the basis of the process of engaging in social action, influencing the choice to enroll and the continuity of the engagement (Mannino et al 2011). Some motivations are similar across every entrepreneurial endeavor: proactiveness, risk taking, innovativeness, achievement, independence, perseverance (Estay et al. 2013; Prabhu 1999; Yitshaki and Kropp 2015). Others motivations are distinct from social entrepreneurs as attaining an unmet social need and the will to help society (Yitshaki and Kropp 2015). Although motivation of entrepreneurial behavior has been studied (Estay et al. 2013; Koh 1996; Shane and Venkataraman 2000), research on what drives individuals to become social entrepreneurs is limited (Yitshaki and Kropp 2015). We study the motivations that influence an individual to become a social entrepreneur and we connect the social entrepreneurial motivations with the goals and type of organizations that are created. To analyze what are the social entrepreneurs' motivations and how they shape entrepreneurial endeavor we use a qualitative approach, using primary data derived from individuals' interviews. The interviews were chosen based on their specific contribution to theory development; hence theoretical (rather than random) sampling is appropriate (Yin 2010). The interviewees were selected in order to have organizations that represent the different types of organizations presented in the typology presented in the Chapter 2. We developed semi-structured interviews with a set of questions covering entrepreneurs' demographic variables, education and experience background, motivation, organizations' history and the origins of the idea and perceived definition of social entrepreneurship. To access the choice of organizational form we addressed the strategic decision that entrepreneurs had when choosing the legal structure. The last question was regarding to which type of organization they would include themselves according to the typology. We conduct in-person interviews to 16 organizations among the different types described in the typology. We conclude that social entrepreneurs have a multitude of motivations as: social mission, empathy, proximity to social problems, accomplishment, social value focus, and sustainability. Moreover we combine motivations that relate with intended social mission with motivations that would influence individuals to choose a specific organizational form (non-profit or for-profit) and we empirically test how these motivations influence the creation of different types of organizations. The findings reveal that motivations linked with Intended Social Mission (social mission, empathy, proximity with social problems, and accomplishment by being a social entrepreneur) influence individuals to create an organization with an Intended Social Mission that, according to the typology of organizations, can be a social non-profit or a hybrid organization. The other motivations: sustainability and social value focus, were grouped as motivations that would influence individuals to choose a specific organizational form (non-profit or for-profit). If the prevailing motivations of the entrepreneur were social value focus and the sustainability refers to the financial viability of the organization in order to better accomplish a social mission that is prioritized, than is more probable for the entrepreneur to create a social non-profit organization. When motivations related with Intended Social Mission, sustainability and social value are equally prioritized with economic value creation, the entrepreneur will most likely create a hybrid organization. Contrarily, if the entrepreneur is motivated by economic value and sustainability and social value are perceived as a byproduct, than is more probable that a for-profit firm will be created. Chapter 3 will be developed into a paper and subsequently will be submitted to an international peer reviewed journal in the entrepreneurship field.

Most of social entrepreneurship literature consists of a conceptual setup, empirical research is slowly appearing using primary data and small sample sizes to define key constructs. For the establishment of social entrepreneurship as a field of scientific inquiry, there is a need of research based on empirical reality that can provide testable and valid theory (Eisenhardt 1989). Following this reasoning, a quantitative approach was used to test the proposed typology, looking at different aspects of social entrepreneurship.

Chapter 4 accesses the choice of engaging in non-profit entrepreneurship by looking at the individual and organizational level. We focused at the occupational choice view of social entrepreneurship and human capital theory to study what drives an individual to start a non-profit organization rather than a for-profit organization. The choice of becoming a non-profit entrepreneur has several human capital barriers. The most prevalent is the retention of founders and leadership team because compensations and benefits are not so competitive comparing with for-profit firms. Dees (1998) described that a social entrepreneur has to be continuously evolving, adapting, creating innovative solutions, acting boldly without being limited by resources currently in hand, to being able to accomplish their mission. This takes qualified individuals with as much drive as experience and knowledge background (Bornstein 2007). Previous literature has suggested that social entrepreneurial activity is positively influenced by access to training, and to education level (Harding 2006; Van Ryzin et al. 2009), but little is known about the relation of type of education and work experience in the enrollment of social entrepreneurship. To fill this research gap we study the drivers of social entrepreneurial occupation, focusing on the entrepreneur human capital regarding general and specific components of education and experience. To provide rigorous hypothesis testing and generalizable results we apply econometric models to the longitudinal matched employer-employee database “Quadros de Pessoal”, a large sample scale provided by the Portuguese Ministry of Labor and Social Solidarity. Data contain information regarding firms’ demography, legal structure, industry and also entrepreneurs’ demographic and human capital background. Concerning the entrepreneurial choice we conclude that human capital is correlated with the creation of social organizations. More specifically, the type of higher education influences positively the entrepreneur to create a non-profit enterprise. The results show that general and specific human capital influence the probability of participation on non-profit entrepreneurship. Tertiary education and in specific humanities and social sciences reveal the greater impact on the engagement in a non-profit organization, followed by engineering and technologies, and the weaker effect in from business sciences. Labor market experience and previous entrepreneurial experience in the non-profit sector also have a positive effect on the enrollment in non-profit entrepreneurship. This chapter originated a paper that was presented in three international entrepreneurship conferences and is under development to be submitted to Nonprofit and Voluntary Sector Quarterly, an international peer reviewed journal.

Chapter 5 enhances our knowledge in how organizations are creating social value by focusing on environmental practices of organizations. Social organizations primary goal is social value creation. But social values comprehends more than social problems, it refers to the enhancing of common welfare (Dewey 1939), benefiting all members of society, instead of any particular group (Lumpkin et al 2013). With the growing focus on the role that businesses play on society and on environmental preservation organizations are becoming more holistic, adopting sustainability strategy and decreasing their environmental impact (Hart 1995; Porter and Van der Linde 1995). Organizations have a substantial impact on the natural environment, 60% to 70% of total pollution being produced by small and medium firms (Aragón-Correa et al. 2008; European Commission 2010). But organizations can ameliorate their negative impact by perceiving and taking account social and ecological matters as a source of opportunity, innovation, and competitive advantage (Porter and Kramer 2011). Chapter 5 will extend the research to a broader societal context including the environmental aspect. Environmental practices are defined as any deliberate environmentally activity undertaken by firms aimed at reducing the impact of their operations and their products and services on the environment (Gadenne et al. 2009; Uhlaner et al. 2012). To understand the extent of socially responsible practices and the conditions under which organizations engage in such practices, two types of practices were distinguished: practices related to production processes and related to products and services. The influences of firm, sector and country characteristics on organizations environmental behavior were investigated applying econometric analyses using the Flash Eurobarometer Survey “small and medium-sized enterprises, resource efficiency and green markets” (No. 342) conducted on behalf of the European Commission. Findings reveal different conditions under which organizations engage in environmental practices. We distinguished between environmental practices related to production processes and to products and services. The results indicate that the type of customers served and stringency of environmental legislation only affect organizations’ engagement in greening product and service offerings whereas firm size is related to greening processes. Moreover, organizations active in process-intensive or tangible sectors and that receive financial support are likely to adopt both environmental practices. Our conclusions indicate that despite scale disadvantages, small firms justify R&D expenditures for green product development to serve an eco-niche that is too small for larger firms to be attractive (Bianchi and Noci 1998; Hockerts and Wüstenhagen 2010). Chapter 5 was an outcome of the collaboration with Erasmus University in Rotterdam, which was established in the work plan of the present thesis. As a visiting scholar I wanted to collaborate with Brigitte Hoogendoorn and we decided to start working on a study that address the environmental practices of firms in order to complement both of our work in organizations that attain a social problem. I conducted literature review on social, sustainable and environmental entrepreneurship, explored the data of Flash Eurobarometer Survey and conducted several econometric models analyses and subsequently I started to write this chapter with Brigitte Hoogendoorn and Peter van der Zwan. This work resulted from a team effort that continued after returning to Portugal, after two years this work resulted into a paper that was presented in an international conference and published in Small Business Economics with the following citation: Hoogendoorn, B., Guerra, D., & van der Zwan, P. (2015). What drives environmental practices of SMEs?.*Small Business Economics*, *44*(4), 759-781.

1.4 Methodology

To achieve the overall aim of enhancing social entrepreneurship as a field of scientific inquiry we use empirical research applying both qualitative and quantitative methods to address different factors that influence its practice. The methodology used on the empirical chapters 3, 4,and 5 will be briefly explained following. Social entrepreneurship data is scarce, on the one hand, large-scale primary data is inexistent because it would require a great amount of resources. On the other hand, secondary data sources from many international institutions as the World Bank do not include measures that are able to distinguish social from traditional entrepreneurship. Therefore the present thesis uses a mixture of qualitative and quantitative approaches to have access to different characteristics of organizations and individuals and integrating all the complementary information in order to build a coherent framework for social entrepreneurship.

To address the individuals motivation that drive them to engage in a social organization and how those motivations influence the type of organization that is created, we use a qualitative approach. To collect primary data we conducted in-person semi-structured interviews and the organizations were chosen based on their specific contribution to theory development. We apply a theoretical sampling and selected organizations across the different types of organizations outlined by the organizations' typology in chapter 2 (social non-profit organizations, hybrids, non-social non-profit organizations and for-profit firm). This approach is suitable to clarify why the entrepreneurs create organizations to attain different goals and how they shape strategic choices such as the organizational form, allowing to empirically testing the organizations' typology. Our sample include a total of 17 individual, of which 13 are entrepreneurs, and whenever the entrepreneur was not available we interviewed presidents (2) and directors (2). The entrepreneurs or founders were chosen because they had entrepreneurial behavior and some were willing to achieve a social mission, the presidents and directors were chosen because they possess the better knowledge of why the organization was created, their characteristics and strategies. Several types of organizations were included: foundations, non-governmental development organization (NGDO), non-profit association, private social solidarity Institutions (IPSS) which is a type of non-profit organizations in Portugal, and for-profit organizations (private limited liability company). The questionnaire encompasses entrepreneurs' demographic variables, human capital, motivation, organizations' history and the origins of the idea and perceived definition of social entrepreneurship. Moreover to capture the organization characteristics we include a set of questions concerning the choice of organizations' legal structure and perceived advantage and disadvantages, and the last question was regarding to which type of organization they would include themselves according to the organizations' typology. To examine the data we used analytical tools such as matrices and a thematic analysis to develop categories of data and identifying patterns. While qualitative approaches are useful to provide detailed explanation and generate theoretical propositions, it has some limitations regarding results generalization. Quantitative approaches can complement it by testing the propositions, providing generalizable results and policy implications.

To complement our knowledge on the profile of individuals that pursue entrepreneurship for the attainment of normative values instead of economic values we apply a quantitative methodology through econometric models that use the panel data set "Quadros de Pessoal". This data set is provided by the Portuguese Ministry of Labor and Solidarity and results from an annual mandatory questionnaire filled by all Portuguese firms. Quadros de Pessoal is a longitudinal matched employer-employee database which includes information on all private firms, establishments, workers and business owners in the Portuguese economy since 1982. The advantages of working with longitudinal matched employer-employee datasets are that they include firm and workers' characteristics and cover nearly the universe of firms (Campbell, 2005). However, research in non-profit entrepreneurship developed with use of this type of dataset is almost non-existent. Not only the use of these datasets provides opportunities to develop and test new theories and to gather support of evidence given by primary data with small sample sizes, but it may also contribute methodologically to non-profit entrepreneurship as a field. The data presents some limitations. As in many European countries, Portugal does not have a legal concept that defines a social organization (Nissan et al. 2012). At the constitutional level, the Portuguese legal system encompasses a public, private and cooperative and social sector, however the legal system does not include a legal concept of social economy (Namorado 2006). Hence, we can only capture non-profit organizations that were defined considering two conditions: first, they are part of the private sector and second; they have a surplus distribution constrained to the controlling staff as members and stakeholders (Dees 1998). Following such definition, we select non-profit organizations according to their legal form, including: charitable and humanitarian association, culture and recreation association, political association, unions and employer association, non-union professional association, mutual aid association, national foundations, cooperative society, and corporate religious (Namorado 2006). Also the data does not have any information on psychological traits or motivations of the individuals, and given that their identity is confidential, it is not possible to gather extra information on the individuals. Such limitation does not allow us to test the different motivations why non-profit and for-profit entrepreneurs engage in entrepreneurship, but enable us to complement the data that we derive from the interviews with other factors that also influence the participation on non-profit entrepreneurship. Additionally it provides further explanation on the role of human capital and gender in that choice, providing empirical and generalizable results as well as public policy implications. This database covers on average over 145 thousand firms, 170 thousand establishments and two million workers in each annual return which are fully linked through the use of a unique identification number. Our sample is restricted to active firms that existed between 2002 and 2012, such restriction was motivated by the inclusion of the education variable only since 2002. Within this time frame we capture 10,617 non-profit organizations and 40000 for-profit firms. In addition we exclude organizations if no employer is identified, this might happen if the individuals do not declare their professional role (as business owner/employer or other) while filling the questionnaire. These restrictions resulted in 51,620 entrepreneurs engaged in 31,513 for-profit firms and 1094 entrepreneurs engaged in working 633 non-profit organizations. To address the probabilities of the determinants that influence an individual to choose to enroll in non-profit entrepreneurship over for-profit were used econometric models. Given that the individual can choose between two options (non-profit or for-profit entrepreneurship) it means that our independent variable is binary, hence a binary choice model as a probit regression is the adequate approach to use (Wooldridge 2006). The probit model will allow perceiving if the factors that will influence this choice, the regressors or independent variables, will have a positive or negative impact on the probability of engaging in non-profit entrepreneurship. The dependent variable that represents the choice of engaging in non-profit entrepreneurship is coded as 1 if the entrepreneur is engaged in a non-profit or 0 if the entrepreneur is engaged in a for-profit organization. To study the role of human capital as a predictor for the entrepreneurial choice we follow human capital theory (Becker 1964) and distinguish between general and specific components. General human capital was captured through education level and labor market experience (measured in years). Specific Education was measured following International Standard Classification of Education (ISCED) and Fields of study (FOS) classification, identifying if an individual is graduate or post graduate i) in engineering and technologies education (including engineering, technologies, architecture, construction and other industries) ii) in social sciences (social sciences, journalism and law) iii) in humanities (including humanities and arts), iv) in business sciences. To measure the influence of specific work experience, we capture previous experience in the same industry, previous entrepreneurial experience and entrepreneurial experience in the non-profit sector. I addition we include the gender variable, many authors have recognized that despite of women have been an underrepresented group in entrepreneurship, they are more prone to pursue entrepreneurial activities for social aims (Williams 2007; Van Ryzing et al. 2009). At the individual level we control for demographic characteristics as the entrepreneur age. Concerning organization level we include size (given by the number of employees), age (in years), organization's industry, regional distribution (metropolitan areas or other municipalities) and the access to private or public capital. Macroeconomic environment was controlled through the inclusion of binary variables for each year included in the sample.

Our aim to provide a framework for social entrepreneurship that encompass several levels of analysis and different objectives such as people oriented and environmental is finalized by examining how organizations are embedding environmental values in their practices. A quantitative approach using econometric models was used to investigate the conditions under which firms embed these values on their production processes and the products and services. We use the data from the Flash

Eurobarometer survey on “small and medium-sized enterprises, resource efficiency, and green markets” (no. 342) that was conducted on behalf of the European Commission. The survey resulted from telephone interviews with about 11,000 businesses in the 28 Member States of the European Union and an additional 2,100 in Albania, Iceland, Israel, Liechtenstein, Macedonia, Montenegro, Norway, Serbia, Turkey, and the United States. The telephone interviews were conducted by TNS Political & Social between January 24 and February 10, 2012. TNS is an established organization in the area of international data collection and has been consistently responsible for the execution of Flash Eurobarometer surveys from September 2011 onwards. In addition, TNS has been in charge of the fieldwork for standard Eurobarometer surveys from 2004 onwards. TNS therefore has vast experience in data collection among firms – like in the present survey – and persons, the associated field work, and translating questionnaires for (Flash) Eurobarometer surveys. Our sample focus on the environmental practices of small and medium-sized enterprises; therefore firms with more than 250 employees are excluded. The observations from Albania and Montenegro are excluded because there is data missing related to stringency of environmental legislation, also observations with missing values for one or more variables were omitted. Our sample consists of 7,700 small and medium-sized enterprises. Firms were randomly drawn from an international business database with a stratification procedure along the dimensions of firm size (three categories: 1-9 employees; 10-49 employees; 50 employees or more) and sector (four categories: manufacturing; retail; services; industry). Hence, the survey covers businesses employing at least 1 person in the manufacturing (NACE C), retail (G), services (H/I/J/K/L/M) and industry (B/D/E/F) sectors. Quotas are used for each of the resulting 12 cells, and possibly adjusted to ensure enough observations in each cell. At the same time, the projected sample size is 100, 200, 300, 400, or 500, depending on the particular country. A centralized e-call center was used from which all interviews were carried out. This Flash Eurobarometer survey is the first extensive survey on the topic of small and medium-sized firms and green markets that includes relevant information on the green economy. To analyze how firms engage in environmental practices we distinguish between engagement in greening processes and producing greening products and service. The involvement in greening processes is measure through the firms’ investments in resource efficiency (including reducing material intensity, use of renewable resources, and enhancing recyclability energy intensity) as a percentage of annual turnover. The engagement in products and service offerings is measured in a similar way, ranging from no involvement at all to specific percentages of a firm’s most recent annual turnover. In both variables we distinguish between no investments (0% of annual turnover), minor (1%-10%), substantial (11%-50%) and large (51% or more) investments. Since both variables are ordinal with a clear ordering of the values, the most suitable model to analyze the influence that several factors (independent variables) have on the firms on the involvement in both environmental practices is an ordered logit model (Wooldridge 2006). As independent variables we include the firm size (given by the number of employees), sector tangibility (distinguishing between tangible products, tangible services, and intangible services), type of market served (the consumer market, the business market, or the public administration market), external support (distinguishing between no external support, non-financial external support, and financial external support) and stringency of environmental legislation. As control variables we include firm age, environmental behavior (distinguishing between proactive or reactive) and the use of environmental management system.

To summarize, the distinct studies encompasses different levels of analyses to access the entrepreneurial process from the beginning, understanding the individual motivations to engage in social entrepreneurial endeavor and how different motivations lead to the probability of creating distinct types of organizations (social non-profit organizations; hybrid; non-social non-profit; and for-profit firms) through a qualitative methodology, creating theoretical propositions that can open avenues for further research. To an afterward step, when the organization is already established, by analyzing the influence of organizational and individual characteristics and the role that human capital have in the propensity of individuals to enroll in non-profit organizations. Moreover we examine firms that embed environmental values in their process and product and services offering in order to encompass both people oriented and environmental social goals. These studies were addresses by quantitative methodologies that allowed to empirically test the theoretical hypotheses provide generalizable results and provide public policy implications.

1.5 Contribution

This study makes several contributions. First, to the social entrepreneurship literature, by setting a framework focusing on the distinctive features of non-profit organizations, social organizations (social non-profit and social for-profit or hybrid), and for-profit firms. At the individual level, the analyses of the social entrepreneurs' motivations through primary data collection is an important factor to the understanding of the process of engaging in a social organization and why some individuals prioritize social over economic value creation. The clarification of key concepts both at the organization and individual level might contribute to the development and maturity of social entrepreneurship as a field. The empirical research on organizations and entrepreneurs enhances social entrepreneurship research to evolve beyond descriptive towards more predictive purposes. Moreover, the study on the determinants of being a non-profit entrepreneur adopts the human capital theory (Becker 1964) perspective to formulate the hypotheses and to explain the results. This theoretical framework has been applied in the entrepreneurship literature, although it has received less attention in regards the context of non-profit organizations. The work contributes to the literature by acknowledging that human capital influence non-profit entrepreneurship, in particular, the relevance that non-business fields of education have on the propensity of enrolling on non-profit entrepreneurship. Hence, contributing to the stream of literature that claims for more attention and awareness to the relevance that non-business fields of education also have on entrepreneurship (Kupferberg 1998). At the firm level, the analyses of the drivers of environmental practices contributes to the literature by extending the predominant focus on large firms focusing on small firms and medium-sized firms and address the call to consider differentiation between different types of environmental practices when assessing firm behavior (Halme and Laurila 2009; Uhlaner et al. 2012) by distinguishing green processes and green products and services. We investigate how their environmental behavior depend on several firm-level characteristics, the tangibility of the business sector, and the stringency of environmental legislation at the country level. Our research design hence allows for taking novel factors into consideration such as environmental legislation. In addition, our results are less hampered by sample specificity compared to existing empirical studies.

Second, it offers insights to public policy. The proposed framework could help clarify the specific aims and impact of each type of organization, helping governments to create more suitable laws to support different types of entrepreneurship. The conclusions regarding the positive impacts that the different education backgrounds have on the probability of engaging in non-profit entrepreneurship claims for more attention to the design of effective scholar programs, and policy measures that support non-profit entrepreneurship. Non-profit entrepreneurship programs could be promoted among students in non-business fields of education as well as fostering non-profit organizations as an alternative business model within schools, resulting in greater inclusiveness in the enterprise culture agenda of populations traditionally under-represented such as women.

Third, practitioners can benefit from this research by acknowledging the different types of ventures and the different challenges that they face. Becoming more alert to the strategic constraints and opportunities associated with each type of enterprise, in order for them to create a proper organizational strategy.

2. A Conceptual Framework for Social Entrepreneurship[1]

Social entrepreneurship, which can be understood as the process of exploring and pursuing opportunities in order to create social value, has received increased attention recently due to the development of innovative business models which may have the potential to alleviate social problems that are not currently being addressed, either by the private or by the public sector, in a sustainable and effective way (Mair and Martí 2006; Weerawardena and Mort 2006). Several authors have contributed to the definition of social entrepreneurship and we can identify two main streams of relevant literature. One stream supports the idea that a broader definition of the concept would attract more attention and resources in order to help in mitigating social problems (Mair and Martí 2006; Santos 2012). The other stream claims that the inclusion of any activity that benefits society (including informal groups of individuals that gather for a social mission and corporate social responsibility activities) under the umbrella concept of social entrepreneurship may involve organizations[2] which are not fully committed to socially beneficial goals. Such organizations may be more concerned with pursuing marketing strategies for the purposes of wealth maximization in a way that could harm and discredit social entrepreneurship (Martin and Osberg 2007; Mort et al. 2003). Hence, many authors argue that a more restrained definition would benefit social entrepreneurship legitimization as a field of research (Dees 1998; Mort et al. 2003). Social organizations often try to pursue innovative solutions in order to mitigate social problems, despite the risks that may be involved (Tan et al. 2005). Their primary focus on social rather than economic value creation differentiates social organizations from other organizations, although financial sustainability is still essential for their survival (Mair and Marti 2006). Organizations may have multiple objectives and the theoretical perspective on research into organizational identity involves an attempt to define whether establishing the nature of the core, distinctive and persistent character of an organization (Albert and Whetten 1985; Moss et al. 2011) can make it possible to establish a dual focus on both the social and economic aims of social organizations. The coexistence of social and economic goals within an organization and the priority that is given to social over economic value influences the choice of organizational form. Some authors argue that a non-profit form can be more effective in prioritizing social aims and will cause less conflict than a for-profit form that has to balance economic and social goals (Leadbetter 1997; Young 2001). Others authors argue that social organizations should not be limited to a particular organizational form and must choose the approach which is of most benefit to the accomplishment of their goals (Austin et al. 2006; Mair and Martí 2006; Nicholls 2006; Peredo and McLean 2006; Williams and Nadin 2012). Given that such different perspectives on the concept of social organization exist, there is a lack of consensual definition and a clear theoretical framework in this area (Weerawardena and Mort 2006; Zahra et al. 2009).

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1 Research work developed on the present chapter was presented by the author at the following international conferences: DRUID Academy Winter PhD Conference, Cambridge, United Kingdom, January 19 – 21, 2012 and Research in Entrepreneurship and Small Business (RENT XXVII) Vilnius, Lithuania November 20 – 22, 2013.

2 The concept of organization in the present work only refers to formal organizations which are understood as social units of people that are structured and managed together to pursue a defined common goal (Handy 2006; Perrow 1991). Organizations have a variety of legal types, including for-profit and non-profit corporations, governments and non-government organizations, charities, cooperatives, universities and political organizations.

The present work proposes an analytical framework for social entrepreneurship that distinguishes the organizations described in the social entrepreneurship literature with regard to their core characteristics. This involves an understanding of what differentiates social organizations from other organizations. In combining elements of social entrepreneurship and organizational identity scientific literature, we develop a typology of organizations built over two types of organizational identity: normative and utilitarian. Normative identity is manifested through values which encompass cultural, educational, sporting and religious purposes (Albert and Whetten 1985; Moss et al. 2011; Rose-Ackerman, 1996). These can be embedded as a social mission or pursued for recreational or other cultural objectives. Utilitarian identity relates to economic goals, profit maximization and cost minimization (Albert and Whetten 1985; Moss et al. 2011; Stevens and Moray 2010). In focusing on normative and utilitarian identities, we distinguish four types of organizations, and discuss the differences related to organizational characteristics in terms of revenue structure, employee structure and tax treatment.

We aim to contribute to research in social entrepreneurship by developing a conceptual framework that differentiates social organizations from their counterparts by establishing their specific characteristics and examining how they prioritize different identities. We also contribute to the field by creating a typology of organizations that allows for a clear understanding of the different characteristics of each type of organization and the strategic choices they face when choosing their organizational form.

The chapter proceeds as follows. Section 2 elaborates on the concept of social entrepreneurship by identifying distinctive perspectives and concepts that can be found in the literature. Section 3 discusses theoretical approaches to the role played by organizational identity in social entrepreneurship. The typology of organizations is proposed and discussed in Section 4. Finally, in Section 5, the chapter concludes by discussing the main implications, limitations and avenues for further research.

2.1 The construct of social entrepreneurship

Social entrepreneurship manifests itself throughout community, development, education, welfare, and charities (Leadbeater 1997; Weerawardena and Mort 2006). Mair and Marti (2006) argue that the concept of social entrepreneurship combines two words that mean different things. “Social”, the first component, refers to the organizations’ objective of benefiting society, or a segment of it, instead of seeking private wealth creation (Tan et al. 2005; Zahra et al. 2009). The use of this term indicates that the segment of society that benefits from the organization’s actions is involved, accepting and cooperating with it (Tan et al. 2005). “Entrepreneurship”, the second component, is defined as a process which involves opportunity perception, accumulating resources, marketing products or services, building an organization and responding to government and society (Gartner 1985). This process entails proactive and risk-taking behavior (Defourny and Nyssens 2008; Gartner 1985; Mort et al. 2003; Peredo and McLean 2006), engaging in innovative solutions (Austin et al. 2006; Mair and Martí 2006) and developing new business models (Austin et al. 2006; Peredo and McLean 2006; Young 2001). These characteristics are common to many organizations. However, the distinctive factor is the intended social mission that guides all strategic decisions within each organization (Dees 1998; Nicholls 2006). A social entrepreneurial process usually begins when an individual perceives a social “illness” that is not addressed by governmental or private organizations (Nicholls 2006; Peredo and McLean 2006; Thompson et al. 2000), decides upon a suitable way of mitigating the problem and creates an organization in order to achieve a solution.

Social organizations create social wealth, which can be defined as the result of social value created and offset by the social costs incurred (Austin et al. 2006; Hoogendoorn and Hartog 2010; Zahra et al. 2009). Tan et al. (2005) suggest that the process of entrepreneurship must add value to society. However, entrepreneurship can be perceived as being either "in society" or "for society". For-profit firms[3] can be categorized as being "in society". Their main goal is to generate private economic wealth, while entrepreneurship "for society" refers to organizations with a social mission that involves the society, or a segment of it, and which can be expressed through the creation of better health and education conditions, the integration of deprived social groups into the labor market, or the mitigation of environmental problems (Tan et al. 2005; Sanchis-Palacio et al. 2013).

Dees (1998) defines social entrepreneurship as the process of innovation, adaptation, recognition and the pursuit of new opportunities to serve a social mission, with a strong sense of accountability to stakeholders. Zahra et al. (2009) highlight the entrepreneurial component which defines social entrepreneurship as the creation of new ventures or managing of existing organizations, which may involve engaging in a process of discovering opportunities and exploiting resources in order to enhance social wealth. Social organizations are driven by a social mission, and require a willingness to stimulate social change and empower their customers (Prabhu 1999). They act as private producers of public goods, often filling a gap left by governmental institutions (Weisbrod 1977). By being closer to their customers, social organizations can provide products and services to a narrow group of people, in a different way to governments that serve the entire population (Weerawardena and Mort 2006). Social organizations are originally created in the non-profit sector and their entrepreneurial behavior is used for social ends rather than economic objectives. They reinvest their surpluses from market activities to benefit a specific disadvantaged group (Leadbetter 1997). However, as government support to social organizations in the non-profit sector has diminished and the competition for funding donations has increased, these organizations have increasingly been adopting strategies which have many market orientated features and which use business models in order to become more autonomous and sustainable (Defourny and Nyssens 2008; Weerawardena et al. 2010). As a consequence, social organizations are now applying business expertise and market-based skills in order to become more efficient in providing and delivering their social services while serving their social missions in creative, innovative and ethical ways (Reis 1999; Sanchis-Palacio et al. 2013; Shaw et al. 2002; Weerawardena and Mort 2006).

One stream of literature which is focused on social change argues that social organizations should not be limited to the non-profit sector, or to specific legal forms or constraints on the distribution of revenues. It is argued that they should choose whatever organizational form[4] (Kistruck and Beamish

[3] For-profit firms without an explicit social mission are referred to in social entrepreneurship literature as commercial, economic or traditional for-profit firms (Acs et al. 2013; Austin et al. 2006; Mair and Martí 2006). In the context of this work we refer to them as "for-profit" firms.

[4] "Organizational form" refers to the legal characterization of an organization that can be in either for-profit or in the non-profit sector. Organizational form is distinguished from organizational structure in that it is defined as the organization configuration that shapes its

2010) is suitable to achieve their mission (Austin et al. 2006; Mair and Martí 2006; Nicholls 2006; Peredo and McLean 2006; Williams and Nadin 2012). Following this reasoning, social organizations that balance social and economic dimensions on equal grounds can choose to establish themselves within the for-profit sector, therefore becoming a hybrid firm combining non-profit and for-profit elements (Mair and Martí 2006). A broader perspective on social entrepreneurship encompasses for-profit firms that engage in innovative action for the benefit of society by creating social capital (Peredo and McLean 2006; Tan et al. 2005; Thompson et al. 2000).

The concept of social entrepreneurship thus has different meanings depending on context. It can be applied to both non-profit organizations and for-profit firms (Austin et al. 2006; Martin and Osberg 2007; Peredo and McLean 2006; Zahra et al. 2009). There is a clear consensus in the relevant literature that a social organization needs to be defined by its social mission. However, how entrepreneurs should undertake their entrepreneurial endeavors with respect to organizational form is still being debated. The dual focus on social and economic value creation is balanced in different ways, so that the entrepreneur can establish an organization in either a non-profit or a for-profit form, according to what best serves their mission.

2.2 Dual identity of social organizations

Social organizations pursue entrepreneurial activity in order to serve a social mission and create social value. Nevertheless, economic value created through trading ensures sustainability and is seen as a key way of attaining that mission (Townsend and Hart 2008). The presence of a double aim (social and economic) shows that an organization can have more than one identity. Different identities coexist within social organizations which distinguish them from for-profit firms. Albert and Whetten (1985) defined the identity of the organizations has the characteristics that their members perceive as core, distinctive and lasting. Identity encompasses organizations' culture, core values, modes of performance and products that they provide (Elsbach and Kramer 1996). Some authors have questioned the extent to which identity is an enduring feature, Gioia et al. (2000) argue that organizational identity is moderately dynamic and mutable. Identity can change so that it can adapt to external demands and opportunity (Gioia et al. 2000; Nielsen and Lassen 2012). Organizational identity literature has provided a theoretical perspective that can clarify the multiplicity of identities within an organization (Moss et al. 2011; Foreman and Whetten 2002; Young 2001). Utilitarian identity refers to economic goals, profit maximization and cost minimization (Moss et al. 2011). Normative identity is manifested through educational, cultural, religious and sportive values that control strategic decisions and organizational patterns (Moss et al. 2011; Rose-Ackerman 1996). Some organizations embed these values in an intended social mission that aims to solve individuals' or communities' social problems. Other organizations may manifest such values for recreational purposes or for other cultural aims without necessarily having an established social mission, even though these organizations might create some social impact as a consequence of their activity. All organizations which express their values through a

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activities internally through divisions (coordination, supervision and task allocation) and externally through subsidiaries and alliances (Kistruck and Beamish 2010; Williamson 1985).

social mission, or for the purposes of recreation or other cultural objectives, can be said to be constituted by a normative identity.

Proposition 1. There is a positive relationship between the decision to create a social organization and the existence of a normative identity expressed by an intended social mission.

Some empirical studies have tested these identities that relate to social organizations. Moss et al. (2011) use a content analysis of mission statements, with a purposive sampling constituted by organizations that combine a social mission and economic goals, to validate entrepreneurial orientation, which can be defined as the processes, practices and decision-making that firms use (Lumpkin and Dess 1996) in the context of social organizations. In focusing on autonomy, competitive aggressiveness, innovativeness, proactiveness, and risk taking as entrepreneurial orientation dimensions (Gartner 1985), Moss et al. (2011) conclude that entrepreneurial identity at the organizational level can be included in utilitarian identity. Entrepreneurial identity, as characterized by entrepreneurial orientation, is distinct from a normative identity that manifests itself through a cultural, educational, or expressive orientation (Moss et al. 2011). The same study shows that social organizations can have elements of both utilitarian identity related to entrepreneurial identity and normative identity manifested though social values. Stevens and Moray (2010) have conducted an empirical study of social organizations with economic, social and environmental aims, providing evidence that organizational identity (in the form of normative and utilitarian identities) and the orientation of the entrepreneurs (social or non-social) could be aggregated into the two distinct constructs of social and economic proclivity. They conclude that social proclivity is an aggregated construct that combines normative identity and entrepreneurs' social orientation, whereas economic proclivity aggregates organization utilitarian identity and entrepreneurs' values of self-interest. Identity is reflected in an organization's mission. It defines its goals and the kind of customers that they serve (Stevens and Moray 2010). Social organizations express a normative identity through their social mission (Dees 1998), revealing a concern for people by attenuating community problems and being accountable to their members (Moss et al. 2011; Thompson and Doherty 2006). Social organizations also have an utilitarian identity related to cost minimization, revenues and/or funding maximization, originating from governmental grants, public and private donations, surpluses from the products or services they sell and the maximization of social value or social welfare (Albert and Whetten 1985; Austin et al. 2006; Moss et al. 2011; Peredo and McLean 2006; Stevens and Moray 2010; Young 2001). While normative identity is connected to people, utilitarian identity refers to products and services that organizations sell to their customers, as well as industrial and market factors (Foreman and Whetten 2002; Moss at al. 2011; Stevens and Moray 2010).

Proposition 2. There is a positive relationship between the decision to create a social organization and the existence of both utilitarian identity and normative identity expressed by an intended social mission.

The coexistence of normative and utilitarian identities may cause conflict within a social organization (Albert and Whetten 1985; Townsend and Hart 2008; Young 2001). Young (2001) argues that a clear organizational identity is crucial to the choice of organizational form (for-profit or non-profit), which influences decision-making, strategy, performance and sustainability. The reason that some social entrepreneurs select one organizational form over another is related to how they balance two organizational identities (Moss et al. 2011; Young 2001). The prevalence of a normative identity could influence the establishment of a non-profit organization that prioritizes its social mission and subjugates the uses of its surpluses to the accomplishment of that mission (Young 2001). Non-profit organizations are characterized by being subject to what Hansmann (1987) calls non-distribution constraints. These are established by governmental laws that forbid the distribution of the surpluses resulting from their activity to individuals who have control over a firm as managers or members. This constraint does not mean that an organization cannot gain revenue from selling its products or services. However, this revenue must be used to finance future projects or be distributed to communities, in order to help accomplish the organization's purposes and its mission (Soriano and Galindo 2012). The category of non-profit organizations encompasses more than social organizations. The fact that some organizations are not profit driven does not necessarily imply that they have a social mission (Rose-Ackerman 1996). The non-profit sector is not only focused on helping people and deprived communities (Rose-Ackerman 1996; Weisbrod 1988). If the normative identity of a non-profit organization is expressed through an intended social mission that has social change and the empowerment of their clients as a primarily objective (Prabhu 1999), the organization can be called a social organization. Otherwise, a non-profit organization can express a normative identity for recreational or other cultural purposes without an established social mission, resulting in a non-social organization. There are several examples of non-social non-profit organization as labor unions, credit unions, industry associations and sports clubs.

Proposition 3. There is a positive relationship between the decision to create a non-social organization and the existence of a normative identity expressed by recreational or other cultural purposes that are not embedded in an intended social mission.

Social organizations result from a specific combination of normative and utilitarian identity. Their normative identity can be expressed through a social mission that is central to an organization, guiding and influencing values and the perception of opportunities, in order to solve social problems and stimulate social change (Dees 1998; Mort et al. 2003; Neck et al. 2009; Waddock and Post 1991). This specific mission sets social organizations apart from other non-social non-profit organizations and from for-profit firms. The prioritization of the normative identity expressed as a social mission emphasizes the primacy of social mission over economic goals, which will most likely influence the adoption of a non-profit form. If a social organization has utilitarian and normative identities in equal proportion, this implies that it will try to generate both social and economic value. Such a dual focus is usually referred to as a "double bottom line" (Fowler 2000; Tan et al. 2005; Townsend and Hart 2008; Wesley and Curtis 2010). In this context, social organizations will probably choose a for-profit form, in order to create a hybrid firm that pursues a social mission while ensuring economic sustainability and prosperity (Moss et al. 2011).

Proposition 4a. There is a positive relationship between the decision to organize under a nonprofit organizational form and the existence of a normative identity, where social, recreational or cultural aims hold primacy over the economic goals.

Proposition 4b. There is a positive relationship between the decision to organize under a for-profit organizational form and the existence of a utilitarian identity, where economic goals hold primacy or are equally important as social, recreational or cultural aims.

The prevalence of a utilitarian identity is clear in firms that are created with the aim of maximizing economic value and private wealth, and which are therefore established in a for-profit form or as a for-profit firm. Consumers, nongovernmental organizations (NGOs) and environmental activists have been questioning the role of firms in society, hence pressuring them to become more sustainable and accountable for their actions (Miles et al. 2009). For-profit firms are increasingly enrolling in corporate social responsibility, defined as actions that are not pursued for the self-interest of the for-profit firms and which go beyond legal requirements to advance a social cause (McWilliams and Siegel 2001). Such actions include engaging in volunteer actions, sustainable business practices such as recycling, abating pollution, supporting local organizations and environmental marketing (McWilliams and Siegel 2001). The adoption of social and environmental values into a firm's way of doing business can be part of a strategy to enhance the firm's financial performance and the societal reputation (Miles et al. 2009) in a different way to social organizations and hybrid firms, whose values are explicitly part of their primary mission.

2.3 A conceptual typology of organizations

As discussed in the previous section, social organizations mitigate social problems and deliver important goods. Some operate under a non-profit form, constraining the surpluses distribution to board members, and reinvesting it in future projects or distributing to communities. Other social organizations that pursue social and economic value find the for-profit form more suitable for attaining their goals (Austin et al. 2006; Sanchis-Palacio et al. 2013; Shaw et al. 2002). Given the variety of organizational identities and the way different organizations trade-off levels between social and economic value creation, we propose a typology that encompasses such diversity and helps to clarify different standpoints and theoretical dimensions. Based on the relevant literature on social entrepreneurship and organizational identity we can identify two key dimensions that are central to the character of an organization and which allow different types of organizations to be distinguished: (1) normative identity, manifested through an intended social mission, and (2) utilitarian identity, characterized by economic goals and profit orientation. A normative identity differentiates organizations that are created with a social mission, from those who express the normative identity for recreational and other cultural aims as well as from for-profit organizations. A social mission controls and guides an organization's strategy, policies, its management of employees, and how it interacts with other organizations in the marketplace (Neck et al. 2009). A utilitarian identity, related to economic rationality, distinguishes organizations with intended adherence to economic goals that seek maximization of financial returns and cost minimization, from those who do not intend to pursue economic goals. Organizations that do not seek economic value maximization perceive monetary value as a resource to accomplish their mission and express their utilitarian identity by minimizing costs or maximizing social value. The adherence to economic goals has an influence on the choice of organizational form; those who seek economic value creation will probably choose a for-profit form, whether those who prioritize social value over economic value will mostly organize under a non-profit form (Townsend and Hart 2008). By combining the concepts of social mission and organizational form, one can propose four types of organizations:

i) Non-social non-profit organizations with a normative identity, which are not created to attain an intended and central social mission, but to serve other goals such as providing facilities for recreation or other cultural purposes (Rose-Ackerman 1996). Examples of these organizations are universities, labor unions, industry associations and sports clubs. Their work may have beneficial social outcomes but these are not their explicit primary mission. These organizations operate under a non-distribution constraint on their earnings (Hansmann 1987). Such a constraint means that organization can earn surpluses from their activities, but these should be reinvested in the organization, or used for other charitable purposes (Soriano and Galindo 2012). The utilitarian identity is expressed through cost minimization and the maximization of revenues such as private donations and grants.

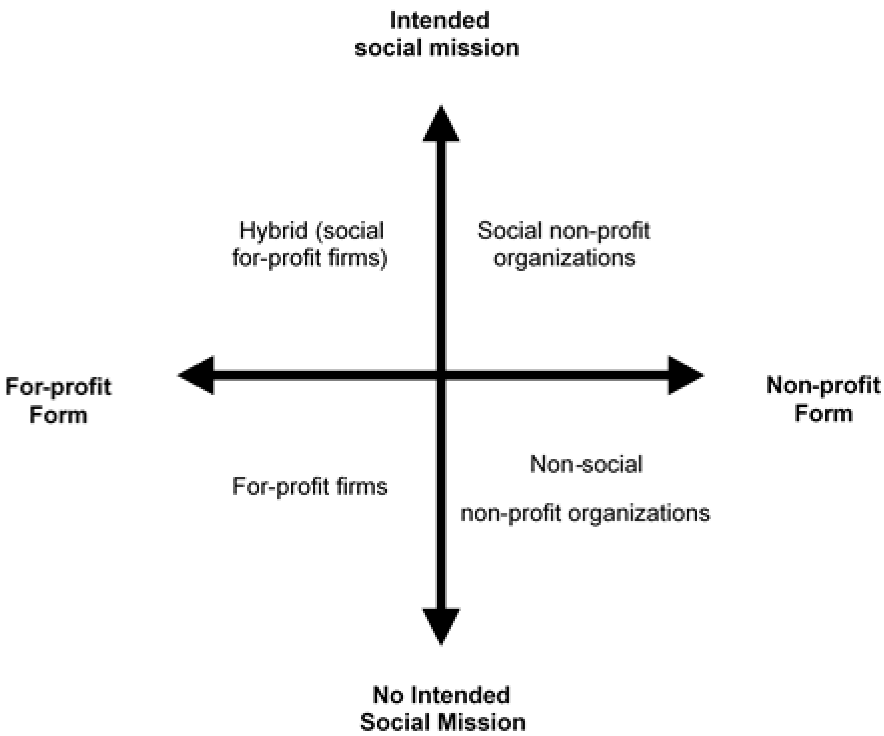
ii) Social non-profit organizations, which have a normative and a utilitarian identity. Their normative identity is manifested through a social mission that is central to the organization. They are founded with the clear intention of serving a social mission, and alleviating a social problem in a way which is complementary to that of public and private sector organizations (Dees 1998). Normative identity as a social mission is prioritized over utilitarian identity in terms of economic goals, which are perceived as a means to achieve the mission. Therefore they operate in a non-profit form within the same structure of financial discipline as any other non-profit organization. Though economic value creation is not a priority, financial sustainability is important for their survival. Commercial revenue from the by-products or services they provide is part of the strategic means to generate income to support the mission, to reinvest in the organization or in the community (Young 2001).

iii) Hybrid or social for-profit firms. These organizations are defined by a dual normative and utilitarian identity, placing equal weight on attaining social aims and generating economic value (Wesley and Curtis 2010). The intended economic goal motivates these organizations to be constituted in a for-profit form. The income they generate from commercial activities can fund social programs, in order to pursue dual objectives of making a profit for their owners while benefiting others without losing sight of their social mission (Fowler 2000; Tan et al. 2005).

iv) For-profit firms. These organizations have a utilitarian identity and pursue economic value creation, the maximization of private wealth creation and shareholder returns. This type of organization does not have a normative identity and is not defined by any social or cultural, educational and religious values. The main objective of for-profit firms is to create private wealth. However, some of their practices have social consequences and some may even be enrolled in corporate social responsibility actions such as corporate grant making and volunteering (Miles et al. 2009). Socially driven activities are usually part of a firm's overall strategy towards creating profit and private wealth maximization in ways which contribute to the productivity of employees, strategic marketing or benefit the firm's public image (Young 2001). However, those activities are not explicitly part of their primary mission.

Figure 2 illustrates how the four types of organizations described above fit into the following specific categories: social non-profit organizations, non-social non-profit organizations, hybrid or social for-profit firms and for-profit firms.

Fig. 2. Organization Typology



According to Dees (1998), social organizations may have a spectrum of organizational possibilities, from non-profit organizations that may adopt market-based approaches to for-profit firms that claim to have social goals. However, such differences have not yet been typified and discussed theoretically. The typology presented in figure 1 encompasses the literature social entrepreneurship and organizational identity which has been reviewed on, highlighting the two key concepts of intended social mission and organizational form, in order to distinguish different types of organization. The four types of organizations examined (social non-profit organizations, non-social non-profit organizations, hybrid firms and for-profit firms) show that alternative organizational forms are possible in the face of different strategic challenges.

2.4 Strategic challenges faced by organizations

The proposed classification in this typology has implications in terms of organizational characteristics such as profit constraints, revenue structure, employee structure and tax treatment. Organizations that operate in a non-profit form, such as social and non-social non-profit organizations, differ from hybrids or for-profit firms by having a non-distribution constraint established by governmental laws that forbids the distribution of the surpluses resulting from their entrepreneurial activity to board members or staff (Hansmann 1987). Such a constraint is perceived by customers or donors as a sign of reliability and legitimacy, since surpluses cannot be used for the private gain of the owners (Rose-Ackerman 1996). Such non-distribution constraints impact on the revenue structure of non-profit organizations, in that they may become entitled, in some cases, to receive government grants or donations (Rose-Ackerman 1996) that can be combined with other sources of income such as charitable and private donations, as well as the monetary gain from the services and products that they sell to the public (Moore 2000; Weerawardena and Mort 2006). The non-profit form can benefit organizations that are often granted special tax advantages, being exempt from sales and property taxes (Nissan et al. 2012, United Nations 2003). Social and non-social non-profit organizations are subject to different legal provisions relating to their revenues, staff income, and purposes (United Nations 2003). These organizations receive governmental funding and are involved in public goods provision, however they do not have the sovereign governmental power (Nissan et al. 2012, United Nations 2003). The dominance of a normative identity attracts potential entrepreneurs and funding sources that have broader goals than profit maximization (Rose-Ackerman 1996). The staff structure of social non-profit organizations differs from the traditional structure experienced by most paid employees. In addition to employees, these organizations often have the services of volunteers that donate time and money to the organization because they empathize with its social mission and want to contribute to the relief of particular social problems (Moore 2000; Nissan et al. 2012; Young 2001).

Hybrid firms have dual aims: to contribute to the alleviation of social problems while generating economic value. These firms pursue social values in a for-profit form, therefore they are not subject to non-distribution constraints. However, they usually constrain their level of profit in order to meet their social goals, whether by engaging in environmental practices to diminish their environmental footprint, engaging in a fair-trade activities or donating part of their surpluses to support social causes (Young 2001). Hybrid firms share some characteristics with social non-profit organizations in terms of their staff and revenue structure. Hybrids include, both paid employees and volunteers in their staff, and their revenue structure includes income from entrepreneurial activity. They are also entitled to receive charity donations. Unlike social non-profit organizations, hybrid firms aim to be financially successful by exploring niche markets that enable economic and social value creation. Thus they do not have access to tax advantages and legal provisions (Young 2001). The coexistence of the dual objective of social and economic goals can create conflict between the entrepreneurial activity and the hybrid organizational form which may lead to strategic uncertainty over time (Moss et al. 2011; Young 2001). Miller and Wesley (2010) conducted a policy-capturing study using a sample of social venture capitalists in order to examine the perceived probability of organizational effectiveness, defined as the capacity for survival, autonomy, and social value creation over a ten year period (Dees 1998). They conclude that having a focus on a social mission is positive and significantly related to the probability of organization effectiveness, while hybrid firms tend to have a less favorable judgment of the probability of effectiveness due to the concern that they might compromise the mission because of their economic goals.

The key aim of for-profit firms is to maximize profit and ensure an organization’s growth. Hence they are not constrained in distributing profit resulting from their activity to board members or staff. The main source of revenue of for-profit firms comes from commercial trade through selling products or services to their customers, but in some cases a for-profit firm can receive donations, for example to support its philanthropic projects. Nonetheless the donations that for-profit firms receive differ from those that non-profit or hybrid organizations receive in the sense that they are not tax-deductible. Unlike all the other organizations, for-profit firms do not have volunteers as staff members, since volunteers are drawn by the normative identity of the organizations, because they share the same values and want to help solve the social problem (Moore 2000; Young 2001). Some for-profit firms use some of their resources to advance social causes by engaging in forms of corporate social responsibility but the social benefits they may create are nearly always subjugated to profit maximization. However, no specific distinction can be drawn between the administration and governance of firms with and without corporate social responsibility (Young 2001). The balance between social and economic value that hybrid firms achieve can be mistakenly confused with the motivation of for-profit firms that engage in corporate social responsibility (Peredo and McLean 2006). However, these are two different types of organizations: hybrids are created to attain a social mission placing equal significance on social and economic values, whereas social outcomes from corporate social responsibility serve a strategy of maximizing economic goals and do not have a central mission (Young 2001).

To summarize, the way organizations prioritize their identities leads to different opportunities and challenges on several organizational levels, as discussed previously. Understanding organizations through their identities allows us to systematize and categorize them according to their core features. This typology is an important contribution to the establishment of social entrepreneurship as a scientific field of research. However, it may have some limitations. Organizational identity is deeply rooted in entrepreneur identity. Therefore it should incorporate the individual dimension and its possible dynamics over time. Townsend and Hart (2008) claim that individuals with stronger normative identity (social goals) are more likely to create an organization with a non-profit form while those with a dominant utilitarian identity (economic goals), might be more prone to start a for-profit firm. Individual identity can be defined as the perception that an individual has of who they are within their own context (Weick 1995; Nielsen and Lassen 2012). This is one of the factors that shape the entrepreneurial process, influencing entrepreneurs' choices and decisions (Sarasvathy 2008; Sarasvathy and Dew 2005). The effectuation theory of entrepreneurship argues that entrepreneurs hold a stable identity during the entrepreneurial process and act according to it. However, shifts can occur because of external factors such as the influence of networking, resources and opportunities (Nielsen and Lassen 2012; Sarasvathy 2008). From this perspective, a balance of different individual identities can evolve and change over time. Hence, organizations can be positioned in different quadrants at distinct moments and those dimensions can blur the boundaries of the typology.

2.5 Concluding remarks and future research agenda

The present work proposes a conceptual framework for social entrepreneurship based on a typology of four types of organizations: social non-profit organizations, non-social non-profit organizations, hybrids (social for-profit firms) and for-profit firms. Additionally we discuss the differences between the four types of organizations in terms of organizational levels of revenue, employee structure and tax treatment, concluding that organizations with a social mission can often benefit by operating in a non-profit form which creates legitimacy among their customers and donors. This also makes them eligible for government grants and donations, special tax advantages and legal provisions. The duality of social and economic goals can cause conflict among those engaged in entrepreneurial activity and create strategic uncertainty over time (Moss et al. 2011; Townsend and Hart 2008; Young 2001). If the balance between social and economic value creation becomes untenable the organization will choose the form whose goals are prioritized. The prevalence of social goals may result in the creation of non-profit organizations, while an organization that has a double bottom line or that prioritizes economic goals will be structured under a for-profit form (Townsend and Hart 2008; Young 2001).

This work has made a clear contribution to academia by creating a framework which focuses on the distinctive features of organizations. This could provide a common theoretical ground for future empirical research. This chapter presents a typology based on two dimensions of organizational identity: normative and utilitarian identities. Normative identity is manifested through educational, cultural religious or sporting values that can be either embedded in a social mission with an explicit concern for mitigating community problems (Moss et al. 2011; Thompson and Doherty 2006) or pursued for other purposes such as recreation or other cultural aims. Utilitarian identity can be expressed through economic goals and profit motivation that will impact on different choices of organizational forms (such as for-profit and non-profit). Analyzing the dual identities and understanding how they are balanced provides a means of comprehending central elements that are very characteristic of these organizations. Each identity shapes the market strategies and the opportunities that can be identified and pursued differently, as well as the challenges that the organizations are facing. Achieving some clarification of these key concepts contributes to the development and maturity of social entrepreneurship as a field. This typology suggests potential areas for future theory building and testing. The empirical testing of the proposed relationships predicted by the typology could indicate an important direction for social entrepreneurship research to evolve beyond the descriptive towards more predictive functions.

Investigating the core factors of social entrepreneurship that influence the creation and sustainability of social organizations is a relevant practical research that becomes imperative with the increasing importance that the practitioners and politicians have placed upon the topic. A number of implications for practitioners and public policies can be drawn from this study by clarifying the different organizational forms and the challenges that each one presents. The choice of organizational form has important implications for the capacity of social organizations to attain the required resources (monetary and human resources), tax treatment and legitimacy needed to sustain their activities (Townsend and Hart 2008). Therefore, entrepreneurs who lead a social organization could use this typology as a starting point for their choice of organizational form. For public policy, this framework could help clarify the specific aims and impact of each type of organization, helping governments to create more suitable laws or understand which ones are they would be keener to support.

Some limitations are worth mentioning. By supporting the typology on organizational identity, we could overstep an important factor, the identity of the entrepreneur. As argued previously, entrepreneurs' identity influences every step of the entrepreneurial process; however, identity is also shaped and modified by external factors (Nielsen and Lassen 2012; Sarasvathy 2008) in a way that could reflect a change in organizational identity. The motivations that influence the pursuit of social entrepreneurship are still underdeveloped in the empirical research. Little is known about the influence of the entrepreneurs' objectives in the creation of the organization, the establishment of a social mission and the choice of the organizational form (Townsend and Hart 2008). Future work should thus take into account the entrepreneur's identity and adopt a dynamic view of these possible changes. In addition, the proposed typology will now have to be tested empirically in order to validate each type of organization: social non-profit organizations, non-social non-profit organizations, hybrids (social for-profit firms) and for-profit firms. An example of a qualitative research approach would be gathering primary data through interviews on social entrepreneurs and develop case studies in order to test our typology dimensions (social mission and the choice of organizational form) and the different organization types. In addition this typology could be tested by econometric models using secondary data, as the standardized questionnaires of Global Entrepreneurship Monitor on social entrepreneurship, to perceive the influence that economic, societal and environmental values have on the organizational form (for-profit or non-profit).

3. MOTIVATIONS OF SOCIAL ENTREPRENEURS

Entrepreneurship literature often portrays entrepreneurs as individuals motivated by self-interest and economic value creation. Entrepreneurs are moved by different motivations, and place distinct value on contributing for society by nurturing the well-being of others, and creating private gains (Dacin et al. 2010; Zahra et al. 2009). Schumpeter (1934) perceived entrepreneurs as individuals that pursue opportunities that are not only related to creating private wealth. Social entrepreneurs identify and act upon opportunities to attain some unmet need that the state welfare system will not or cannot meet, through an innovation, adaptation, and learning processes (Dees 1998; Thompson et al. 2000). Individuals promote social change and engage in entrepreneurial action to accomplish a social mission and create social value. A stream of literature argue that social entrepreneurs' activities are aimed for social ends, benefiting society, or a part of it, instead of seeking private wealth creation (Prabhu 1999) or that the surpluses generated from market activities are used for the benefit of a disadvantaged group Leadbetter (1997). Other authors state that social entrepreneurs create social value through innovation and integrating profitable activities, for social and economic development (Martin and Osberg 2007; Reis 1999; Zahra et al. 2009). The unifying element in the definition of social entrepreneurs is the central role of a social mission that distinguishes them from their counterparts.

The factors that influence entrepreneurial activity have been addressed by several authors (Mair and Marti 2006). Motivation is an important aspect of the entrepreneurial process and can be understood as a personal process and the expression of a particular attitude that derives from multiple factors as their needs for accomplishment, autonomy, creativity, control and risk taking (Cromie 2000; Estay et al. 2013; Shane et al. 2003). While some aspects are common across every entrepreneurial endeavor as proactiveness, risk taking, innovativeness, perseverance, goal oriented, communication skills (Estay et al. 2013), social entrepreneurs are distinguished for their will to attain a social mission (Bornstein 1998; Boschee 1995; Alvord et al*.* 2004). Some studies on social entrepreneurial motivations have concluded that motivations as: attaining unmet social needs, the will to help society and propensity to act (Yitshaki and Kropp 2015) and achievement and nonmonetary focus (Germak and Robinson 2014) motivate prosocial action. Other individuals motivations as empathy; moral engagement (Beugré 2014; Omorede 2014), ideology and religious or spiritual conviction (Omorede 2014; Yitshaki and Kropp 2015) are drivers to engage in social entrepreneurship. A last group of motivations concerning awareness and alertness to social problems and local conditions as economic deficiency, inequalities, closeness to social problem motivate social entrepreneurial activity (Germak and Robinson 2014; Yitshaki and Kropp 2015; Omorede 2014). The literature offers little empirical research on motivating factors for engaging in social entrepreneurship and the existing studies present several limitations. There is a gap in the literature regarding social entrepreneurs' personal motivations (Dorado 2006; Mort et al. 2003) and our study addresses it by examining motivations of social entrepreneurs. Additionally we want to go further than identifying motivations and connect them with social entrepreneur's goals and how they are expressed when creating a social enterprise. Motivation is directly linked to goals (Locke and Latham 1990) it represents a crucial factor for the capability of individuals to mobilize resources and pursue their goals (Estay et al. 2013). The type of entrepreneurial motivation may determine the objectives for the organization. By developing the typology of organizations (chapter 2) based on an intended social mission and on the choice of an organizational form, we conclude that the balance between attaining social or economic goals leads to different types of organizations. Entrepreneurs that pursue and prioritize economic goals will most likely organize the firm under a for-profit form, while those who prioritize social value creation will probably organize under a non-profit form, a third group of entrepreneurs that place equal value on social and economic goals will likely choose a hybrid form, as were discussed on chapter 2. While entrepreneurship as a process focused on economic value creation has received attention by researchers, little is known about the diversity of motivations of entrepreneurs that pursue such endeavor to foster social value (Estay et al. 2013).

Our research aims to unveil the origins of social mission, a central element of social entrepreneurship, by exploring the motivations of entrepreneurs and its relation with the goals they pursue and the type of organizations they create. For that purpose, we developed a qualitative analysis based on primary data obtained through interviews to several social entrepreneurs with different motivations and goals. Theoretical sampling was applied due to its suitability to contribute to theory development (Yin 2010) and empirically test the organizations' typology. Given that motivations and values of the entrepreneurs are embedded in organizations (Bacq et al. 2013) we focused on the individual entrepreneur as our key unit of analysis. Our results highlight several motivations for creating social organizations. The processes under which these different types of motivation shape the creation of distinct organizations are investigated and discussed.

The chapter proceeds with a detailed literature review in the following section, first through the perspective of psychology; we gathered background literature on the motivations for people to engage in social action. Subsequently we access the motivations within the social entrepreneurship literature in order to access the state of the art on why individuals create organizations for a social purpose. In section 3.3 we present the research question and methodology that was adopted, and in section 3.4 we analyze the key findings and build research propositions for future research. Afterwards we propose a model for social entrepreneur's motivation (section 3.5) and finally we draw final conclusions and implications for theory and practice (section 3.6).

3.1 Research Background

3.1.1 Motivations for Social Action

Motivations are in the basis of the process of engaging in social actions whether that might be social movements, organizational citizenship or volunteerism. They influence the choice to enroll and the continuity of the engagement, guiding individual and the collective action (Mannino et al. 2011). Lewin (1951) argued that to understand a specific behavior, like helping others, is more relevant to focus on motives than the behavior itself, since behavior is highly variable. According with the same author, motives are forces within a force field that is constituted by goals in the context of an individuals' life. Under particular circumstances motivational forces can be triggered and activate action. Batson et al. (2011) based on Lewin's work, stressed four types of social motivations that lead an individual to help other in need: *egoism, principalism, altruism and collectivism*. Each of the previously mentioned motivations will be clarified following. The motivations are categorized according to their goal; egoism has as final goal self-benefit, meaning that one is benefiting another as a mean of benefiting themselves, independently of the greater benefits that it may cause. Egoistic motivation can take several forms: avoid a stressful or unjust situation; avoid punishments (as recrimination, shame, fines or imprisonment) and lastly, gain material, social, or self-rewards as payment, enhanced self-image, honor, or empathic joy (Batson et al. 2011; Dovidio et al. 2006). This stream of literature suggests that benefiting others in order to alleviate their suffering is an instrumental means to stop bad feelings as sadness or upset that it may cause on oneself. Social action can also be motivated by principalism, which goal is to reinforce moral principle. Morality refers to the rules of conduct and accepted norms in a society (Bacq et al. 2013). Individuals can be instructed to have strong moral values by the society, avoiding antisocial behavior and guaranteeing a moral conduct (Freud 1930). Principalism's goal can be keeping a moral principal or, for example, to fulfill an egoistic desire to be rewarded for acting according to high moral standards or to avoid punishments such as recrimination or shame for not being able to live by such conduct. Another motive for engaging in social action is altruism that is related with the goal of benefitting another. This concept has been widely debated, one group of authors argue that altruism can be instrumental to egoism, in the sense that, if a person is motivated to solve another´s problems, that person should be pleased to achieve such goal (Batson et al. 2011). Others argue that altruism is true and state that even if the person is pleased, that positive feeling is a consequence of the action and not the goal per se, they might help just because they care about others welfare, and that is the goal (Batson et al. 2007). A different type of social motivation is collectivism which final goal is to benefit a social group, in a context of having to allocate limited resources in a community, collectivism will choose to prioritize the welfare of the group as a whole rather than to a single individual. A social group is defined by at least two individuals who share a social identification, who have a collective perception of being members of the same social category (Turner 1987). Contrarily to arguments that state that collectivism can be a form of egoism, Dawes et al. (1990) found evidence that those are two independent concepts and that collectivism is a form of prosocial motivation (Batson et al. 2011). Motivations help understand the antecedents of these types of action, however this can be a simplistic view since the motivations are not static and exclusive variables in the individual behavior. An individual can have multiple motives and aims, and they might conflict and change overtime (Turner 1987). Behavior is highly variable, it is influenced by the strength of the motive, the strength of alternative motives, the relation between behavior and the different motives, and other behavioral options in the same moment (Batson et al. 2011). Literature on social psychology has studied the group behavior related to social solidarity relationships among individuals. The interdependence between members related to the fulfillment of needs, goals achievement and validation of values motivates cooperative social interaction and mutual attraction and influence (Turner 1987).

Research on identity has also contributed to the understanding of the motivational factors that promote helping others. Social identity and individual identity play a role on the individual motivations to become and remain a volunteer over time (Mannino 2011). With regard of personal identities, important roles and identities – such as being proud of helping others and feeling unique by doing so – may motivate people to act in volunteerism and continue to do so, as long as they maintain that self-image

(Mannino 2011). The longer individual develop volunteer activities, the more it becomes part of their identity and defines them (Piliavin et al. 2002). Klandermans (1997) stresses that the engagement on social movements is promoted by three major motivations: reward, normative motive (related to the expectations on how others will react to ones actions) and collective motive (involving common social improvements that will result from the social movement). Civic participation was studied by Verba et al. (1995) that acknowledged that individuals may seek individual material benefits, social gratification from connecting with others, civic gratification by helping the community and collective outcomes by influencing government policy. Concerning social identity, the factors that are connected to social or collective activities are related to belonging and group membership (Mannino 2011). Hence, the social group identity fosters collectivism, which is particularly important for understanding the motivation of attaining social problems by engaging in social action such as social movements, volunteerism, civic and political participation, and organizational citizenship (Stuermer et al. 2003).

In the context of social actions, social entrepreneurship has been discussed in terms of the important role that they can have on the enhancement of living conditions in deprived communities fostering a social change (Weerawardena and Mort 2006). Social entrepreneurship acts on the mitigation of social problems through the creation of an enterprise that is guided by a social mission (Prabhu 1999; Wallace 1999). The motivations related to social entrepreneurship are explored in the next chapter.

3.1.2 Social entrepreneurship motivations

Social entrepreneurship practice had its origins in the 18th and 19th centuries in the values of Victorian Liberalism (Shaw and Carter 2007). Business owners and industrialists started to be concerned with the welfare of employees and engaged in philanthropic activities, improving the workers' conditions, education and health (Shaw and Carter 2007). However as an academic field of investigation social entrepreneurship is still emerging and its definition is still under debate. Some authors considered it as a process of exploring and exploiting opportunities to create social value by stimulating social change and attaining social needs through innovative use of limited resources (Mair and Marti 2006; Peredo and McLean 2006). Mort et al. (2002) define it as a multidimensional construct expressed by entrepreneurially behavior involving innovativeness, proactiveness and risk-taking, aimed to accomplish a social mission in a context of moral complexity. Social entrepreneurship can be perceived as a process through which social entrepreneurs created social enterprises (Defourny and Nyssens 2008). Some authors argues that social enterprises can be created in the non-profit or the for-profit sector (Mair and Marti 2006; Martin and Osberg 2007). Others argue that social enterprises are non-profit private organizations providing goods or services directly related to their explicit aim to benefit the community (Defourny and Nyssens 2008), using entrepreneurial behavior for social ends rather than for profit objectives or benefiting a specific disadvantaged group with surpluses (Hibbert et al. 2001). Due to the multiplicity of objectives and innovative organization models that intertwine features of the private and non-profit sector there is not a clear definition of what is a social enterprise. The main difference between entrepreneurship in the for-profit sector and social entrepreneurship whether in for-profit or non-profit sector lies in the prioritization given to social wealth creation versus economic wealth creation.

Entrepreneurship in the business sector prioritizes economic wealth creation while social wealth is a by-product (Venkataraman 1997). Social entrepreneurship in the non-profit sector prioritizes the creation of social value and the surpluses are reinvested for the accomplishment of the social mission (Prabhu 1999; Wallace 1999, Austin et al. 2003; Boschee 1995). Non-profit organizations are private institutions constituted by a legal personality with other goals than profit maximization (Soriano and Galindo 2012). Those organizations who have a social mission and are created under a non-profit organizational form include in their staff paid employees and/or volunteers that engage in several actions such as: defending causes, providing health care, cultural and religious expression and environmental protection. Some authors have considered the non-profit form of social entrepreneurial activities as a distinct characteristic of social organizations (Austin et al. 2003; Boschee 1995). However not all non-profit organizations are created to attain an intended social mission, they might serve other goals such as providing facilities for recreation or other cultural purposes (Rose-Ackerman 1996). Their work may have beneficial social outcomes but these are not their explicit primary mission. Other stream of literature argues that social entrepreneurs should not be restricted to a particular form and could also choose a for-profit form (Mair and Marti 2006). When social enterprises are created in the for-profit sector they integrate social and economic dimensions that are equally important in order to promote social change through sustainable and synergistic approaches (Thompson 2002; Thompson et al. 2000). Sustainability is usually connected with the social mission because it ensures the continuation of the organization and the accomplishment of that mission (Weerawardena and Mort 2006). Sustainability is embedded in the entrepreneur value, culture and vision as well as on the organization and it encompasses people and the environment as their stakeholders. Innovative business models are appearing with hybrid organizations that combine social and economic goals, blurring the boundaries between non-profit and business sector. The choice of organizational form[5] should be based on the suitability of the business model to attain the specific social needs, accounting for the resources needed, capacity to raising capital and ability to capture economic value (Young 2001). The organizational form is established at the initial stage of the entrepreneurial process by the entrepreneur, the central actor in the creation of an organization. Schumpeter (1965) defined entrepreneurs as individuals who exploit market opportunity through technical and organizational innovation. Social entrepreneurs identify and exploit opportunities to create social value (Martin and Osberg 2007) through innovative solutions to persistent social problems (Alford et al. 2004), targeting specific disadvantaged groups (Leadbetter 1997) by creating new ventures or managing existing organizations (Zahra et al. 2009). Social entrepreneurs' aims are distinct from those pursued by their counterparts, as they are committed to solve social problems and enhance society's well-being (Austin et al. 2006). They meet the gaps in the provision of public goods where governments have lag and the private sector does not perceive an opportunity to act upon (Nissan et al. 2012; Weisbrod 1977). Literature has investigated why individuals become entrepreneurs, applying research on motivation to entrepreneurship theory, leading to the concept of entrepreneurial motivation (Baron 2008; Gartner 1985). The motivation that drives individuals to become entrepreneurs depends on one's values, needs and objectives, it combines social interaction, knowledge and skills and

[5] Organizational form concerns the legal characterization of an organization that can be either for-profit legal form or non-profit legal form (Williamson 1985).

the enthusiasm of the individual (Goss 2008). Moreover, entrepreneurial motivation is influenced by the interaction of a set of factors such as economic and business environment, self-confidence, creativity and tolerance to ambiguity (Koh 1996), individual's autonomy, desire for control and persistence (Estay et al. 2013) and the wish to build something of their own (Knight 1987). Individual's perceptions of future outcomes resulting from their entrepreneurial actions along with the expectation that these outcomes meet the expectations play an important role on motivation (Estay et al. 2013). While some aspects are common across every entrepreneurial endeavor as: proactiveness, risk taking, innovativeness, achievement centered, independence, perseverance, creativity, goal oriented, communication skills and tolerance for ambiguity (Estay et al. 2013; Mair and Noboa 2003; Prabhu 1999; Yitshaki and Kropp 2015), social entrepreneurs are portrayed by a drive to attain a social mission, guided by a strong ethical conduct (Bornstein 1998; Boschee 1995; Alvord et al. 2004) that provide solutions which are financially, organizationally, socially and environmentally sustainable (Thake and Zadek 1997). Social entrepreneurs engage in entrepreneurial endeavor due to a compelling social mission that aims to suppress a social or environmental problem. This mission shapes the type of opportunities perceived (Dees 2001). Social entrepreneurs promote social change as they have a sense of responsibility to attain societal causes. Such causes result from the persistence of market failures, that state will not or cannot suppress, social entrepreneurs provide public goods and services to niche populations (Perista and Nogueira 2002; Weisbrod 1977) including the bottom of the pyramid[6] market (Dees 1994; Hart 2005). Social entrepreneurs are characterized by an enduring persistence, they commit to the achievement of the social mission regardless of their resources limitations (Dees 1998). Although motivation of entrepreneurial behavior has been studied (Estay et al. 2013; Koh 1996; Shane and Venkataraman 2000), research on what drives individuals to become social entrepreneurs is limited (Yitshaki and Kropp 2015). Some empirical studies have focused on the entrepreneurial intentions to understand individuals' behavior (Mair and Noboa 2003; Nga and Shamuganathan 2010). Social psychology literature has cleared the connection between intentions and behavior, intentions reflect the motivations that affect behavior (Ajzen 1991; Mair and Noboa 2003). Entrepreneurial intentions are predictors of entrepreneur behavior and represent an important factor in the process of becoming an entrepreneur (Bird 1988, Estay et al. 2013). Mair and Noboa (2003) propose a model that analyses how behavioral intentions to create a social venture get formed and conclude that perceived social venture feasibility related to social support and self-efficacy beliefs and perceived social venture desirability that encompasses empathy and moral judgment influences the behavioral intentions to create a social venture. Empathy is defined as the receptivity to the other person needs involving feelings of sympathy, compassion and distress, feelings or emotions and the capacity to adopt the perspective of other people (Batson et al. 1989; Miller et al. 2012; Prabhu 1999). It is not a common feeling across individuals; people feel empathy in a diverse manner and to different extent. Literature on the motivations for enrolling in social action present the empathy-altruism hypothesis in which empathy produces the

[6]The term bottom of the pyramid or base of the pyramid refers to the population in the poorest socio-economic group. It is used in the context of social entrepreneurship both in the non-profit (Bornstein 2007) and for-profit sectors (Prahalad 2005; Yunus et al. 2010), to describe the efforts by social entrepreneurs to alleviate poverty in least developed countries (McMullen 2011).

altruistic motivation that triggers the engagement in social action, empirical evidence has consistently supported this hypothesis (Batson et al. 1989). Empathy together with entrepreneurial behavior motivates entrepreneurs to recognize opportunities and use resources in innovative ways to create social value (Barnett et al. 1981; Mair and Noboa 2003). Individuals' who intellectually perceive and are able to share another individual's emotions will develop a desire to help and do something to diminish other's person suffering. The probability that empathy triggers a behavior to help another person is higher when both persons belong to the same group as compared to persons belonging to different groups (Batson et al. 2011). Moreover empathy can be transferable, meaning that in the context of social entrepreneurs empathy felt towards a group of people can be transferable to another (Barnett et al. 1981; Mair and Noboa 2003). Yitshaki and Kropp (2015) researched social entrepreneurial motivations, using life story analysis, and concluded that pull factor motivations as "resolving unmet social needs based on a past or current experience", associated with empathy; and awareness, ideology and spiritual imperative connected with moral orientation, led to prosocial actions (Miller et al. 2012; Powell and Baker 2013). Also they found that other social entrepreneurs were motivated by push factors like staying in an undesirable job. The second component of perceived social venture desirability is moral judgement, that is a selective variable that influences the career choices of entrepreneurs whether in social sector or not (Mair and Noboa 2003). Moral judgment was addressed in the previous section as being part of principalism as a motivation for engaging in social action (Batson et al. 2011) and is additionally referred by another stream of literature, focused on the individuals' motivations, to explain social entrepreneurial behavior. Beugré (2014) proposed a model of moral engagement in which stresses the relevant role of moral engagement as a determinant for individuals that start social organizations for other reasons than monetary rewards. The model suggests that social problems cause feelings that violate "personal moral mandates", which consequently produce a moral responsibility to act through social entrepreneurial behavior. In Omorede (2014) inductive study of motivational drivers to start social organizations, using interviews and archival data in Nigeria, moral judgement is part of the aggregated concept "intentional mindset" that was found to motivate individuals create social organizations. The intentional mindset also includes alertness to social problems (referring to opportunity identification that occurs "without actively searching"), religious conviction and propensity to act. Omorede also found that local conditions as economic deficiency (high level of poverty), ignorance (lack of education) and unscientific beliefs and inequalities motivate social entrepreneurial activity. Germak and Robinson (2014) examined the motivations of nascent social entrepreneurs without prior experience in the sector. Using a qualitative methodology based on interviews with self-identified nascent social entrepreneurs in the USA, the authors find that the will to help society, closeness to social problem, personal fulfillment, nonmonetary focus and achievement orientation are the main motivations. Closeness to social problems motivates people to engage in social entrepreneurship (Ibidem). People are usually involved in actions in and around their communities (Mannino 2011). A different factor that has been considered important for social entrepreneurial motivation is the need for achievement and accomplishment (Germak and Robinson 2014). Need for achievement is associated with the desire to accomplish something in a better or more effective way and people with high need for achievement are more prone to become entrepreneurs (McClelland 1961). For social entrepreneurs this means maximizing social value by fulfilling a social or environmental problem, providing a product or service that is not yet offered. They aim to create solutions that are sustainable concerning social and environmental dimensions but also on the financial and organizational aspects (Thake and Zadek 1997). The motivations that influence individuals to become social entrepreneurs can be approached through different methodological and theoretical lens and there is no decisive conclusion. In sum, previous literature find that social entrepreneurs can be influenced by motivations such as the will to resolve unmet social needs, empathy, moral engagement, ideology, personal accomplishment, achievement orientation, spiritual or religious imperative, non-monetary focus, closeness to social problem, local conditions, awareness or alertness. Existing literature have focused on the different characteristics and purposes of social entrepreneurship, comparing it to traditional entrepreneurship but research on the motivations regarding engagement in social entrepreneurship is limited. More research and empirical studies are needed to address why individuals become social entrepreneurs (Hoogendoorn, et al. 2010; Omorede 2014; Yitshaki and Kropp 2015).

3.2 Research question and methodology

Following the literature described above and the need for more empirical evidence that clarifies the motivations that influences individuals to have social entrepreneurial behavior and create social organizations our research question is: *what are the motivations that influence individuals to become social entrepreneurs*? The present study will address this question subsequently.

Individuals are stimulated to contribute to the social welfare through a range of motivations that have different intensities and are combined with each other in different ways. These motivations influence individuals to become social entrepreneurs by creating a social organization. Social organizations may have a range of organizational possibilities: from non-profit organizations that prioritize social mission and reinvest their surpluses in their projects or in the community, to firms that pursue social and economic value creation (Dees 1998). To analyze what are the social entrepreneurs' motivations and how they shape entrepreneurial endeavor we use a qualitative approach, using data derived from individuals' interviews. Qualitative research is a research strategy focused on investigating a contemporary phenomenon within a real-life context (Yin 2010). It is used to provide description and explanation of processes, assess local causality (Miles and Huberman 1984), and generate theory (Eisenhardt 1989).

The interviews were chosen based on their specific contribution to theory development; hence theoretical (rather than random) sampling is appropriate (Yin 2010). Theoretical sampling means that organizations were selected concerning their suitability for understanding entrepreneurs' motivation to create different types of organizations, allowing for a better understanding of these motivations and the relationships between them. The interviewees were selected in order to have organizations that represent the different types presented in the typology proposed in chapter 2. Based on social entrepreneurship and organizational identity literature this typology distinguishes social organizations from other organizations according to their systematic core characteristics: intended social mission and organizational form. The analysis lead to four types of organizations: social non-profit organizations, hybrids (or social for-profit firms), non-social non-profit organizations and for-profit firms (chapter 2).

Hence our theoretical sample was selected based on the diversity of types of organizations. We started our sampling by identifying social organizations through web sites, through which we identified 67 Non-Governmental Development Organization (NGDO), more than a hundred Foundations, 22 social non-profit associations. Our sample was composed by 20 suitable organizations across the different types of organizations (social non-profit organizations, hybrids, non-social non-profit organizations and for-profit firm). Moreover we select organizations in different industries, who performed different activities. We contact them by e-mail describing the purpose of the research and received responses from 11 who agreed to participate in an interview. Those who agreed to participate were successively invited to identify other organizations within the several types mentioned in the organizations' typology presented in chapter 2. Sampling proceeded through a snowball effect (Fuchs, 2010) until we reach theoretical saturation (Eisenhardt 1989) with 16 organizations. Despite the theoretical sampling does not require a random selection we included three international cases that add to our theoretical sample (whether by focusing on environmental mission, or because they use different approaches to suppress social needs), as well as span the geographical dimension of the sample. Two organizations were from the Netherlands (a hybrid enterprise and a student's foundation) Saúde Criança from Brazil a non-profit association that created a methodology that was adopted by the Brazilian government and became a public policy. We apply semi-structured interviews with 50 minutes to 1.5 hours length. In line with previous research in social entrepreneurship (Mair and Marti 2006, Harding 2006), we developed a set of questions covering entrepreneurs' demographic variables, education and experience background, motivation, organizations' history and the origins of the idea and perceived definition of social entrepreneurship. Another set of questions was related with organizations' legal structure choice and perceived advantage and disadvantages. The last question was regarding to which type of organization they would include themselves according the typology presented in chapter 2. A total of 17 individual, in-person interviews[7] were conducted, from 16 organizations, in one of them two of the founders were present. The sample includes 13 entrepreneurs, whenever the entrepreneur were not available we interviewed presidents (two) and directors (two). The entrepreneurs or founders were chosen because they had entrepreneurial behavior and were willing to achieve a social mission, in the case of presidents and directors, they were chosen because they possess the better knowledge of why the organization was created, their characteristics and strategies (table 1).

[7] The interviewer also took handwritten notes during the interviews, and transcribed them. Interviews were held at different locations chosen by respondents (such as offices or coffee shops) which proved to be more convenient for the subjects in these select cases.

Table 1. List of Interviews

Organization	Date	Person Interviewed	Type	Location
Nariz Vermelho	January 2012	Entrepreneur	IPSS	Portugal
Champalimaud Foundation	July 2012	President	Foundation	Portugal
Calouste Gulbenkian Foundation	July 2012	Director	Foundation	Portugal
Sair da Casca	July 2012	Entrepreneur	For-profit Firm	Portugal
Entrajuda	December 2012	Entrepreneur	IPSS	Portugal
Sapana	January 2013	Entrepreneur	NGDO	Portugal
Roetz	May 2013	Entrepreneur	For-profit Firm (Hybrid)	Netherlands
Kembé	May 2013	Entrepreneur	Foundation	Netherlands
Terra dos Sonhos	March 2014	Entrepreneur	IPSS	Portugal
Ensina-me	June 2014	Entrepreneur	For-profit Firm (Hybrid)	Portugal
Tela Bags	January 2015	Entrepreneur	For-profit Firm (Hybrid)	Portugal
Saúde Criança	January 2015	Entrepreneur	Non-profit association	Brazil
Casa Seis	February 2015	Entrepreneur	IPSS	Portugal
Reklusa	March 2015	Entrepreneur	IPSS	Portugal
Socio Investment Exchange (BVS)	March 2015	President	Non-profit association	Portugal
TESE	May 2015	Director	NGDO	Portugal

Several types of organizations were included: foundations, non-governamental development organization (NGDO), non-profit association, Private Social Solidarity Institutions (IPSS)[8] which is a type of non-profit organizations in Portugal, and for-profit organizations (Private limited liability company). Table 2 we include a description of the organizations' characteristics.

[8] IPSS are one of the non-profit organizations groups in Portugal. They can be perceived as associations for social solidarity, voluntary associations of social action, mutual aid associations, and charitable foundations (Franco and Salamon, 2005).

Table 2. Entrepreneur and Organization Background

Organization	Information about the Entrepreneur	Organization scope
Nariz Vermelho	We interviewed the entrepreneur Mark Mekelburg works full time and is one of the clowns Doctor PPP Popcorn.	The organization was found in 2002, it was inspired on the American big apple circus were Michael Christensen introduce the idea of Doctor Clowns going to the hospitals. Their mission is to bring joy to children in the hospitals, to their families and to the professionals through clowning.
Champalimaud Foundation	We interviewed Leonor Beleza. In his will António Champalimaud appointed Leonor Beleza, as President. She was given the responsibility, of constructing the Foundation’s statutes, leadership and direction.	The foundation was created in 2004 by will of the António Champalimaud who was a business man. The foundation supports biomedical research.
Calouste Gulbenkian Foundation	We interviewed Rui Esgaio director of the President's Office since 2001, as well as secretary of the board of directors.	Non-profit institution was created from testamentary disposition from Calouste Gulbenkian. After his death in 1955, he bequeathed his property to the country in the form of a foundation. The Foundation develops a transversal action covering five areas of activity: Arts, Education, Science, Development and Global Initiatives.
Sair da Casca	We interviewed the entrepreneur Natalie Ballan. Natalie Ballan started to create the firm in 1993 shortly after having arrived in Portugal .The idea was to combine the experience gained during the years of volunteering in NGOs with the skills acquired in the world of journalism and communication.	Sair da Casca was created in 1994, and their mission is to place sustainability in the core of organizations strategy to optimize the impact of our customers, which are large firms, in social and environmental issues.
Entrajuda	We interviewed Helena André the co-founder of Entrajuda. Helena André joined Isabel Jonet when the idea was to empower companies and provide them help that it was not up to the Food Bank to provide.	The Entrajuda was created in 2004. Their mission is to strengthen the non-profit sector, including charities, enabling access to the necessary means and resources to exercise a lead on social inclusion and combating poverty. Mobilizing people of good will for a structured civic intervention in combating poverty.
Sapana	We interviewed Carolina Cruz the founder of Sapana. SAPANA.org Carolina Almeida Cruz was inspired during a trip to India and Nepal, where she lived and worked with local communities.	Sapana was founded in 2010 and the ONGD mission is consulting local NGOs to provide lasting basic tools for sustainability and efficiency.
Roetz	We interviewed Tiemen ter Hoeven the co-founder of Roetz. Tiemen ter Hoeven was working on a project on remanufacturing, a sustainable concept and he though to develop a concept around that and bicycles were perfect.	Roetz was created in 2010. We believe that it is possible to make beautiful, robust bikes in an environmental friendly way. A Roetz-Bike is a sustainable bike for environmental and social reasons.
Kembé	We interview Rick Vinken one of the co-founders of Kembé, who decided to create this organizations inspired by the idea of volunteer tourism.	Kembé was created in 2010 Kembé mission is to fight poverty through social entrepreneurship, and we do it by creating new jobs making sure those current jobs and entrepreneurs are able to improve their work and lives.
Terra dos Sonhos	We interview Frederico Fezas Vital who found Terra dos Sonhos after being inspired by a similar organization Fundación Pequeño Deseo, a spanish foundation that make dreams of sick children come true.	Terra dos Sonhos started in 2007. The primary mission of Terra dos Sonhos to create 'possibility seed' in children and young individuals that have serious chronic illnesses. The main mission is to remove children and families from the negative side and move them to the healthy side of life.
Ensina-me	We interview the entrepreneur Luís Baião co-founder of Ensina-me,that perceived an opportunity to find an activity for individuals with special needs in an increasingly competitive society creating a range of products that are made by them in a system for which they are paid.	The organization was created in 2008 and closed in 2010 due to the decrease of the demand of products made by individuals with special needs. The primary mission of the organization was to create employment for disable and individuals with special needs.
Tela Bags	We interview the entrepreneur that created Tela Bags Helena Amaral Neto that was inspired by the advertising screens that were considered trash after the first edition of Rock in Rio in Lisbon, she decided to transform them into bags.	Tela Bags was created in 2006. With an environmental mission Tela Bags reuse materials that would otherwise end up in a landfill and transform them into a wide range of accessories.
Saúde Criança	We interviewed Vera Cordeiro the entrepreneur that created Saúde Criança. Vera Cordeiro is a doctor that after realizing that the medical treatment was not sufficient to get people healthy she decided to create an organization to	Saúde Criança was created in1991. Its mission is to promote the biopsychosocial welfare of children and their families that live below the poverty line, comprising health in an integrated manner and as a social inclusion tool.

	suppress other complementary needs as education, income, citizenship and housing, thus promoting human development "	
Casa Seis	We interviewed Giorgio Casula and Solange Aquino founder of Casa seis. Casa seis was created when the municipality invited Giorgio Casula (at the time volunteer for other organization) to help the relocation of an immigrant and deprived community.	Casa seis was created in 2000 our main motivation is to improve the quality of life and their social integration conditions of the population of Mira Sintra area, following the principles of Education for Active Citizenship, so that the population can participate as protagonist and acting in society as full citizens.
Reklusa	We interviewed Inês Seabra co-founder of Reklusa. Inês Seabra decided to create Reklusa when she was a volunteer and dedicated her time within the same population of female inmates.	Reklusa was created in 2010 and its mission is to rebuild the lives of the prison and former inmates, by supporting their rehabilitation and social and professional integration.
Socio Investment Exchange (BVS)	We interviewed Silvia Taveira Almeida the president of Socio Investment Exchange. Silvia Taveira Almeida was invited to work in BVS in 2014 she was captivated by this project because it serves a mission other than profit.	Socio Investment Exchange was created in 2009. Its mission is to increase the funding of social organizations, promoting scalability of the most innovative and effective solutions and thus achieving a positive impact.
TESE	We interviewed Helena Gata director of TESE. Helena Gata was involving in TESE during the initial stage however not as a founder member, she starts working fuul time in 2006. TESE was created within the university environment the founders of TESE were inspired by a professor to develop work focused on the PALOP countries and then they create the organization.	Tese was created in 2002, and its misson aims at the sustainable development of regions and underserved communities in Portugal and in developing countries, by creating and implementing innovative answers that best promote social development, equal opportunities and quality of life by creating partnerships with the public sector, private and civil society organizations.

Even though the sample was collected to fulfill theoretical purposes, in table 3 we include the main characteristics of the interviewees.

Table 3. Descriptive of Individuals Features

Variables	Entrepreneurs	President or Directors
Gender		
Male	6	1
Female	7	3
Age		
[20-30]	3	0
[30-40]	3	1
[40-50]	6	2
[50-60]	1	1
Education		
Level: Tertiary	13	4
Type		
Social sciences	4	1
Humanities	3	0
Business sciences and Economy	3	3
Engineering	1	0
Natural Sciences	1	0
Previous Entrepreneurial Experience	5 (1 in social sector)	2 (1 in social sector)
Volunteer Experience	6	1

Despite of the non-representativeness of the sample it presents patterns that have been recognized in the literature. The sample gathers a higher number of women engaged in social organizations. Quantitative studies have concluded that social entrepreneurship is less gendered that commercial counterpart (Harding 2006; Williams 2007; Van Ryzing et al. 2009). Women are motivated to create social organizations that can include self-fulfillment, autonomy, to pursue a social mission (Bruni et al. 2004). Most of the entrepreneurs interviewed are in their forties, which is in line with results from Global Entrepreneurship Monitor that show that social entrepreneurs create most of the enterprises between their forties and fifties (Harding 2006). All of the interviewed people have tertiary education in different fields from social sciences (5 individuals), humanities (3), business sciences (6), engineering (1) and medicine (1). This high level of education cannot be generalized; however it corroborates studies claiming that social entrepreneurs have an average higher education level than commercial entrepreneurs (Harding 2006). The diversified set of fields of education among these entrepreneurs highlights that entrepreneurs come from multidisciplinary areas and suggests that those different backgrounds can motivate an individual to pursue a social mission, as will be discussed in chapter 3 in more detail. A minority of individuals have previous entrepreneurial experience, in which only 2 persons had previous experience in creating a social organization, and only 7 persons had been volunteers in social organizations. 41% of these entrepreneurs remain volunteers in the organization without any income.

Additionally we collected information from the organizations' reports, newspapers, articles and interviews in public websites. The combination of several and distinct data collections reduces the validation problems, as well as potential bias of historical analyses, while helping to identify converging lines (Yin 2010). The interviews were recorded and transcribed faithfully and subjected to thematic and further analyses as discussed below. We applied several techniques to analyze the data. We organized matrices according with the motivations highlighted in the literature review and analyzed the answers from the interviews. Matrices are analytical tools that enable to identify patterns and categorize data (Miles and Huberman 1994; Weerawardena and Mort 2006). The research also adopted a thematic analysis, to develop categories of data and the examination of similarities. Thematic analysis allows the study of qualitative data by identifying patterns and classifying data, according to themes and interpreting the resulting thematic structures by seeking relationships, overarching patterns (Germak and Robinson 2014). We performed cross-case analyses to select similar themes and propositions and subsequently we returned to the literature to compare our emerging themes with theoretical ones and looking for similar or different themes.

3.4 Results and discussion

This section examines the motivations that influence individuals to become social entrepreneurs identified across the seventeen interviews. The themes that emerged from our data were six different motives: social mission, sustainability, social value focus, accomplishment, proximity to social problems and empathy (table 4). Each of these is described in a separate section below accompanied by data supporting each theme.

Table 4. Organizations Motivations

Organization	Social mission	Closeness to social problems	Empathy	Sustainability	Social Value focus	Accomplishment
Nariz Vermelho	Our primary mission was to Bringing Joy to children		The clown has an emphatic capacity		Being a non-profit solidarity organization means to give something to others	This is a dream, we love clowning
Champalimaud Foundation	We do not have a social mission					
Calouste Gulbenkian Foundation	We do not have a mission					
Sair da Casca	We have a societal mission				We aim for profit maximization	A project like this survives because you think about it 24 hours a day
Entrajuda	Strengthen the non-profit sector				Mission is fundamental, the surpluses are reinvested in the institution	
Sapana	I wanted to change the world, win the Nobel peace prize		I had empathy with other people	We need to create sustainability	Sapana has a social mission but is financially sustainable.	That's where I feel myself as the best human being
Roetz	Social, sustainable and economical aims are the most important			We start a sustainable business	Is important to build a company that is social, sustainable but also financially successful	I left Delloite and took two months to develop those ideas, and to set up this company the best
Kembé	Our mission is to fight poverty through social entrepreneurship				I am not sure if a non-profit status it is better or worse	I am proud for helping others, this was one of my biggest achievement
Terra dos Sonhos	Our mission is to push children and families to the healthy side of life	I watch him die of cancer I do not know if this was a motivation		Our biggest challenge has been ensure the project's sustainability	In a near future we hope to generate revenues so that we diminish dependency on external funding	
Ensina-me	We wanted to create job positions for disable people	A colleague became disable because of an accident			My first objective was to create jobs for disable people. We wanted to have a commercial approach.	
Tela Bags	Environmental factor is a core value.				The environmental factor is a core value but the economic factor is also very important.	

Saúde Criança	I want to change the world and end the poverty	A mother of a little girl with pneumonia came to me (…) and I said I will help	being a social entrepreneur is to stepping into someone else’s shoes			
Casa Seis	Helping people to develop themselves as an active citizen	I am Italian. Emigration and intercultural issues are important to me	I am still motivated to keep on help other people		Job creation, promoting better relationships between people with different cultural background are also good impacts	
Reklusa	I wanted to change lives and empower people	I began to volunteer for visiting inmates			My goal was never the money, I wanted to change their lives and empower people.	I never thought that this would become like a dream come true.
Socio Investment Exchange (BVS)	Our mission is to provide funding for other social organizations				Limiting an organization to be non-profit is limiting its action	
TESE	Help deprived populations in African countries (…)		This will to help others always were a part of me.	The organization was created with a focus on sustainability	We do not go to the non-profit sector to in search of money, we will not get it	Personal motivations are linked to personal fulfillment and joy by knowing that we are doing good

3.4.1 Social mission

The literature agrees that creating social value is a defining characteristic of social organizations (Austin et al. 2006; Dees 1998; Defourny and Nyssens 2008; Bacq et al. 2013; Leadbetter 1997; Mair and Martí 2006; Mort et al. 2002; Zahra et al. 2009). Social mission guides a majority of strategic decisions, operating procedures, networking (Moss et al. 2012) and the establishment of the organizational form, as we conclude on chapter 2. Our findings support this stream of literature that argues that the primary purpose of the social organization is to achieve a social mission.

> *Our primary mission was to Bringing Joy to children smile. Also in the back office, people have to be good professionals and equally important, have a good heart, this is one of the core values, our inside also has to reflect our positive values. – Nariz Vermelho*

> *I wanted to change lives and empower people. I realize that inmates they have a lot of free time and no occupation or training, so I started to explore their talents. We started to do some patchwork bags and as I have good commercial skills I sold plenty to my friends. (…) It has to do with the way I am, if I understand that there is something wrong or it could be done in a better way I try to change it. – Reklusa*

> *My life goals were never to marry or have children, neither a car nor a house. I wanted to change the world, win the Nobel peace prize. – Sapana*

> *Our mission is to fight poverty through social entrepreneurship and we do it by creating new jobs in local communities, making sure those jobs are helping entrepreneurs to improve their lives. – Kembe*

> *I am a physician that wants to change the world and end the poverty and I have not quit. I was working in a hospital and I realized that the medical act has its limitations (…) Our mission is to break the vicious cycle of readmission of people in the hospital complementing health care with psychosocial care. – Saúde Criança*

> *We created an organization with a motivation focused on helping people to develop themselves as an active citizen, helping to solve their social problems of integration. – Casa Seis*

> *That comes a point in life when we need a mission, other goals than profit seeking, and I felt motivated by this project. Our mission is to provide funding for other social organizations so they can scale up and be sustainable. – Socio Investment Exchange*

We wanted to create job positions for disable people that otherwise wouldn´t be employed, I wanted to prove that using a strategic approach these people can succeed, they can have a work and be productive, that is more important that being rich. – Ensina-me

The founders were students and have the will to help deprived populations in African countries as well as apply the knowledge and skills that they acquired. - TESE

Our findings show that social entrepreneurs are involved in the provision of goods and/or services complementing the role of the government and market. This is in line with many authors that state that social entrepreneurs play a role on the delivery of public goods and services that originated from market and state failures (Perista and Nogueira 2002; Weisbrod 1977). Suppressing the gaps in the provision of goods where governments have failed and where the private sector views no opportunity or perceives too much risk to engage in social activities (Nissan et al. 2012). Also the results stress that they serve deprived communities, in agreement with the stream of literature that say that they provide solutions to the bottom of the pyramid market that represent niches and remain uncovered (Hart 2005).

The services that the hospital provided were not enough so I thought I had to create an organization to attain those social needs. Not to replace the role of the state but to complement the medical service with the psychosocial component of the illness. The government cannot satisfy all the necessities and there is not a spirit of citizenship, people pay their taxes and think that already served their duty. – Saúde Criança

The things we do are aimed at mitigating problems. The governmental help is not enough to overcome unemployment. This is an important matter, without a salary there is no money to provide the basic well-being, and then comes psychological problems, domestic violence, everything is interconnected. Therefore we feel the necessity to attain this problem. – Casa Seis

Social organizations may replace the the role of the State hereby they are paid, most of IPSS and other organizations depend on governmental funding that derive from the social security budget. I do not know if it has to be that way, I would not choose that way. Firms can make donations but corporate social responsibility is not a core aspect to them, and the (economical) crises lead to a decrease in the donations. – Socio Investment Exchange

The concept of social, in the entrepreneurship context, refers to the organizations objective of benefiting society (Tan et al. 2005; Zahra et al. 2009). Social problems concern issues related to the human being, but also societal problems encompassing the environment. The social entrepreneurs discourses emphasizes that they devote to social but also to environmental causes.

I was working for a consultant and one of my last projects was doing a project on remanufacturing that is a sustainable concept. I thought it was a very nice and clean business case and think about *to develop a concept around that, using bicycles. In Netherlands we have millions of them and every year about a million get destroyed. Then we took social entrepreneuring to set the basis to build the company around. We work together with shelter workplaces with people that have some disability. For us social, sustainable and economical aims are the most important, also we have a goal to do everything in a fair and honest way. – Roetz*

For us the environmental factor is a core value. The idea to create Tela Bags started the first edition of Rock in Rio, in Lisboa, due to a surplus of advertising screens to promote the festival. Our goal was to re-use those screens and give them a second life, changing them into unique bags, made of high quality materials and a great design. – Tela Bags

From the beginning our core dimensions encompassed social and environmental mission. –TESE

We have a societal mission that is to optimize our costumer's social and environmental impacts, and everything that is connected with sustainability, corporate social responsibility and social entrepreneurship. – Sair da Casca

A social mission is not directly linked to the creation of a non-profit organization. The non-profit sector is not exclusively aimed at solving the problems of disadvantaged people (Rose-Ackerman 1996; Weisbrod 1988). The results help to clarify the misconception that being a non-profit organization implies having a social mission. Social organizations have a normative identity that is expressed through values as health, educational, cultural, religious and sportive (as was discussed in chapter 2). In these organizations values are be embedded in the social mission, however other organizations can pursue such values for recreational purposes or cultural preservation without an established social mission. Presidents, Directors and Founders of the different Foundations in our sample that were interviewed support the previous assumption.

We do not have a mission, the foundation statutes foresees four different statutory areas: art, *education, science and charity. The founder did not establish a mission, the administration board has broad skills within the selected areas to attain the society needs. – Calouste Gulbenkian Foundation*

The expression that the founder used on his will was medical area, the founder wanted to focus on the prevention and care of diseases and we tried to build everything around his idea with the resources that he granted to the foundation. We do not have a social mission. – Champalimaud Foundation.

Proposition 1. The will to pursue a social mission motivates individuals to become social entrepreneurs.

3.4.2 Closeness to social problems:

Researchers have highlighted that people are triggered to help others when they are around people in need or a specific social problem and they have the will to suppress that need (Mannino 2011; Hsieh et al. 2011). Germak and Robinson (2014) found that the closeness of individuals to specific social issues would motivate them to engage in social entrepreneurship. The following quotations show how close social entrepreneurs were to the social problems confronted and how they influenced their entrepreneurial behavior.

I started to work when I was seventeen, and I had a strike of reality, but I was always keen to share what I had with others. I was working in Brazil in a rich school but I also saw the poor kids, I saw both sides and dealing with children issues always fascinated me. – Casa Seis

I am Italian. Emigration and intercultural issues are important to me. I came to Portugal in 92, and I lived in Belgium for a long time and I have already worked in areas related with education, languages, youth, poverty, emigration and labor and I am still motivated by such issues and to keep on help other people. – Casa Seis

Once, a mother of a little girl that had 23 pneumonia came to me saying: "I do not have money to by the medicine, she is going to die, can you keep her?" And I said no, but I will help. ". Our methodology was not top-down, we listen hundreds of families that were discharged from the same hospital. – Saúde Criança

I had an uncle that was living in my house, and for a year and a half I watch him die of cancer. Coping with his death was a very hard process. I am a positive person, I always face problems focusing on the good side. I do not know if this is a motivation for my desire to make other people dream come true. – Terra dos Sonhos

It all started when I began to volunteer for visiting inmates with other non-profit organization in 2000. I was there for almost ten years before starting our organization. – Reklusa

One of the co-founders was a colleague of mine and she became disable because of an accident that she suffered during work, and our goal was to provide a work place for her and to other disabled people. – Ensina-me

Proposition 2. Closeness to social problems motivates individuals to become social entrepreneurs.

3.4.3 Empathy

A concept that is related to proximity to a social problem is the capacity to feel empathy, to be receptive to other's feelings or emotions (Batson et al. 2011; Mair and Noboa 2003). The chances of a person feel empathy for another and help her/him is higher when they belong the same group (Batson et al. 2011). An entrepreneur that experiences empathy towards others is keener to create organizations that are focused on maximizing social value creation (Mair and Noboa 2003). The following citations suggest that social entrepreneurs are receptive to others feelings, they create empathy with other people and they have a sense of responsibility to attain societal causes.

Since early age I understood that I had empathy with other people, and I was in a privilege position so I had to use my voice to help them. – Sapana

The clown has an emphatic capacity of understanding the other, it is surprising because at a first sight the clown is very different, out of the box but its essence is the same as ours. The clown connects the humanity that people have using a non-rational path, it uses the body and the heart. For a solidarity cause people get involved because they want to help to attain a specific cause or to help other people. For empathy and sympathy which is interesting. – Nariz Vermelho

The problems are clear to all of us (the physicians), the father went to the doctor but he does not have the money to pay for the medicine, we were digging a hole in the sand. But being a social entrepreneur is to get in touch with a reality, and breathe through the problem, stepping into someone else's shoes and starts to identify the problem. We do not know the answer but we keep trying knowing that somehow that answer will be built collectively. – Saúde Criança

This will to help others is something that always were a part of me. Also there is a side that should not be undermined that is connected to our ego, and by being in leadership positions we as social entrepreneurs need to be critic and be introspective on what we do and how we do it. – TESE

Proposition 3. The capacity to feel empathy motivates individuals to become social entrepreneurs.

3.4.4 Accomplishment:

Need for achievement is associated with the desire to accomplish something in a better or more effective way, people with high need for achievement are more prone to become entrepreneurs (Estay et al. 2013; McClelland 1961). In the context of social entrepreneurship such drive goes towards solving social or environmental problems. Many authors stress the importance of need for achievement and accomplishment when it comes to become a social entrepreneur (Germak and Robinson 2014, Nga and Shamuganathan 2010).

I left the organization I bought a one-way ticket to Nepal and did a SWOT analyses to the idea of doing consultancy to local NGOs. In India we establish the project of my life, that's where I feel myself as the best human being. – Sapana

This is a dream, we love clowning, it is touching, and a regular job in the artistic context is very rare. This is something that comes from within. – Nariz Vermelho

I wanted to do volunteering for a long time and I became interested in volunteering tourism. But sometimes you go for an orphanage work with the kids and the impact that you have is low and the costs associated are not very efficient. I thought that we could use the same money and invest in a project. The benefit from it all apart from travelling is how proud I am for actually doing something and also helping others. – Kembe

I was born with this entrepreneurial spirit, I have a restless spirit I am always looking to get things started, and motivate people. But I never thought that this would become like a dream come true. – Reklusa.

I was working for a big consultant and one of my last projects there involved remanufacturing, a sustainable concept that take materials that have been used before in products and you use those materials again. I thought it was a very nice and clean business case and think about to develop a concept around that and bicycles were perfect and then we took social entrepreneuring to set the basis to build the company around. And then I left Delloite and took two months to develop those ideas, and trying to find funding and to set up this company the best. – Roetz

Personal motivations are linked to the challenges that it represents professionally, to pursue a noble cause and personal fulfillment and joy by knowing that we are doing good. Nowadays is also linked with the ability to solve problems and the fulfilment that we take to change people's lifes. – TESE

I decided that my future project would be to combine my experience as a volunteer in several ONGs, the social impact and mission that they have with my journalism background, by being an observer and to disseminate information and I wanted to do it by creating a business. A project like this survives because you have anger and think about it 24 hours a day, give up everything else and it is very difficult for a team take it. The project will change according to the entrepreneur – Sair da Casca

Proposition 4. The need for achievement associated with the will to pursue a social mission motivates individuals to become social entrepreneurs.

3.4.5 Sustainability

The social mission is usually connected with a focus on sustainability that ensures the continuation of the organization and the accomplishment of the social mission (Weerawardena and Mort 2006). For an organization to be sustainable it requires a strategic combination of their core aspects as the social and or environmental mission with the financial and organizational aspects (Nga and Shamuganathan 2010; Thake and Zadek 1997). Sustainability is embedded in the entrepreneur value, culture and vision as well as on the organization and it encompasses people and the environment as their stakeholders. Society is increasingly pressuring firms to include societal and economic impacts into what Lovins et al. (2007) called as natural capitalism.

As long as entrepreneurship is perceive as social, people forget about the economic aspect. We need to create sustainability independently from the target group that we aim to impact. For us the main priority is our target population as well as the organization values and the second priority is to guarantee funding. The funding is managed in a way that promotes sustainability and synergies that allows spanning the project itself. – Sapana

As many institutions in the beginning we could not generate revenue's therefore our biggest challenge has been ensure the project's sustainability, in the way that we defined it. – Terra dos Sonhos

When we had to decide of what business should look like we decided to start a sustainable business which also means making it socially sustainable and not outsourcing everything from Taiwan or China, but trying to do it in a local basis. Almost all social enterprises are startups, because it´s more difficult to rebuilt an enterprise than to be a social one, if you start right with your social dimensions it will pass to your products and the core of your business. – Roetz

Our values are based on sustainability and social responsibility. We recycle and reuse material avoiding the usual destination the landfill, also our production process minimizes the environmental impact. (…) The economic factor is also very important for the firm sustainability. – Tela Bags

The organization was created with a focus on sustainability, we wanted to create services that were sustainable and the revenues resulting from consultancy would be reinvested in the other projects that we were developing. Therefore we would not be so dependent from subsidies. The sustainability were the most difficult aspect but it was always present. – TESE

Proposition 5. The focus on sustainability associated with the will to pursue a social mission motivates individuals to become social entrepreneurs.

3.4.6 Social value focus

Social organizations have multiple identities that are expressed through distinct goals (Moss et al. 2010; Young 2001), the common element between them is the social mission. Despite the attempts of many researchers there is no definition of a social enterprise, therefore to achieve their mission organizations have created innovative entrepreneurial models that dissolve the boundaries between the private and non-profit sector. The origins of social organizations are linked to the non-profit sector and many find in it a natural organizational form since that prioritize the attainment of the social mission (Austin et al. 2003; Leadbetter 1997; Young 2001). However other authors argue that these organizations can perceive the for-profit form more advantageous in order to be more competitive and more independent from grants and public support (Mair and Marti 2006). The choice of organizational form should be based on the suitability of the business model to attain the specific social needs (Mair and Marti 2006). Our interviews reveal that social entrepreneurs lack the existence of a formal legal structure that could be a suitable form. However in this absence they choose mostly a non-profit form that prioritizes the mission instead of profit creation.

> *We create a non-profit organization because we want to achieve a mission without having profit as our main goal. In a for-profit organization people invest in order to receive, being a non-profit solidarity organization means to give something to others, people engage in non-profit organizations because they identify themselves with the work, it gives them pleasure. – Nariz Vermelho*

> *My goal was never the money, I wanted to change their lives and empower people. In the beginning we felt the necessity to establish a legal form, Portugal does not recognize the organizational form of social enterprise so we could be a cooperative or an IPSS, and so we choose the latest. I would like that Reklusa was could unit profits with social mission. There is a lot of prejudice in the third sector concerning the profit, due to some troubles and lack of transparency in the organizations. – Reklusa*

> *We do not go to the non-profit sector to in search of money, because we will not get it, we have to be extremely motivated and be resilient. – TESE*

> *There is not a legal structure that defines the social enterprise, and in my opinion it should have rules concerning the profit distribution. There could be more social business; we are still deeply rooted in our religious background and the charity mindset that motivates the choice for non-profit legal structure. Sometimes non-profit organizations have higher costs than a commercial firm to do the same thing. I think that limiting an organization to be non-profit is limiting its action, the access to major funds and to be competitive. – Socio Investment Exchange*

> *The municipality asked us to help the relocation of an immigrant and deprived community our main motivation is to help them and one day give back the association to the population members.*

I could say that what we do can be classified as entrepreneurship. Before entrepreneurship was always connected with profit, while in social entrepreneurship the wealth is not only perceived in monetary value. Job creation, promoting better relationships between people with different cultural background, and creating a community spirit are also good impacts. – Casa Seis

The interviews evidence that even though monetary value is not the primary goal, financial viability is a requirement for social organizations to sustain and reach more stakeholders, in order to accomplish the social mission.

For us the mission is fundamental, we work in the social sector. The surpluses are important for the organization in the sense that they are reinvested in the institution to the creation of new projects and to employ more people, etc. But for social enterprises in general, profits might be reinvested or not, depending on the goals of each one. – Entrajuda

We could say that we have a social business that aims for profit as a means to achieve sustainability, however the profit is to reinvest in our stakeholders and not on the shareholders or in our institution so that we can create more jobs and spread our activity to other prisons. – Reklusa

The funding is decreasing and depending from subsidies is a mistake, we have to be sustainable. There are two aspects related to profit, first economy is a social science and second we save money to the governments with our projects. Sapana has to be perceived as a non-profit organization because is mandatory by law, with a social mission from the beginning but financially sustainable. I create a non-profit organization but it could be a business since the functioning is the same. – Sapana

In a near future we hope to generate revenues that can cover much of the operational costs, so that we diminish our dependency on external funding. To meet the ambition that we have for our social project we would need a bigger team, and for that we would have to raise more funds. – Terra dos Sonhos

Individuals that engage in the social sector as entrepreneurs, managers or employees are motivated in their work because they are highly engaged with the social mission (Lewis et al. 2012). They place a higher value on why and what they are working than monetary motivations, even if they do not have the same financial benefits as in the private sector (Denhardt et al. 2009). The data from the interviews supports this literature, six of the thirteen social entrepreneurs that we interviewed did not have any income and were highly motivated to pursue their goals, nevertheless some manifest that having an income would be motivational, or allow them to work full time as a social entrepreneur.

I never thought in creating a paid job position with the organization, my first objective was to create jobs for disable people. My job as a professor was flexible enough to allow me to coordinate both things. – Ensina-me

The founders and people working in management positions are all working as volunteers. – Casa Seis

People that want to work with me are volunteers before becoming paid employees. I am a volunteer and I will be until I can provide an income for them first. Social sector is still seen the "poor thing", then wages are "poor things", and this should not be like this, because we work like crazies from 12 to 16 hours a day. – Sapana

There is a feeling of distrust, even in my circle of friends, people do not believe that I work full time and do not have an income. Sometimes I get frustrated and tired, I would like to be paid, I think it would give me more motivation to continue. – Reklusa

I am not sure if a non-profit status it is better or worse, but I think that are differences from social entrepreneurs that do it for-profit. I also encourage that as well in the end if they gain money and they can do it as a job. I cannot do it on a daily bases, I have another job. Maybe in ten years Kembe exists and became a bit bigger I could quit my job and become a social entrepreneur earning money on that and at the same time helping other people, it would be great. – Kembe

Organizations who pursue the double bottom line, combining economic with social values in their mission (Fowler 2000; Townsend and Hart 2008; Wesley and Curtis 2010) or the triple bottom line: economic prosperity, environmental quality and social justice (Elkington, 2004) create hybrid enterprises. Our results indicates that organizations with for-profit forms do not consider themselves as social enterprises because they associate the concept with a non-profit form, however they perceive themselves as hybrid organizations.

The environmental factor is a core value but the economic factor is also very important for the firm sustainability. Our organization is not a social organization because we are for-profit. According to this typology[9] *I would say that Tela Bags is a hybrid firm with an environmental mission and a for-profit legal structure. – Tela Bags*

I create a for-profit organization to induce a specific impact on people perception, the disable people that work for us have a specific profile to work and must take it serious and not like a random volunteer work. I think institutions lack a commercial mindset, are dependent on subsidies, and do not have the culture to produce something, and there are less subsidies as less

[9,3] The typology mentioned is the one presented in chapter 2.

capacity to employ people. We wanted to have a commercial approach therefore it must be a for-profit firm. Concerning the typology[10] *we are a hybrid enterprise – Ensina-me*

For me is important to build a company that is social, sustainable but also financially successful, because if you are not economically sustainable obviously you cannot achieve your other goals, so they are all equally important. Roetz co-founder and I we both have very good jobs and we started this and it really shows courage but also builds trust with people because they know that we are not doing it for the money because we had it and we decided to do something with that money. – Roetz

When the economic dimension is the primary focus of the organization and is dominant to the social and sustainable goals the organization recognizes itself as a for-profit traditional organization.

Sair da Casca is not a social enterprise, is a traditional one, we aim for profit maximization and we distribute them to our shareholder. We have some similarities with social enterprises characteristics. The success of our organization is firstly the financial result, secondly the market recognition, and thirdly the happiness of our employees. – Sair da Casca

Proposition 6a. The focus on social value motivates individuals to become social entrepreneurs.

Proposition 6b. The focus on economic value motivates individuals to become commercial entrepreneurs.

These findings are built on recent theory reviewed and presented in the previous section that highlighted that social entrepreneurs can be triggered by motivations such as the will to resolve unmet social needs, empathy, moral engagement, ideology, personal accomplishment, achievement orientation, spiritual or religious imperative, non-monetary focus, closeness to social problem, local conditions, awareness or alertness. Some of these motivations were confirmed by the answers of the social entrepreneurs in our sample as: the motivation to find a solution for social needs, empathy that is often related with closeness to social problem, accomplishment, a focus on other factors than monetary value. The other motivations were not present on the social entrepreneurs' discourses. Though a different motivation than the previously mentioned existed in many of the interviewees, sustainability appeared has a strong motivation to become a social entrepreneur. Sustainability was linked to the social mission accomplishment guaranteeing the financial viability of the organization, guiding the core values and how the organization manages strategic decisions. This result is in line with social entrepreneurship literature that perceives a connection with a focus on sustainability with social mission (Thake and Zadek 1997; Weerawardena and Mort 2006).

To apply our motivations to the typology proposed in the chapter 2 we cluster the motivations that resulted from our sample in two aggregated terms. First, social mission, empathy, proximity with social problems, accomplishment by being a social entrepreneur were aggregated as motivations for individuals to create an organization with an Intended Social Mission. The other motivations: sustainability and social value focus were aggregated as motivations that would influence individuals to choose a specific organizational form (non-profit or for-profit).

i) Entrepreneurs that do not expressed a motivation related with a social mission however show motivations as sustainability or other value creation rather than social or economic, create non-social non-profit organizations. These organizations are created to serve other goals such as providing facilities for recreation or other cultural purposes do not have an intended social mission and operate under a non-distribution constraint on their earnings (Rose-Ackerman 1996).

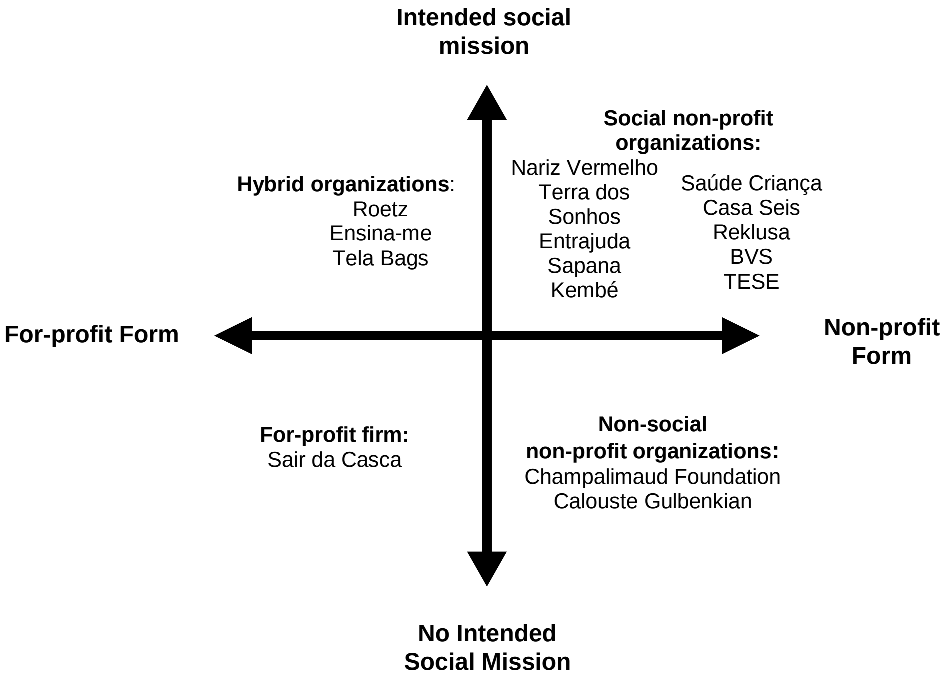
ii) Entrepreneurs that reveal motivations as social mission, empathy, proximity with social problems, accomplishment by being a social entrepreneur as well as social value creation and sustainability, and prioritize these motivations over economic value creation created social non-profit organizations. These organizations are founded with the clear intention of serving a social mission, they operate under a non-profit form and though they find financial sustainability important for their survival, economic value creation is not a priority.

iii) Entrepreneurs that show motivations as: social mission, empathy, proximity with social problems, accomplishment, sustainable and give equal value to social and economic value creation are connected with hybrid or social for-profit firms. These organizations are characterized by placing equal importance on social mission, mitigating social problems while are financially profitable, they operate under a for-profit form.

iv) Entrepreneurs that do not expressed a motivation related with an intended social mission, and the sustainability and value creation motivations are mainly connected to economic value create for-profit firms.

Based on the motivations that the entrepreneurs expressed we divided their organizations according to the four types of typology (figure 3).

Fig. 3. Interviewees' distribution according to the organizations typology

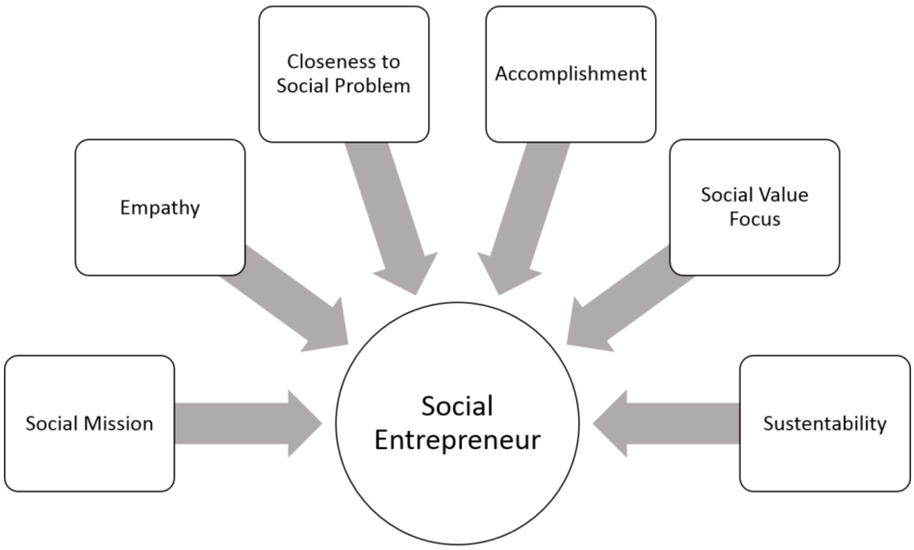


3.5 Towards a Social Entrepreneurs Motivation Framework

Most of entrepreneurship literature remains dominated by the perspective that individuals seek entrepreneurial endeavor for self-interest, but if social entrepreneurs are pursuing it in order to solve social problems and enhance society welfare does this makes them a different breed of entrepreneurs, as Bacq et al. (2013) poses? The distinct factor, pointed by several authors, is the drive that traditional entrepreneurs have for private wealth maximization contrarily to social entrepreneurs that seek social value maximization. Yet, on the one hand the increasing pressure that traditional firms are experiencing by the society is pushing entrepreneurs to adopt more social and environmental sustainable practices, producing green product and services (Hart 1995; Hoogendorn, Guerra and van der Zwan 2015). On the other hand social entrepreneurs are implementing market strategies and creating innovative business models. Hence both types of entrepreneurs are blurring the boundaries that would distinguished them. Motivations are not static they can change over time and vary according to each individual (Naffziger et al. 1994), hence what separates entrepreneurs from social entrepreneurs can also change over time. Understanding the motivations that triggers an individual to become a social entrepreneur can apply to a student that creates an association to alleviate the poverty, as well as to the traditional entrepreneur that perceived a solution for a social problem and became a social entrepreneur.

The results presented in this chapter suggest that there are specific motivations in social entrepreneurs that could explain their enrollment in social entrepreneurship. In figure 4 we show a blend of motivations including attaining a social mission, felling empathy with a specific cause or other individual in need, the proximity to the social problem, feeling accomplished with creating a social organization, have a focus on social value creation, and sustainability.

Fig. 4. Social Entrepreneurs Motivations Framework



This framework is presented in a simplistic way, we acknowledge that motivations can be entwined and social entrepreneurs can combine them in different ways. Therefore more research is needed to understand these entanglements of social entrepreneurs' motivation how they interact and other factors that may exist.

3.6 Concluding Remarks

The aim of this study was to empirically investigate the motivations that trigger an individual to become a social entrepreneur. The findings of the present work suggest that there is an array of motivational factors for engagement in social entrepreneurship. Based on qualitative data, gathered by interviews, we conclude that social entrepreneur's motivations can encompass: attaining a social mission, empathy, proximity to the social problem, feeling accomplished, focus on social value creation and sustainability. The spectrum of motivations that individuals have influence their engagement in social entrepreneurship and the type of organizations that they create. Empirical work on the social entrepreneurs' motivation is scarce and more theoretical and empirical researches are needed (Austin et al. 2006; Hoogendoorn et al. 2010; Mair and Marti 2006). The present research contributes to social entrepreneurship literature on the understanding of motivations and provides a basis for further research. Also we contribute by empirically testing the organizations' typology proposed in chapter 2 and linking the social entrepreneurial motivations with the goals and type of organizations that are created. The findings reveal that motivations linked with intended social mission (social mission, empathy, proximity with social problems, accomplishment by being a social entrepreneur) influence individuals to create an organization that according to the organizations' typology can be a social non-profit or a hybrid organization. Motivations as: sustainability and social value focus were grouped as motivations that would influence individuals to choose a specific organizational form (non-profit or for-profit). If the prevailing motivations of the entrepreneur were related with intended social mission, social value focus and the sustainability refers to the financial viability of the organization in order to better accomplish a social mission, which is prioritized, than is more probable for the entrepreneur to create a social non-profit organization. When motivations related with intended social mission, sustainability and social value are equally prioritized with economic value creation, the entrepreneur will most likely create a hybrid organization. Contrarily, if the entrepreneur is motivated by economic value and sustainability and social value are perceived as a by-product, than is more probable that a for-profit firm will be created. Social entrepreneurial activity has an important role on the enhancement of society welfare, and the type of entrepreneurial motivation may influence the goals that the firm have, which in turn affects macroeconomic outcomes (Hessels et al. 2008). Hereby developing a better understanding of the motivations that lead to entrepreneurial activity is relevant to formulate policies that stimulate social entrepreneurship (Mair and Marti 2006). Some limitations are worth mentioning, the findings can only be generalized within our sample and not to the total population of social entrepreneurs. As future work this study could be improved by using data triangulation as a methodological approach deepening our insights on the motivations of social entrepreneurs and contributing to the development of the motivations framework.

4. WHAT DETERMINES INDIVIDUALS TO BE A NON-PROFIT ENTREPRENEUR?[11]

Non-profit organizations are constituted by a legal personality, are considered private and independent from government and engage in entrepreneurial action not to create profit maximization but to pursue the maximization of social welfare. They act in several areas such as: education, environment, animal protection, health care, politics, religion or arts and supply a wide set of services and activities complementing the role of government activity in satisfying human necessities (Soriano and Galindo 2012). Many industries, e.g. education and health care studied by Rose-Ackerman (1996), contain both non-profit and for-profit organizations which mean that even though entrepreneurs may perform similar activities some may choose to create a non-profit (instead of a for-profit) organization. Although they may share the same activity, why and how they engage in entrepreneurial activity is completely different. Hence it is important to understand the main differences and factors underlying these two entrepreneurial approaches. According with the literature, characteristics of founders' human capital – defined as the knowledge and skills acquired through formal and informal learning (Becker 1964) – play a role in the decision to become an entrepreneur (Williams 2004). Examining the entrepreneur human capital is important because it is less person-centric than personality traits in the sense that it can be transferable and people can invest and acquire knowledge and experience (Marvel 2013; Ucbasaran et al. 2008). Several authors claim that more people could become entrepreneurs if more potential individuals were identified and encouraged throughout the educational process (Hatten and Ruhland 1995; Kent 1990). Therefore, it is important to focus on the educational backgrounds and experience of the entrepreneurs (Feldman and Stewart 2008). Additionally, human capital is more easily connected with public policy than other individual characteristics such as demographics or attitudes (Van Ryzin et al. 2009). Hence, understanding human capital is crucial to foster effective policies to support non-profit entrepreneurship. However, few studies have researched the role that human capital play on non-profit entrepreneurship. Previous research focused on distinguishing non-profit entrepreneurs and for-profit entrepreneurs have found that they present differences regarding socioeconomic, demographic and human capital characteristics (Williams 2007; Harding 2006; Van Ryzin et al. 2009). Harding (2006) and Van Ryzin et al. (2009) specifically find that education is an important prerequisite for an individual to become a non-profit entrepreneur. The scarcity of empirical studies on non-profit entrepreneurship is partially explained by the limited number of available datasets; in fact, most empirical studies on the topic are based on the Global Entrepreneurship Monitor dataset (Harding 2006, Lepoutre et al. 2013; Williams 2007) and others present significant limitations, like Van Ryzin et al. (2009) who use data drawing on a US online survey that – as mentioned by the authors – is not representative of the population. Hence, more empirical evidence is needed on entrepreneurs' educational background and labor market experience in order to understand to what extent human capital is a predictor for individuals' engagement into non-profit entrepreneurship (Van Ryzin et al. 2009).

[11] Research work developed on the present chapter was presented by the author at the following international conferences: International Council for Small Business (ICSB), Stockholm, Sweden, June 15 – 18, 2011, Research in Entrepreneurship and Small Business (RENT XXV), Bodo, Norway, November 16 – 18, 2011, Babson College Entrepreneurship Research Conference (BCERC), Fort Worth, USA, June 5-9, 2012 and 2013 SCALES Seminar, University of Groningen, April 11, 2013

The present study contributes to extend the existing research on the field by understanding what influences an individual to be a non-profit entrepreneur building on the distinction between general and specific forms of human capital as a predictor for the individuals' choice. While general human capital has been studied, in general, through level of education (primary, secondary or tertiary education) and labor market experience, the present work addresses specific human capital by analyzing specific educational backgrounds among non-profit vs. for-profit entrepreneurs (business sciences, engineering and technological sciences, social sciences and humanities), as well as their industry and entrepreneurial experience (number of years within the same industry). The empirical research uses a unique longitudinal matched employer-employee data to shed new light on the following questions: How far individuals' human capital is statistically associated with non-profit (rather than for-profit) entrepreneurship? Does general and specific human capital influence positively the choice of the individual to be a non-profit (rather than for-profit) entrepreneur? Is the specific educational background of the entrepreneur statistically associated with non-profit (rather than for-profit) entrepreneurship? Our findings reveal that both general and specific components of human capital influence an individual to enroll in non-profit entrepreneurship. More specifically, tertiary education is the most relevant education level and all types of educational background (business sciences, engineering and technological sciences, social sciences and humanities) show a positive effect on the probability of an individual to be a non-profit entrepreneur. Concerning work experience the results present a positive impact of the labor market, industry and previous non-profit entrepreneurial experience on the probability to be a non-profit entrepreneur. This work presents public policy implications for the universities concerning the impacts that the different education background has on the propensity to engage in non-profit entrepreneurship. Our findings claims attention to the design of effective scholar programs, and policy measures that support non-profit entrepreneurship across several fields of education and to the need to foster cooperation between universities and non-profit organizations.

The chapter proceeds with section 2 presenting the literature review that provides a rationale for the study and to formulate theoretical hypotheses in the next section. Section 3 introduces the methodology and data set to empirically test the hypotheses. Results and the key findings from the analysis are shown in section 4. Finally, we draw the conclusions and discuss the implications for theory and public policy in section 5.

4.1 Theoretical background

4.1.1 Non-profit organizations

Non-profit organizations have different characteristics that distinguish them from for-profit firms and governmental agencies namely a non-distribution constraint of their profits, revenue structure, employee structure, tax treatment and public goods providence (Nissan et al. 2012; Soriano and Galindo 2012). "Non-distribution constrain" (Hansmann 1987) is established by governmental laws and forbids the distribution of the surpluses resulting from the company activity to individuals who exercise control over the firm as stakeholders or members. The non-distribution constrain does not mean that the organization cannot have revenues from selling products or services; instead those must be used to accomplish the organization's mission. The costumers or donors perceive it as a sign of reliability, as it assures that profit maximization is not the organization's aim (Rose-Ackerman 1996). The revenue structure is also a distinct characteristic since non-profit organizations have a variety of funding sources for their activity: they can receive charitable donations, private or public sector donations and monetary gain from the services and products that they sell to their customers (Rose-Ackerman 1996; Weerawardena and Mort 2006). In addition, the human resources structure of non-profit organizations differs; they combine paid employees with a substantial volunteer labor. Volunteers donate time and money to the organization, contributing with their experience to the success of the organization's mission. The employees must have the suitable knowledge and experience, and share the values and vision of the organization (Hansmann 1987; Young 2001). Non-profit organizations have special tax advantages, being exempt from sales and property taxes (Nissan et al. 2012; United Nations 2003) and have to provide different legal requirements relating to their revenues, staff income and purposes (United Nations 2003). The legal constraints imposed on these organizations might be advantageous to entrepreneurs who are driven by a mission other than profit maximization, due to the existence of donations, grants, tax and regulatory benefits (Rose-Ackerman 1996). The choice of the organizational form[12] can impact the organization survival depending on the interaction between the organizational structure and entrepreneurial motivation among other environment characteristics of the (Rose-Ackerman 1996).

Economic literature has neglected the importance of non-profit organizations in the providence of solutions to social needs since the neoclassical models that considered that market forces were sufficient to attain the greater welfare (Bahmani et al. 2012). However private and public sectors are not able to solve all the problems concerning the community. Non-profit organizations are private producers of public goods[13] to a subset of the population, reaching niche interests that result from the persistence of market and state failures (Weisbrod 1977). They serve as a mechanism for people to engage in entrepreneurial endeavor to pursue interests or express values like groups focused on specific ethnicity, self-help, sports, arts and hobbies (Salamon 2002). Non-profit organizations create a social context suitable for the entrepreneurial process (Schumpeter 1947), providing an alternative system for delivering public services such as housing, health and education (Perista and Nogueira 2002). By complementing the education offered by public schooling, these organizations enhance the population human capital improving their productivity (Bahmani et al. 2012).

[12] In the present study organizational form refers to the legal characterization of an organization that encompass for-profit form or non-profit form. Thereby organizational form is distinguished from organizational structure in that it is perceived as the configuration that shapes the organization activities (Kistruck and Beamish 2010; Williamson 1985).

[13] Weisbrod (1988) argue that non-profit organizations provide services that have the character of public goods, in the sense that the services they offer are non-excludable, so individuals cannot be effectively excluded from use, and non-rivalrous, the use by one individual does not reduce availability to others, as knowledge or street lightning.

4.1.2 Human capital

Human capital is perceived as the skills and knowledge that individuals acquire through their investments in education, health and experience (Becker 1964). The works of Schultz (1961), Mincer (1958) and Becker (1964) contributed to change how economist perceived the importance of human capital towards economic, social and policy issues (Becker et al. 2011). From an occupational choice perspective, economists and management researchers find that education is a credential for employability allowing maximizing utility from an individual employment (Blundell et al. 2005; Almond and Currie 2009). Moreover, education is an important determinant of selection into entrepreneurship for the individual (Dickson et al. 2008).

Entrepreneurship literature has recognized the importance of human capital to the creation and sustain of an entrepreneurial organization (Austin at al. 2006; Venkataraman 1997). It plays an important role on the organizations' dynamic capabilities to learn and adapt to new circumstances (Teece 2011). The entrepreneurial ability to connect knowledge and opportunities requires a very specific set of skills and insight (Venkataraman 1997). Human capital represents those skills and knowledge that the individual must have (Hitt, et al. 2001) to perceive opportunities and create innovative solutions (Miller and Wesley 2010; Hitt et al. 2001; Teece 2011; Venkataraman 1997). Human capital theory has guided studies in many aspects of entrepreneurial behavior as organization survival (Rauch and Rijsdijk 2013), performance and growth (Roberts 1991), opportunities perception (Ucbasaran et al. 2008) but mainly in the for-profit entrepreneurship. As in for-profit firms, non-profit organizations also require the entrepreneurs' human capital to facilitate their entrepreneurial activity. Human capital is positively linked to the creation of non-profit organizations (Harding 2006; Williams 2007; Van Ryzin et al. 2009). Moreover it enhances the capacity of capturing resources, the organization effectiveness and the ability of ensuring the survival and development of the non-profit organization (Miller and Wesley 2010).

Some authors have distinguished human capital in their multiples types, Rauch et al. (2005) have distinguished between education, experience, and skills. Becker (1964), Bosma et al. (2004) and Bruederl et al. (1992) distinguish between general and specific components of the human capital. General human capital refers to skills that the entrepreneur may transfer to other jobs in economy it can be measured through education, training and work experience (Cooper et al. 1994; Teece 2011). General human capital enables the capacity to acquire new knowledge therefore increasing the productivity and the quality of individuals work (Mincer 1958), it is a crucial factor to the access to external financing (Bruederl et al. 1992; Rauch and Rijsdijk 2013). Formal education is considered a proxy for human capital (Grant 1996). Higher levels of education increased the likelihood of self-employment and new firm creation (Bates 1990; Peterman and Kennedy 2003), also it potentiate individuals learning abilities and organizational skills (Baptista et al. 2014). Those competences are important for ensuring the capabilities and performance of firms and organizations, as well as the well-being of individuals and communities (Baptista et al. 2014). Roberts (1991) found that the link between higher education level and new firm performance may change according to industry, in bioscience founders with a PhD appeared to be more successful than their counterparts. However in other industries this effect is only found at master's degree and not at PhD level, since highly academic people are mainly oriented toward research (Roberts 1991). Moreover tertiary education level is linked to higher levels of productivity rather than primary or secondary enrollment (Van Praag and Stel 2013). Education is linked to the probability of being engaged in a non-profit organization (Harding 2006; Williams 2007). Individuals in full time education are the most likely to create non-profit organizations (Harding 2006). Those in tertiary education as bachelors, masters and doctorate levels of qualification, show the higher percentages among entrepreneurs in the non-profit sector (Bacq et al. 2013; Harding 2006; Van Ryzin et al. 2009). Secondary and tertiary levels of education are positive and significantly related to effectiveness (Miller and Wesley 2010), defined as the capacity of the organization to exist, being autonomous, and deliver social value within 10 years (Dees 1998). Accordingly, we hypothesize a positive relationship between higher levels of general education and the engagement in non-profit organization:

Hypothesis 1. A high level of education influences positively individuals to be non-profit entrepreneurs.

Human capital theory stresses the importance of experience and capabilities acquired in previous employment to entrepreneurial activity (Becker 1964). Through general experience individuals acquire skills that can be applied across several sectors and jobs. Work experience as labor markets show a positive impact on the performance survival and employment growth of the firms (Baptista et al 2014; Bosma et al. 2004; Gimeno et al. 1997; Marvel 2013). Prior experience as past employment experience is linked to the discovery of opportunities and most firm ideas (Marvel 2013; Venkataraman 1997). Non-profit organizations have increasingly adopted the business knowledge and skills from the for-profit entrepreneurship sector (Dees 1998; Leadbeater, 1997; Miller an Wesley 2010), the strategic use of resources (Dees 1998; Mair & Martí 2006; Thompson et al. 2000) to provide solutions to societal needs. Harding (2006) found that work experience and training within an organization affects positively the propensity to become a non-profit entrepreneur but government or public sector training is the most relevant experience. Accordingly we formulate the following hypothesis:

Hypothesis 2. A high level of labor market experience influences positively individuals to be non-profit entrepreneurs.

Specific human capital concerns different types of educational background and skills that are specific to a firm as previous experience in the same sector, managerial experience and prior self-employment (Bruederl et al. 1992; Cooper et al. 1994; Teece 2011). Focusing on specific types of education, literature evidences that entrepreneurial endeavor has an interdisciplinary nature, new firm opportunities exist within almost all academic disciplines (Audretsch et al. 2007; Kupferberg 1998). Entrepreneurship literature is rooted in the economic and management literatures and such background shaped an interpretation of entrepreneurship manly focused on economic goals (Hebert and Link 1989). Consequently, it has caused scholars to underestimate the importance of entrepreneurship in the non-profit sector as a conceptual and theoretical approach to the analysis of innovative, and socially oriented organizations (Mars and Rios-Aguilar 2009). Education is one of the main commodities of modern economy and tertiary education has a major role on knowledge creation and diffusion (Feldman and Stewart 2008). The knowledge that universities create are increasingly being transferred to firms and industries whether for social or economic development goals (Feldman and Stewart 2008). We argue that different fields of study may embody different set of values and impact the propensity of an individual to choose different career paths according to the educational background.

Engineering and Technologic Education. Different streams of literature point in opposite directions concerning the entrepreneurial engagement of entrepreneurs with engineering and technologic educational backgrounds. Literature on the life-cycle models of scientists' state that they invest in human capital and on the later stages they seek an economic return for their human capital (Levin and Stephan 1992). Audretsch (2000) examined the extent to which entrepreneurs at universities are different than other entrepreneurs. He analyzed a dataset on university life scientists in order to estimate the determinants of the probability that they will establish a new biotechnology firm, and he found that university entrepreneurs tend to be older and more scientifically experienced. University scientists working on inventions face a strategic decision: whether to commercialize the invention, or disclose the invention to the public, making it freely accessible (Feldman and Stewart 2008). In order to capture the economic value of the product or service invented, scientists may commercialize it through the creation of an organization focused on economic value creation and the maximization of their returns (Feldman and Stewart 2008). A study conducted at the MIT alumni found that the majority of the students that engage in entrepreneurial activities were from engineering educational background that created high technology firm to capture economic value (Hsu et al. 2006).

Another stream of literature focused on the role that engineers have within a societal context. As reviewed by Amadei and Wallace (2009) engineering was initially perceived by a determinist approach that argue that it should be develop apart from society and that technology was nothing more than applied science and economics (Hughes 1991). However more recently the dynamic between technology and society has changed and both started to be connected. Literature recognizes that engineers have an important contribution to the economic development and quality of life. They are responsible for major advances, that are mostly delivered in develop countries and there is an increasing debate on the contributions that are made to enhance developing countries quality of life. Some authors state that engineers professional activities should involve addressing the needs of all humans, including the providence of water, sanitation, food, health, and energy, as well as to protect cultural and natural diversity (Amadei and Wallace 2009; Saviz et al. 2012). The engineering community has been trying to understand how to meet this gap. (Amadei and Wallace 2009).There are some examples of organizations that Engineers without Borders and Engineering for Developing Communities program at the University of Colorado that aim to improve their quality of life through education and implementation of sustainable engineering projects. However literature argues that engineers have not been involved in international development, an area in which is fundamental to the cooperation between technology and society. They lack a voluntary service spirit in the engineering profession, and they do not have sufficient infrastructure to support engineering volunteerism to provide hands-on opportunities (Saviz et al. 2012; Passino 2009). Following this stream of literature we hypothesize a negative relationship between engineering and technologies knowledge and the engagement in non-profit organizations:

Hypothesis 3a. Engineering and technologies educational background influences negatively individuals to be non-profit entrepreneurs.

Business Science Education. Business students acquire appropriated resources and knowledge in finance, marketing and management to start a firm (Jyothi 2009). Management skills in addition to technical skills are associated with opportunity recognition. Park (2005) showed that those skills are needed to identify the right opportunities in high tech startups. Management and economic university education have a significant and large effect on firm growth of surviving new high tech firms (Colombo and Grilli 2010). Entrepreneurship literature, since the neoclassical models, have recognized the role of for-profit firms on economic growth and neglected the role of non-profit organizations (Bahmani et al. 2012; Hebert and Link 1989). Consequently, entrepreneurship courses and initiatives included in the curriculum of many universities and business schools reinforce the economic value creation as the main driver for entrepreneurial activity (Ede et al. 1998). Hence, we postulate a negative relationship between business sciences knowledge and the engagement in non-profit organizations:

Hypothesis 3b. Business sciences educational background influences negatively individuals to be non-profit entrepreneurs.

Social Sciences and Humanities Education. Opportunities that may lead to entrepreneurial activity exist among all academic disciplines, however research on the determinants of entrepreneurship have limited their scope of analysis to business, engineering and technological areas (Teixeira 2007). Fields of knowledge such as social sciences or humanities represent an important entrepreneurial potential (Kupferberg 1998). Qualitative research on entrepreneurs with a university degree in humanities and social sciences - *humanistic entrepreneurs* - show that they have traditionally stayed out of business, not because they lack business ideas or opportunities but because they fear that humanities and social sciences knowledge background wasn´t enough to start an organization (Kupferberg 1998). The non-engagement on entrepreneurial activities by humanistic entrepreneurs' is also due to differences in values between business and humanistic culture (Merton 1973; Kupferberg 1998). Business culture is grounded on values such as risk-taking, profit–making and cost-reduction, values that may conflict with humanistic culture used to emphasize the unique value of scholar or artistic products, and quality over quantity (Merton 1973). In line with this rationale we hypothesize a positive relationship between humanities and social sciences educational background and the engagement in non-profit organizations:

Hypothesis 3c. Social sciences educational background influences positively individuals to be non-profit entrepreneurs.

Hypothesis 3d. Humanities educational background influences positively individuals to be non-profit entrepreneurs.

Entrepreneur specific experience refers to skills that are applicable to a particular company or industry. Specific human capital manifests itself through work experience, in particular when occurs in the same industry where the new organization is being started (Baptista et al. 2014). Individuals who have worked in the same industry have acquired industry-specific human capital, which consists of knowledge that can be useful to organize a business successfully (Rauch and Rijsdijk 2011). Such specific knowledge is about a wide range of issues, as market and technological information, network of professional and social contacts encompassing customers, suppliers, or other stakeholders (Helfat and Lieberman 2002). In the specific for the non-profit sector, Sharir and Lerner (2006) found that previous experience in the same industry has a positive impact on the creation of non-profit organizations with social aims.

Hypothesis 4a. Previous industry experience influences positively individuals to be non-profit entrepreneurs.

Entrepreneurship research stresses prior entrepreneurial experience has one of the most relevant aspects of specific human capital (Davidsson and Honig 2003; Ucbasaran et al. 2008). Prior self-employment experience provides the individual with better managerial and technical skills that derive from the process of creating an organization, thus they should be better prepared to create and sustain new organizations (Dahl and Reichstein 2007; Rauch and Rijsdijk 2011). Harding (2006) shows that the perception of having the skills to start a business is one driver for individuals to start a non-profit organization. Therefore the previous experience of owning or managing a business is positively related with the creation of organizations whether for-profit or non-profit ones (Van Ryzin et al. 2009). Following such rationale we formulate the following hypotheses:

Hypothesis 4b. Previous entrepreneurial experience influences positively individuals to be non-profit entrepreneurs.

4.2 Data and method

4.2.1 Data source

The applied research uses the data set “Quadros de Pessoal”, provided by the Portuguese Ministry of Labor and Solidarity, as a result of an annual mandatory questionnaire filled by all Portuguese firms. The relevance of such a panel data set comes from the longitudinal matched employer-employee nature that allows observing both sides of labor market, individually or connected. The data include a total of 145 thousand firms, 170 thousand establishments, and 2 million workers in each annual return, that are fully linked with a unique identifier. Firm’s information available includes year of constitution; location; industry at the 6-digit level, total number of workers, employees’ wages, and number of establishments. For individuals, data includes gender; age; occupation; schooling; and skill. The total data is restricted to active firms that existed between 2002 and 2012, this time restriction was motivated by the inclusion of education variable in the dataset in 2002. The data set has some limitations: it excludes self-employed workers providing services to firms, or workers without contract and it does not include public administration, the military, and the agriculture sectors. Social and personal service activities and private households with employed people have an insufficient coverage. The Portuguese legal system encompasses a public, private and cooperative and social sector at the constitutional level, however the legal system does not include a legal concept of social economy or social organization (Namorado 2006). Non-profit organizations were tracked considering two conditions: first, they are part of the private sector and second; they have a surplus distribution constrained to the controlling staff as members and stakeholders (Dees 1998). Following, we track non-profit organizations according to their legal form, the analysis includes: charitable and humanitarian association, culture and recreation association, political association, unions and employer association, non-union professional association, mutual aid association, national foundations, cooperative society, and corporate religious (Namorado 2006).

The sample encompasses 10,617 non-profit organizations and 40000 for-profit firms however many individuals when filling the questionnaire about their professional role (as entrepreneur/employer or other) they do not declare themselves as entrepreneur, therefore those organizations that do not present the employer were excluded. These restrictions resulted in 51,620 entrepreneurs engaged in 31,513 for-profit firms and 1094 entrepreneurs engaged in working 633 non-profit organizations.

4.2.2 Dependent variable

To track the entrepreneurs in the sample we look at the questionnaire variable of professional situation that encompasses four categories: employer, employee, family member and employee, and cooperative member. We consider entrepreneur those responders within the employer category. The dependent variable non-profit entrepreneur is a binary variable that equals 1 if the individual consider himself/herself an employer in a non-profit organization, and 0 if the individual is an employer in a for-profit firm.

4.2.3 Independent variables

We include several independent variables in our analyses, following human capital theory (Becker 1964) we distinguished between general and specific components. To examine general human capital we used the total sample, however for specific human capital we used a subsample including entrepreneurs with tertiary level of education only, in order to distinguish the different educational backgrounds. Table 5 presents the descriptive analyses.

Table 5. Descriptive of the main variables

VARIABLES	Percentage of Non-profit Organizations	Percentage of For-Profit Firms
General Human Capital		
Primary Education (D)	42.34	64.59
Secondary Education (D)	22.92	20.33
Tertiary Education (D)	34.74	15.08
Labor Market Experience	Mean:29.15; SD:13.48	Mean:28.43; SD:11.65
Observations	4707	251563
Specific Human Capital		
Business sciences(D)	10,09	20.65
Engineering and Technologies (D)	9,17	22,75
Social Sciences (D)	37,61	14,32
Humanities (D)	12,97	4,28
Industry Experience (D)	2.32	1.38
Entrepreneurial Experience (D)	4.95	4.94
Non-profit Entrepreneurial Experience (D)	0.42	0.01
Control Variables		
Female	51.38	37.00
Entrepreneur age	Mean:45.16; SD:12.44	Mean:42.84; SD:10.67
Organization age	Mean:23.90; SD:21.54	Mean: 12.46; SD:13.28
Organization size	Mean: 41.17; SD:80.57	Mean: 20.69; SD:168.78
Education Sector (D)	22.81	3.12
Health Sector (D)	21.10	12.94
Private Funding (D)	40.80	96.10
Public Funding (D)	2.75	0.48
Metropolitan Areas (D)	60.55	57.04
Observations	1635	37942

D stands for dummy variables.

General human capital was captured by education and labor experience. General education is seen as a key variable by several other studies (Bates 1990; Honig 2001) and is captured through education level primary education (reference category), secondary and tertiary education. Education levels are related to gradations of learning experiences and the knowledge, skills and capabilities. These levels represent steps of educational process from elementary to more complex experiences, to the higher level of education. Primary education represents the stage of basic education, corresponding to the entry into the nationally designated primary institutions and compulsory education. Secondary education starts after 9 years since the beginning of primary education at the end of compulsory education. Tertiary education corresponds to faculty graduation and post-graduation degrees. Looking at education (table 5) the majority of non-profit entrepreneurs have secondary or tertiary education, contrarily to for-profit entrepreneurs that overall have lower education levels. This result supports non-profit entrepreneurial activity appears to be positively influenced by graduate and postgraduate degrees (Harding 2006; Van Ryzin et al. 2009). General work experience was captured through labor market experience is expressed through the years that an entrepreneur has worked in the labor market. Non-profit and for-profit entrepreneurs work approximately the same years before engaging on entrepreneurial endeavor.

Specific education and work experience was used as proxies for specific human capital. Specific Education was measured through several dummy variables following International Standard Classification of Education (ISCED) and Fields of study (FOS) classification, identifying if an individual is graduate or post graduate i) in engineering and technologies education (including engineering, technologies, architecture, construction and other industries) ii) in social sciences (social sciences, journalism and law) iii) in humanities (including humanities and arts), iv) in business sciences. The control group includes medical and health sciences, natural sciences, and agriculture sciences. Comparing the two groups of entrepreneurs we observe different patterns. The education backgrounds more representative among non-profit entrepreneurs with tertiary education are social sciences and humanities representing 51% of the total of the tertiary education. For-profit entrepreneurs are mainly coming from the engineering and technologies education and business sciences background (43%) and only 19% are from social sciences and humanities. The majority of engineering and technologies background of for-profit entrepreneurs resonates the vast literature on high-tech firms of for-profit entrepreneurship literature (Hsu et al. 2006).

Focusing on specific work experience, dummy variables were created to capture if the entrepreneur has worked at the same industry, previous entrepreneurial experience and entrepreneurial experience in the non-profit sector. In all cases the dummy variables take the value 1 if the entrepreneurs have experience and 0 otherwise. Non-profit entrepreneurs show a higher experience in the same sector as the organization that they are currently in. Entrepreneurial experience shows similar results for both types of entrepreneurs, however despite the low rates of entrepreneurial experience in the non-profit sector it has higher percentages among non-profit entrepreneurs.

4.2.4 Control variables

To control for demographic characteristics we included the entrepreneur age and gender. Gender is a dummy variable equal to 1 if the entrepreneur is a woman and 0 otherwise. There are a higher percentage of women engaging in non-profit that in for-profit entrepreneurship that makes non-profit entrepreneurship less gendered (Williams 2007; Van Ryzing et al. 2009). Entrepreneur age is a discrete variable with the individuals' age and we also take into account the age square. Results reveal that the average age for an entrepreneur to create an organization is similar for non-profit and for-profit entrepreneurship. This is in line with empirical research that found that people in the age group 35-44 years are the most likely to start a for-profit firm (Cowling 2000; Harding 2006; Williams 2004).

Several control variables concerning the organization were also taken into account as the size (given by the number of employees), and the firm age at the time of the survey (in years). Comparing the enterprise size, measured by the number of employees, we conclude that on average non-profit organizations are bigger and older than for-profit firms. Such results agree with Rose-Ackerman (1996) that in industries where for-profit and non-profit organizations coexist, non-profit are generally larger on average. Also many are old and well established and have substantial donations (Rose-Ackerman 1996). In our sample a great part of non-profit organizations were created back to the beginning of the collection of data set, and still managed to survive throughout these years. Empirical evidence confirms that age, size and level of capitalization are positively associated with a non-profits' survival (Bowen et al. 1994). In order to control for industry two dummy variables were created for the education and health sectors since those are the main sectors were non-profit and for-profit coexist in the market (Rose Ackerman 1996). Such variables have the value 1 if the organization is within the specified sector and 0 otherwise. Non-profit organizations have access to different sources of funding for example, being eligible to accept donations and governmental grants and subsidies and private donations due to the non-distribution constraint that prohibits the distribution of revenues in the form of stocks and dividends (Miller and Wesley 2010; Young 2001). Therefore we included two dummy variables that accounts for private and public capital. The pattern of accessing finance is different, the results show that non-profit organizations have more financial resources coming from public sources than their counterparts. Almost all for-profit firms are financed by private capital (96%), compared to 41% of non-profit organizations. In order to control for regional distribution Portugal regions were classified in two: metropolitan areas and other municipalities. A dummy variable was created using nuts (iii) and equals 1 if it refers to a metropolitan area and 0 otherwise. Regarding geographical distribution of organizations, most non-profit and for-profit organizations are located in metropolitan areas. Theoretical arguments found that urban areas provide better resources and more support for non-profit organizations (Nissan et al. 2012; Van Ryzing et al. 2009). Regions with higher levels of income and higher quality of life were more alert and proactive to take part in non-profit activity (Nissan et al. 2012). Macroeconomic environment was controlled through the inclusion of dummies variables for each year.

4.2.5 Econometric model

In order to assess the probability of an entrepreneur to choose to enroll in a non-profit organization rather than in a for-profit we will use an econometric model that takes into account the discreteness of that choice that is our dependent variable (Y) and constrain the predicted probability to be between zero and one, therefore a binary choice model as Probit regression is the adequate model to use (Wooldridge 2006; Cameron and Trivedi 2005). The dependent variable is a binary variable formulated as

$$\mathrm{f(x)}=\{1, \text{if individual is an entrepreneur in non-profit organization} \\ 0, \text{if individual is an entrepreneur in for} - \text{profit firm} \}$$

The probability p of such binary outcome (coded as 1 if the individual is a non-profit entrepreneur, the success event) or not, corresponding to being a for-profit entrepreneur (coded as 0), varies across individuals as a function of their own characteristics but also according to firm and macroeconomic features that are referred as regressors. The binary response model evaluates the response probability:

Probability of being a non-profit entrepreneur (binary) = P (y=1|**x**) where **x** denotes the full set of regressors.

x_i= (level of education, specific type of education, general and specific work experience, gender, entrepreneur's age, organizations' size and age, private or public funding, geographical distribution (metropolitan areas), industry, and control variables for the years).

The Probit model assumes that the response probability P (y=1|**x)** is linear in a set of parameters β_i:

$$P(y=1|x)= G(\beta_0 + \beta_1 x_1 + \cdots + \beta_k x_k)= G(\beta_0 + \mathbf{x\beta})=G(z) \qquad (1)$$

Where G is the standard normal cumulative distribution function, taking on values between zero and one 0<G(z)<1, for all real numbers z, so the response probabilities are strictly between zero and one.

$$G(z) = \phi(z) \equiv \int_{-\infty}^{z} \phi(v)dv \qquad (2)$$

$$\phi(v)= (2\pi)^{-1/2}\, e^{-z^2/2} \qquad (3)$$

With, $z = \beta_0 + \beta_1 \text{ Education level } + \beta_2 \text{ Labor Market Experience} + \beta_3 \text{ Engineering and technologies education} + \beta_4 \text{Business sciences education} + \beta_5 \text{Social sciences education} + \beta_6 \text{Humanities education} + \beta_7 \text{Industry Experience} + \beta_8 \text{Entrepreneurial Experience} + \beta_9 \text{Entrepreneur age} + \beta_{10} \text{Entrepreneur age}^2 + \beta_{11} \text{Gender} + + \beta_{12} \text{Organization age} + \beta_{13} \text{ Organization size } + \beta_{14} \text{Health Industry} + \beta_{15} \text{ Education industry } + \beta_{16} \text{Public Funding} + \beta_{17} \text{Private Funding} + \beta_{18} \text{Metropolitan Areas} + \beta_{19} \text{ Year}$

The nonlinear nature of G(z) makes it difficult to estimate the effect of each regressor x_i on the probability of success P(y=1|x) and the magnitudes of each β_i are not very useful, thereby we calculate the partial effect of each regressor through the partial derivative:

$$\frac{\partial p(x)}{\partial x_i}=g(\beta_0 + \mathbf{x\beta})\, \beta_i \text{ , com } g(z) \equiv \frac{dG}{dz}(z) \qquad (4)$$

G is the cumulative distribution function, strictly increasing for the probit model and its derivative g, is the probability density function that takes values higher than 0 for all z, hereby the marginal effects will always have the same sign as β_i

$$P(\text{Non-profit entrepreneur}=1\backslash x)= \phi(\beta_0 + \beta_1 \text{ Education level } + \beta_2 \text{ Labor Market Experience} + \beta_3 \text{ Engineering and technologies education} + \beta_4 \text{Business sciences education} + \beta_5 \text{Social sciences education} + \beta_6 \text{Humanities education} + \beta_7 \text{Industry Experience} + \beta_8 \text{Entrepreneurial Experience} + \beta_9 \text{Entrepreneur age} + \beta_{10} \text{Entrepreneur age}^2 + \beta_{11} \text{Gender} + + \beta_{12} \text{Organization age} + \beta_{13} \text{ Organization size} + \beta_{14} \text{Health Industry} + \beta_{15} \text{ Education industry } + \beta_{16} \text{Public Funding} + \beta_{17} \text{Private Funding} + \beta_{18} \text{Metropolitan Areas} + \beta_{19} \text{ Year } + \varepsilon_i)$$

4.3 Results

Probit models for the probability of being a non-profit rather than a for-profit entrepreneur were estimated for general and specific human capital separately. All models were significant at the level 0.001 and the results are consistent across several models, the signs of the coefficients for each variable remain unchanged across all models. Table 6 presents the results of the regression analyses.

Table 6. Probit of the probability for entrepreneurs to engage in non-profit organizations (General Human capital)

Variables	Model 1	Model 2	Model 3	Model 4
Dependent variable: probability of an entrepreneur participate on non-profit entrepreneurship				
Education level: secondary		0.285*** [0.0191]	0.336*** [0.0201]	0.311*** [0.0196]
Education level: tertiary		0.393*** [0.0193]	0.470*** [0.0212]	0.415*** [0.0197]
Labor market experience			0.00632*** [0.000689]	
Entrepreneur age (%)				-1.04** [4.37 e-03]
Entrepreneur age^2(%)				0.0171*** [4.51e-05]
Female	0.0485*** [0.0156]	0.0401** [0.0158]	0.0542*** [0.0159]	0.0545*** [0.0159]
Enterprise age	0.0232*** [0.0003]	0.0234*** [0.0003]	0.0229*** [0.0004]	0.0229*** [0.0004]
Enterprise size	5.53e-05 [4.71e-05]	-9.79e-06 [4.80e-05]	-1.54e-05 [4.85e-05]	-1.30e-05 [4.85e-05]
Private funding (D)	-1.306*** [0.0162]	-1.344*** [0.0166]	-1.347*** [0.0167]	-1.345*** [0.0167]
Public funding (D)	0.510*** [0.0826]	0.408*** [0.0844]	0.417*** [0.0842]	0.418*** [0.0841]
Metropolitan areas[a] (D)	-0.0438*** [0.0152]	-0.0860*** [0.0155]	-0.0981*** [0.0156]	-0.0966*** [0.0156]
Industry (D)	YES	YES	YES	YES
Year (D)	YES	YES	YES	YES
R^2	0.316	0.327	0.330	0.330
Loglikelihood	-16335.45	-15884.811	-15728.10	-15725.38
Observations	259,891	257,207	256,270	256,270

[a] Regions included on the model were divided as metropolitan areas and other municipalities (comunidades intermunicipais) using (nutsiii). Year dummys were included in the model in order to control for macroeconomic factors. D stands for dummy variables. Standard errors in parentheses. Significance levels *** p<0.01, ** p<0.05, * p<0.1

Model 1 presents the base model including only the control variables and it explains 31% of the variation in the probability of taking part on non-profit entrepreneurship (R^2). Model 2 improves the explained variance to 32% comparing to model 1. In model 2 the education level variable is entered, displaying a statistically significant positive effect on engagement on non-profit entrepreneurship, which confirms our Hypothesis 1 – a high level of education influences positively individuals to be non-profit entrepreneurs. Comparing to primary education (reference level) tertiary level impacts the most on the probability of an entrepreneur to engage in a non-profit organization. Such result are corroborated across all models (table 6), and by the marginal effects (table 7) where we observe that tertiary education increases the probability of individuals to engage in a non-profit organization by 1.3% holding other variables constant.

Table 7. Marginal effects of the probability for entrepreneurs to engage in non-profit organizations (General Human capital)

Variables	Model 5	Model 6
Dependent variable: probability of an entrepreneur participate on non-profit entrepreneurship		
Education level: secondary	0.0091*** [0.0006]	0.01079*** [0.0007]
Education level: tertiary	0.0138*** [0.0007]	0.0169*** [0.0009]
Labor market experience		0.0002*** [0.00002]
Female	0.0012|** [0.0005]	0.0017*** [0.0005]
Enterprise age(%)	0.07*** [1 e-05]	0.07*** [1 e-05]
Enterprise size	-3.12e-07 [1.53 e-06]	-4.89e-07 [1.54e-06]
Private funding (D)	-0.0428*** [0.0006]	-0.0427*** [0.0006]
Public funding (D)	0.0130*** [0.0026]	0.0132*** [0.0026]
Metropolitan areas[a] (D)	-0.0027*** [0.0004]	-0.0031*** [0.0004]
Industry (D)	YES	YES
Year (D)	YES	YES
Observations	257,207	256,207

[a] Regions included on the model were divided as metropolitan areas and other municipalities (comunidades intermunicipais) using (nutsiii). Year dummys were included in the model in order to control for macroeconomic factors.

Model 3 includes general work experience, analyzed through labor market experience (measured in years). This variable shows a positive and significant effect on the probability of taking part on a non-profit organization and enhances the accuracy of the model and the explained variance by 33%. Marginal effects (model 6, table 7) show a small increase on the probability of individuals to engage in a non-profit organization (0.02%). Hence we can validate our Hypothesis 2 – a high level of labor market experience influences positively individuals to be non-profit entrepreneurs. In model 4 we included the entrepreneurs' age as a control variable. Due to a strong correlation between age and labor market experience we build different models to test the impact of each variable. Age displays a negative and significant coefficient, meaning that younger people have a stronger impact on the engagement on a non-profit organization. The explained variance of the model remained unchanged (33%) when compared to model 3.

In order to analyze specific human capital and in particular specific types of educational backgrounds, we calculated probit models based on the subsample of individuals that hold tertiary education. Results concerning specific human capital are presented in table 8.

Table 8. Probit of the probability for entrepreneurs to engage in non-profit organizations (Specific Human capital)

	Model 7	Model 8	Model 9	Model 10	Model 11
Dependent variable: probability of an entrepreneur participate on non-profit entrepreneurship					
Engineering and technologies education (D)	0.273***	0.272***	0.272***	0.266***	0.269***
	[0.0395]	[0.0395]	[0.0395]	[0.0398]	[0.0401]
Business sciences education (D)	0.151***	0.151***	0.150***	0.131***	0.153***
	[0.0434]	[0.0434]	[0.0434]	[0.0439]	[0.0442]
Social sciences education (D)	0.633***	0.632***	0.631***	0.634***	0.645***
	[0.0299]	[0.0299]	[0.0300]	[0.0300]	[0.0302]
Humanities education (D)	0.859***	0.860***	0.860***	0.863***	0.872***
	[0.0491]	[0.0491]	[0.0491]	[0.0491]	[0.0494]
Industry experience (D)		0.247***	0.239***	0.238***	0.247***
		[0.0629]	[0.0739]	[0.0636]	[0.0638]
Entrepreneurial experience (D)			0.0102		
			[0.0506]		
Entrepreneurial experience non-profit sector (D)				2.209***	2.317***
				[0.204]	[0.217]
Entrepreneur age (%)					-1.30***
					[4.34 e-03]
Entrepreneur age^2 (%)					0.0180***
					[4.48e-05]
Female	0.0274*	0.0280*	0.0280*	0.0301*	0.0406**
	[0.0159]	[0.0159]	[0.0159]	[0.0159]	[0.0160]
Enterprise age	0.0232***	0.0232***	0.0232***	0.0233***	0.0229***
	[0.000390]	[0.000391]	[0.000391]	[0.000391]	[0.000412]
Enterprise size	-2.77e-05	-2.75e-05	-2.78e-05	-2.47e-05	-3.15e-05
	[4.94e-05]	[4.94e-05]	[4.94e-05]	[4.94e-05]	[5.01e-05]
Private funding (D)	-1.308***	-1.307***	-1.307***	-1.307***	-1.308***
	[0.0164]	[0.0164]	[0.0164]	[0.0164]	[0.0165]
Public funding (D)	0.479***	0.483***	0.483***	0.479***	0.498***
	[0.0829]	[0.0828]	[0.0828]	[0.0828]	[0.0826]
Metropolitan areas (D)	-0.0764***	-0.0776***	-0.0776***	-0.0825***	-0.0903***
	[0.0154]	[0.0154]	[0.0154]	[0.0155]	[0.0156]
Industry (D)	YES	YES	YES	YES	YES
Year (D)	YES	YES	YES	YES	YES
R^2	0.329	0.330	0.330	0.332	0.334
Loglikelihood	-16011.0	-16003.9	-16003.9	-15950.9	-15790.0
Observations	259891	259891	259891	259891	258914

Regions included on the model were divided as metropolitan areas and other municipalities (comunidades intermunicipais) using (nutsiii). Year dummys were included in the model in order to control to macroeconomic factors. D stands for dummy variables. Standard errors in parentheses. Significance levels *** p<0.01, ** p<0.05, * p<0.1

In table 8 the specific education variables are included, displaying statistically significant coefficients, consistent across all the models. Results show that specific education has a positive effect on the probability of creating and enrolling on non-profit entrepreneurship. Model 7 improves the explained variance to 32% comparing to model 1 (control model). Engineering and technologies education background show a positive and significant coefficient not supporting hypothesis 3a – engineering and technologies educational background influences negatively individuals to be non-profit entrepreneurs. Instead individuals would be motivated to enroll in a for-profit firm. The marginal effects (model 12, table 9,) evidences that an individual coming from engineering and technologies background would be prone to choose to engage in non-profit entrepreneurship by 0.09%. Correlation of the main variables are presented in table 9.

Table 9. Marginal effects of the probability for entrepreneurs to engage in non-profit organizations (Specific Human capital)

Variables	**Model 12**	**Model 13**	**Model 14**
Dependent variable: probability of an entrepreneur participate on non-profit entrepreneurship			
Engineering and technologies education (D)	0.0086***	0.0086***	0.0084***
	[0.0012]	[0.0012]	0.0012
Business Sciences education (D)	0.0048***	0.0047***	0.0041**
	[0.0013]	[0.0013]	[0.0013]
Social sciences education (D)	0.0201***	0.0201***	0.0200***
	[0.0009]	[0.0009]	[0.0009]
Humanities education (D)	0.0273***	0.0273***	0.0273***
	[0.0015]	[0.0015]	[0.0015]
Industry Experience (D)		0.0078***	0.0075***
		[0.0020]	[0.0020]
Non-profit Entrepreneurial Experience (D)			0.0700***
			[0.0065]
Female	0.0008*	0.0008*	0.0009*
	[0.0005]	[0.0005]	[0.0005]
Enterprise Age (%)	0.07***	0.07***	0.07***
	[1.4 e-05]	[1e-05]	[1e-05]
Enterprise Size	-8.83e-07	-8.76e-07	-7.84e-07
	[1.57e-06]	[1.57e-06]	[1.57e-06]
Private Funding (D)	-0.0416***	-0.0416***	-0.0414***
	[0.0006]	[0.0006]	[0.0006]
Public Funding (D)	0.0152***	0.0153***	0.0152***
	[0.0026]	[0.0026]	[0.0026]
Metropolitan Areas[a] (D)	-0.0024***	-0.0024***	-0.0026***
	[0.0004]	[0.0004]	[0.0004]
Industry (D)	YES	YES	YES
Year (D)	YES	YES	YES
Observations	259,891	259,891	259,891

[a] Regions included on the model were divided as metropolitan areas and other municipalities (comunidades intermunicipais) using (nutsiii). Year dummys were included in the model in order to control to macroeconomic factors.

Table 10. Correlation of the main variables

Non-profit entrepreneurs	1.0000																
Education level	0.0753	1.0000															
Humanities	0.0615	0.1690	1.0000														
Engineering and technologies	-0.0018	0.3748	-0.0160	1.0000													
Business Sciences	0.0030	0.3572	-0.0152	-0.0338	1.0000												
Social sciences	0.0965	0.3094	-0.0132	-0.0293	-0.0279	1.0000											
Industry Exp.	0.0111	0.0201	-0.0039	0.0083	0.0068	0.0118	1.0000										
Entrepreneurial Exp.	0.0013	0.0559	0.0042	0.0262	0.0350	0.0151	0.5110	1.0000									
Female	0.0469	0.0749	0.0405	-0.0685	0.0323	0.0718	-0.0076	0.0043	1.0000								
Entrepreneur age	0.0280	-0.1682	-0.0156	0.0005	-0.0704	-0.0438	-0.0267	-0.0684	-0.0347	1.0000							
Entrepreneur age^2	0.0323	-0.1621	-0.0146	0.0003	-0.0695	-0.0406	-0.0267	-0.0667	-0.0367	0.9899	1.0000						
Enterprise Age	0.1541	-0.0081	0.0119	0.0157	0.0015	0.0121	-0.0173	-0.0501	-0.0082	0.3165	0.3212	1.0000					
Enterprise Size	0.0392	0.0559	0.0157	0.0665	0.0146	0.0262	0.0005	0.0101	-0.0108	0.0177	0.0180	0.1100	1.0000				
Health industry	0.1554	0.2323	-0.0013	-0.0271	-0.0052	0.0550	0.0059	-0.0033	0.1018	-0.0119	-0.0090	0.0130	0.0054	1.0000			
Education industry	0.1343	0.1052	0.0655	-0.0033	0.0146	0.1453	0.0146	0.0089	0.0598	-0.0128	-0.0130	0.0068	0.0049	-0.0214	1.0000		
Private Funding	-0.2413	0.0389	-0.0083	0.0306	0.0268	-0.0135	-0.0008	0.0029	-0.0435	-0.0022	-0.0069	-0.0208	-0.0238	-0.0383	-0.0051	1.0000	
Public Funding	0.0396	0.0459	0.0052	0.0180	0.0013	0.0323	0.0013	0.0093	0.0066	0.0103	0.0112	0.0065	0.2820	0.0537	-0.0019	-0.0548	1.0000
Metropolitan Areas	0.0083	0.1468	0.0462	0.0573	0.0503	0.0605	0.0079	0.0049	0.0346	0.0647	0.0647	0.1109	0.0152	0.0441	0.0353	0.0585	0.0313

Business sciences education shows a positive effect on the probability of being enrolled in non-profit entrepreneurship. Marginal effects evidences that business sciences education enhances the probability of joining a non-profit organizations by 0.05%, holding other variables constant. Hypothesis 3b – business sciences educational background influences negatively individuals to be non-profit entrepreneurs is not supported. Social sciences education has a strong positive and significant impact, meaning that such educational background influence people to enroll in non-profit entrepreneurship. Marginal effects reveal that the probability of choosing to enroll in non-profit enterprise increase by 2%, holding other variables constant. Hence hypothesis 3c – social sciences educational background influences positively individuals to be non-profit entrepreneurs can be accepted. Analyzing humanities education variable, it has the strongest positive and significant coefficient, marginal effects show that it increases the probability of individuals to engage in a non-profit organization by 3% (model 12). Humanities educational background is the most likely to influence individuals to take part in non-profit entrepreneurship. Such results validate the hypothesis 3d – humanities educational background influences positively individuals to be non-profit entrepreneurs. Model 8 adds industry experience as a measure of specific work experience, enhancing the explained variance to 33%. Experience in the same industry as the organization that the entrepreneur currently engages shows a positive and significant impact on the probability of taking part on non-profit entrepreneurship. From the marginal effects (model 13) we can conclude that if an individual has industry experience it enhances the probability of engaging in a non-profit organization by 0,7%, holding other variables constant. Such results confirm the validation of hypothesis 4a – previous industry experience influences positively individuals to be non-profit entrepreneurs. Entrepreneurial experience was measured through two variables, one if the individual has experience as an entrepreneur, whether in a non-profit or for-profit organization, and a second variable related to previous entrepreneurial experience on a non-profit organization. Model 9 includes the entrepreneurial experience that displays a positive but not significant coefficient, meaning that it has no impact on influencing an individual to choose to enroll in non-profit activity. However previous entrepreneurial experience in the non-profit sector evidences a strong positive and significant coefficient (model 10). The probability of enrolling in non-profit entrepreneurship increases in 7% by having previous entrepreneurial experience in the non-profit sector (model 14). The inclusion of this variable improves the explained variance to 33.2% compared to the previous models. Hence hypothesis 4b – previous entrepreneurial experience influences positively individuals to be non-profit entrepreneurs, is partially supported by the results, it is validated when that experience is acquired in the non-profit sector.

Analyzing the control variables, we found that the gap between men and women in entrepreneurship is much smaller in non-profit organizations. Being a woman has a high positive impact on engaging in non-profit organization, corroborating that women are overall less likely to pursue entrepreneurial activities, but when they do, they are more prone to enroll in non-profit entrepreneurship (Harding 2006; Williams 2007; Van Ryzing et al. 2009). The difference between male and female enrollment in entrepreneurship lies on different characteristics and motivations: women are more risk averse, more insecure about their qualifications, judge opportunities more pessimistically (Bacq et al. 2013; Verheul and Thurik 2001). Women are compelled to set up businesses in order to pursuit of a social mission, but also for reasons of self-fulfillment and autonomy (Bruni et al. 2004). The voluntary sector and non-profit organizations provide more leadership and innovation opportunities to women and minorities (Santos 2012). Age also differs from for-profit to non-profit entrepreneurship. Our descriptive analyses state that the average non-profit entrepreneur is in their forties. Probit models regressions stress that younger people are more prone to enroll and create organizations in the context of non-profit sector than older people. Reasoning for this result might be connected with individual life stage. Younger people are searching for new forms of expressing civic engagement and are not so risk averse (Van Ryzing et al. 2009), however they may lack experience and resources to turn their activities into sustainable organizations (Parker 2009). The demographic variables at the firm level conclude that non-profit organizations are older than their counterparts, which is in line with literature that states that these organizations as older than their counterparts, particularly when they share the same industry as in the case of education and health industry (Rose-Ackerman 1996). The positive impact that public funding have on non-profit entrepreneurship evidence the importance and dependence of donations and governmental grants from the non-profit organizations (Miller and Wesley 2010; Young 2001). Regarding geographical distribution variable our data reveals that living in metropolitan areas influence negatively the engagement in non-profit entrepreneurship. Therefore our conclusions don't support the literature that states that urban regions provide better access to groups, networks, funding, more support for them (Van Ryzing et al. 2009). The inclusion of each year in the dataset allows perceiving a possible effect of the economic crisis the variables presents a negative and significant impact since 2006.

4.4 Concluding remarks and implications

The present work examines the determinants of being a non-profit entrepreneur, using individuals' human capital as a predictor for that choice. We applied a quantitative approach using econometric models, namely binary probit models to understand what influences the probability of an individual to be a non-profit entrepreneur. We conclude that non-profit entrepreneurship is influenced by the entrepreneur human capital both in the general and specific components. General human capital encompassing education and labor market experience affects positively the probability of an individual to engage in a non-profit organization. In particular higher levels of education enhance such probability, tertiary education revealed the most prominent effect when compared to primary education level. This conclusion corroborates the literature that found that individuals with tertiary education are more prone to be entrepreneurs in the non-profit sector (Bacq et al. 2013; Harding 2006; Van Ryzin et al. 2009). Specific human capital also impacts positively non-profit entrepreneurship. We studied different educational backgrounds as engineering and technologies, business sciences, humanities and social sciences, concluding that humanities and social sciences have the strongest effect on the probability of an individual to take part in non-profit entrepreneurship, but all showed a positive impact. Individuals with humanities and social sciences education are not usually portrayed as entrepreneurs and an important reason why, is because they fear that they did not have the necessary skills (Kupferberg 1998). Our results shows that humanities and social sciences education are important to non-profit entrepreneurship, supporting the stream of literature that claims for more attention and awareness to the relevance that non-business fields of education also have on entrepreneurship (Kupferberg 1998; Teixeira 2007). Literature acknowledges that engineers contribute to the economic development and quality of life, and our findings evidences that engineering and technologies influence positively the engagement in non-profit entrepreneurship. Specific work experience as previous experience in the same industry as the current organization is being started shown a positive relation with non-profit entrepreneurship, corroborating previous research that found that industry-specific human capital is relevant to organize an organization (Sharir and Lerner 2006) or a firm successfully (Baptista et al 2014; Rauch and Rijsdijk 2011). Specific work experience in the non-profit sector also displays a strong effect on the engagement on non-profit entrepreneurial activity. Our results are in agreement with authors that stress that for non-profit entrepreneurs the previous experience of owning or managing an organization gives them the confidence that they have competences to start an organization enabling them to start another (Harding 2006; Van Ryzin et al. 2009).

There has been a growing interest on non-profit entrepreneurship worldwide, but the field is still in an early stage and calls for further development (Van Ryzin et al. 2009). Some empirical studies have focused on the characterization of individuals that pursue entrepreneurial endeavor for social causes instead of economic goals (Harding 2006; Van Ryzin et al. 2009; Williams 2007). However empirical evidence gathered through secondary data is scarce and most studies use the same data set and some of them presented limitations, being unable to provide generalizable conclusions. This work brings an original contribution to the entrepreneurship and human capital literature extending our knowledge on the role that the entrepreneurs' human capital play on non-profit entrepreneurship, at the individual and firm level.

This work has several public policy implications. The impacts that the different education background has on non-profit entrepreneurship claims attention to the design of effective scholar programs, and policy measures that support non-profit entrepreneurship. Our findings regarding engineering and technologies background support literature that calls to the creation of educational strategies to support the engaging in engineering volunteerism activities in the universities and the creation of infrastructures to provide hands-on opportunities for students to do pro bono work (Saviz et al. 2012; Passino 2009). Hence engineering universities should integrate the social benefit of engineering in a global society through the development of courses, internships and extra-curricular activities focused on the socio-technical aspects of engineering, appropriate for the developing world (Saviz et al. 2012). Also there is a need to foster cooperation between universities and non-profit organizations. More attention by policy makers and higher education authorities should be attributing to fostering 'hands-on', non-profit entrepreneurship programs offered to students in rather neglected areas of studies in terms of entrepreneurial activities and research avoiding the mistake of confining entrepreneurial education related programs within business schools. Promoting non-profit organizations as an alternative business model within schools could foster the levels of non-profit entrepreneurial activity, resulting in greater inclusiveness in the enterprise culture agenda of populations traditionally under-represented such as women.

5. HOW DOES ORGANIZATIONS EMBED ENVIRONMENTAL VALUES IN THEIR PRACTICES?[14]

There has been a growing focus on the role that businesses play preserving the environment since the sixties (Bansal and Hoffman 2012; Van Marrewijk 2003). Despite an emerging literature on the role of large firms, the role of small and medium-sized firms remains underexposed (Bansal and Hoffman 2012; Aragón-Correa et al. 2008; Pacheco et al. 2010). This neglect is remarkable given the substantial impact of small and medium-sized firms on the natural environment with estimates of 60% to 70% of total pollution being produced by small and medium-sized firms (Aragón-Correa et al. 2008; European Commission 2010). Addressing the environmental impact of small and medium-sized firms requires a solid understanding of what drives individual small and medium-sized firms to engage in environmental practices. Too often policies are based on insights from large firms assuming that small and medium-sized firms are miniaturized versions of corporate firms (Aragón-Correa et al. 2008; Perrini et al. 2007).

The objective of this chapter is to develop a better understanding of what drives small and medium-sized firms to engage in environmental practices, and whether the drivers differ across types of environmental practices. Two types of environmental practices are distinguished: engagement in greening processes and in greening product and service offerings.

We address two important gaps in the literature. From a practical perspective, we address the call from the market and policy makers on small and medium-sized firms to lower the environmental impact of their products and processes (European Commission 2010). From a research perspective, we move beyond the predominant focus on large corporate firms focusing on small firms in “dirty” industries (Bansal and Hoffman 2012), and address the lack of differentiation between types of environmentally friendly activities (Halme and Laurila 2009; Uhlaner et al. 2012).

We investigate differences across small and medium-sized firms regarding their engagement in environmental behavior. Large-scale harmonized data for almost 8,000 small and medium-sized firms across 12 sectors in 36 countries are used to test the hypotheses. These data are retrieved from the 2012 Flash Eurobarometer survey on “small and medium-sized firms, resource efficiency, and green markets” (no. 342) that was conducted on behalf of the European Commission.

This study makes several contributions. *First*, our multi-country and multi-sector set-up is an extension of existing studies that are limited to a single country (Perrini et al. 2007; Uhlaner et al. 2012) and/or a single industry (Lepoutre and Valente 2012; Sine and Lee 2009). We investigate how differences between small and medium-sized firms regarding their environmental behavior depend on several firm-level characteristics, the tangibility of the business sector, and the stringency of

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14

During my period as a visiting scholar in Erasmus School of Rotterdam, established in the thesis working plan, Brigitte Hoogendoorn, Peter van der Zwan and I decided to start working on a study that addresses the environmental values. Therefore, complementing my work on social organizations with an environmental perspective. This study resulted from a team effort during two years and was presented by the authors in Research in Entrepreneurship and Small Business (RENT XXVII) Vilnius, Lithuania November 20-22, 2013. This chapter is based on: Hoogendoorn, B., Guerra, D., & van der Zwan, P. (2015). What drives environmental practices of SMEs?. Small Business Economics, 44(4), 759-781.

environmental legislation at the country level. Our research design hence allows for taking novel factors into consideration such as environmental legislation. In addition, our results are less hampered by sample specificity compared to existing empirical studies.

Second, by taking two types of environmental behavior into account, we investigate whether the conditions under which small and medium-sized firms engage in environmental practices differ across types of environmental practices. We address the call to consider multiple environmental practices when assessing firm behavior (Halme and Laurila 2009; Hockerts and Wüstenhagen 2010; Uhlaner et al. 2012).

Third, we take a stakeholder perspective (Freeman 1984) to formulate our hypotheses and to explain our results. Although this perspective has proven its value in the corporate social responsibility (CSR) literature (Clarkson 1995; Wood 1991), it has received less attention in regards the behavior and decision-making processes of smaller firms (Jenkins 2006). However, stakeholders groups are acknowledged to influence small and medium-sized firms' environmental decision-making processes such as employees (Sharma and Henriques 2005; Almazan et al. 2009), social movements (Sine and Lee 2009; Weber et al. 2008), customers (Kaenzig and Wüstenhagen 2010; Gershoff and Irwin 2012), and regulators (Kassinis 2012; Sharma and Henriques 2005).

The findings reveal that firm-level characteristics are relevant when explaining the environmental behavior of small and medium-sized firms. In addition, it is important to distinguish between the types of environmental practices. That is, the type of customers served only affects small and medium-sized firm's engagement in greening product and service offerings. In addition, small and medium-sized firms are more likely to engage in greening their product and service offerings when environmental legislation is strict. There is a more pronounced positive relationship between firm size and greening processes than between firm size and greening product and service offerings. Additional findings are that small and medium-sized firms active in resource-intensive or tangible sectors and small and medium-sized firms that receive financial support are more likely to be involved in both environmental practices.

This chapter is structured as follows. We describe the main concepts used in our study in section 2. The hypotheses are formulated in section 3 whereas section 4 describes our methodological set-up and the data. The results are presented in section 5, followed by a discussion and concluding remarks in section 6.

5.1 Environmental practices and small and medium-sized firms

The present work focuses on environmental practices of small and medium-sized firms.[15] Environmental practices include activities undertaken by firms aimed at reducing the impact of their operations and their products and services on the environment (Gadenne et al. 2009; Uhlaner et al. 2012). Examples of these activities are minimizing waste, saving on resources, recycling, and offering organically produced or eco-designed products. Environmental practices are closely related to concepts such as sustainable development, sustainable entrepreneurship and corporate social responsibility (CSR). A description of each concept is given below.

[15] Enterprises with 250 employees at most are considered SMEs (European Commission 2012a).

Sustainable development refers to the development that “meets the needs of current generations without compromising on the ability of future generations to meet their own needs” (WCED 1987, p.43). Related to the business realm, sustainable entrepreneurship refers to business practice that puts economic, social and environmental goals on equal footing (so-called ‘triple bottom line’) and emerged from two separate research streams (Hockerts and Wüstenhagen 2010): social entrepreneurship (Dacin et al. 2010; Mair and Martí 2006; Zahra et al. 2009) and environmental entrepreneurship (Cohen and Winn 2007; Dean and McMullen 2007; York and Venkataraman 2010). Whereas environmental entrepreneurship refers to disruptive rather than incremental innovation brought about by entrepreneurs who discover and exploit economic opportunities related to environmental issues (Hockerts and Wüstenhagen 2010), environmental practices refer to any deliberate environmentally friendly activity undertaken by firms. Finally, CSR can be defined as instances where a firm goes beyond compliance and engages in actions that appear to advance a social cause (McWilliams and Siegel 2001; Rodriguez et al. 2006). CSR literature mainly concerns large firms (Perrini 2006; Quinn 1997) and the findings of these studies cannot be generalized to small and medium-sized firms (Aragón-Correa et al. 2008; Spence and Rutherfoord 2003).

In relation to these associated concepts, we consider environmental practices as practical operationalizations of the three related concepts (Uhlaner et al. 2012). Research in sustainable development, sustainable entrepreneurship and even CSR not necessarily arrives at the level of what firms actually do to become more sustainable. However, since all contributions towards a more sustainable society emerge from actual practices our concept of environmental practices is broader than those practices related to sustainable entrepreneurship and CSR. Environmental practices include those activities that firms undertake that are not necessarily classified as entrepreneurial in the sense of seizing and exploiting market opportunities (Shane and Venkataraman 2000). In addition, where CSR is defined relative to legislation, actual environmental practices concern all activities undertaken by firms that reduce the impact of their operations on the environment. These activities include those that are necessary to meet environmental regulation (reactive strategies) and those that go beyond compliance (proactive strategies). We argue that solely focusing on activities that go beyond compliance is inappropriate in a cross-country setting because what is considered regulatory compliant varies across countries. In the present work environmental practices concern practices related to production processes as well as product and service offerings (Halme and Laurila 2009; Hockerts and Wüstenhagen 2010; Nidumolu et al. 2009; Uhlaner et al. 2012).

With regard to the attitude of small and medium-sized firms towards environmental practices, two contrasting views prevail in current literature. On the one hand, it is argued that small and medium-sized firms – as compared to large firms – are reluctant to engage in environmental practices and perceive social responsibility as a burden and a threat. On the other hand, small and medium-sized firms possess characteristics that may foster their engagement in environmental practices such as the observation that ownership and management are often not separated in small businesses. This provides the small and medium-sized firms’ owner-manager with control over the allocation of resources according to personal beliefs to affect business practices (Spence and Rutherfoord 2003) such as engagement in environmental practices.

We contend that these contrasting views (reluctance and willingness to engage) may well be related to different types of environmental practices. Conducting existing business operations more responsibly or developing new eco-friendly products and services are based on different business logic (Halme and Laurila 2009; Hockerts and Wüstenhagen 2010; Jenkins 2006) for which different antecedents such as stakeholder pressures are likely to exist. With respect to greening operational processes, signaling unexploited inefficiency improvements and cost reductions – through e.g. pressure of legislators by means of taxes and environmental regulations – may drive the reallocation of resources (Kassinis 2012; Horbach 2008; Buysse and Verbeke 2003). With respect to greening product and services, customers' willingness to pay for additional investments in products and services with environmental features may dominate the decision-making (Horbach 2008). More broadly, we hypothesize that the conditions under which small and medium-sized firms engage in environmental practices differ across types of environmental practices. We draw on a stakeholder perspective to formulate hypotheses.

5.2 Background and hypotheses

Several theoretical perspectives have been applied to examine socially responsible behavior of firms. For example, the perspective of agency theory has been used by Friedman (1970) who states that the only responsibility of firms is to make profits while accepting the rules, laws and customs in a particular context (Garriga and Melé 2004). Resources spent on socially responsible activities are merely seen as a means to further the personal goals of the agent (manager) and are not in the interest of the principle (shareholder). McWilliams and Siegel (2001) propose a theory of the firm perspective (Jensen 1988) where socially responsible behavior is viewed as an investment and hence a means to maximize profits. From a resource-based view of the firm socially responsible activities can constitute a valuable resource at the firm's disposal serving as a source for competitive advantage (Russo and Fouts 1997; Aragón-Correa and Sharma 2003; Strike et al. 2006). Specifically related to small and medium-sized firms, a social capital perspective has been put forward as a useful perspective explaining small and medium-sized firms' engagement in socially responsible behavior (Perrini 2006; Russo and Perrini 2010). For small and medium-sized firms operating in a more informal and less structured setting, trust, norms and interpersonal relationships are highly relevant in their decision-making processes.

Despite these and other theoretical perspectives that have been put forward, the stakeholder perspective dominates literature concerning large firms (Clarkson 1995; Donaldson and Preston 1995; Jamali 2008; McWilliams and Siegel 2001; Wood 1991). However, this perspective has received less attention in regards the environmentally responsible behavior and decision-making processes of smaller firms. Despite our acknowledgement that small and medium-sized firms and large firms have different characteristics (Storey and Greene 2010) the idea that the expectations and interests of a wide variety of actors influence strategic choices also applies to small and medium-sized firms (Jenkins 2006; Perrini 2006). Next, the stakeholder perspective is described and hypotheses are formulated accordingly.

5.2.1 Stakeholder perspective

Stakeholders can be defined as: "any group or individual who can affect or is affected by the achievements of the organization's objectives." (Freeman 1984, p.25). In order to survive, grow and be successful, a firm must create value for its stakeholders such as employees, financiers, customers, government and suppliers. Stakeholder theory takes account of competing claims that different stakeholder groups have (Child 1972, 1997; Donaldson and Preston 1995; Ogden and Watson 1999) and as such, relates to strategic choices. Currently, it is widely accepted that strategic decision-making requires taking into account the expectations, interests and competing claims of a wide variety of stakeholders (Van Marrewijk 2003). Stakeholder theory has been proven fundamental in explaining behavior and actions of firms with regards to social responsibility (Clarkson 1995; Wood 1991).

The group of stakeholders that has the greatest impact on the environmental strategy of a firm can be classified as the primary stakeholder group (Buysse and Verbeke 2003; Buzzelli 1991). This group consists of those stakeholders that maintain a formal relationship with the firm, such as employees, customers, suppliers, and shareholders. Primary stakeholders are directly relevant to the firm's survival, growth and profitability (Buzzelli 1991). Examples of primary stakeholder claims are customers who require environmental attributes to the products purchased, employees calling for safe workplace amenities, and investors applying environmental investment screens.

The group of secondary stakeholders includes regulators, competitors, support organizations, NGOs, communities, media, and other institutional forces (Campbell 2007). This secondary group of stakeholders is relevant because they secure and enhance the firm's social legitimacy and play a crucial role in moving the firm toward engaging in sustainable behavior (Garriga 2004; Porter and Kramer 2006; Russo and Fouts 1997). Priority that is given to competing stakeholder claims is dynamic, varies over time, and depends on the issue considered (Buysse and Verbeke 2003; Mitchell et al. 1997). We contend that primary and secondary stakeholder groups exert different pressures on the types of environmental practices of firms.

5.2.2 Hypotheses

The stakeholder framework is used as a rationale to formulate hypotheses. Firm size and tangibility of a firm's business sector are used as a proxy for a small and medium-sized firms' susceptibility to primary and secondary stakeholder claims. For the type of market served and external support we argue that customers and providers of external support are primary stakeholder groups exerting influence on strategic decision-making related to environmental issues. Finally, stringency of environmental legislation is used as an indication for the influence of regulatory institutions representing an important secondary stakeholder.

Firm size

Several studies indicate that firm size affects the environmental strategies of firms (Bianchi and Noci 1998). In line with Uhlaner et al. (2012) we contend that size differences are also relevant within the category of small and medium-sized firms. Next we provide a brief overview of the main arguments.

Arguments suggesting a positive relationship between firm size and engagement in environmental practices dominate the debate: small firms are reluctant when it comes to socially responsible behavior. *First*, a presumed lack of resources characterizing small and medium-sized firms (Aragón-Correa et al. 2008; Chen and Hambrick 1995) hinders them to respond to stakeholder claims (Lepoutre and Heene 2006; Uhlaner et al. 2012). *Second*, small firms' investments in environmental practices may be hard to justify from the viewpoint of scale economies and negligible market shares (Bianchi and Noci 1998). Whereas these two arguments mainly relate to primary stakeholders such as managers, owner-managers and employees directly involved in environmental decision-making, a *third* argument relates size to secondary stakeholders. Due to their size small firms are less visible to media and public. Because small firms enjoy a certain degree of anonymity related to these secondary stakeholders such as environmental activists, they are less likely to engage in environmental practices than large firms (Aragón-Correa et al. 2008; Bianchi and Noci 1998; Chen and Hambrick 1995).

So far, empirical evidence indeed points at a positive relationship between firm size and environmental practices (Perrini et al 2007; Uhlaner et al. 2012). However, no distinction has been made between types of environmental practices. For example, Block and Wagner (2014) find in a sample of large US firms that family firms, depending on different stakeholder claims, are more inclined to address product-related aspects of CSR compared to other CSR aspects. This distinction is important because different arguments or stakeholder considerations may be at play across types of environmental practices. Beyond the three arguments above, we hypothesize that arguments in favor of a negative relationship between firm size and environmental practices are more likely to apply to green product and service offerings compared to greening processes. *First*, small firms are assumed to be more innovative and less likely to be hindered by fear of cannibalizing market share of current product offerings (Aragón-Correa et al. 2008; Hockerts and Wüstenhagen 2010). *Second*, it is argued that a viable and effective strategy for small firms is to produce specialty products and services for niche markets that are unattractive for larger firms to address (Lee et al. 1999; Lescure 1999). Related to environmental practices, both arguments suggest that small firms can justify R&D expenditures for green product development to serve an eco-niche. These arguments seem less relevant to the greening of operational processes.

Hence, we hypothesize that the arguments in favor of a positive relationship between firm size and environmental practices dominate in case of greening processes and that opposing arguments apply to greening product and service offerings. While we do not expect a significant association between firm size and greening products and services, we formulate the following hypothesis for greening processes:

Hypothesis 1: Firm size is *positively* related to engagement in greening processes.

Tangibility of firm's business sector.

Industry-specific circumstances pose different environmental threats and opportunities and, therefore, influence the environmental practices of firms including small and medium-sized firms (Aragón-Correa et al. 2008; Perrini et al. 2007). For example, in resource-intensive or tangible sectors such as construction or manufacturing economizing on resources fits business logic (Orsato 2006;

Williamson 1991). High levels of impact on the environment not only generate opportunities to realize cost reductions but also offer the potential to generate competitive advantage by differentiating from other firms (Orsato 2006; Uhlaner et al. 2012). A second argument for a positive relationship between sector tangibility and small and medium-sized firms' environmental behavior from a stakeholder perspective is that firms in resource-intensive or tangible industries face high levels of processing costs and cause more environmental damage. These firms are, therefore, more likely to be closely monitored by primary and secondary stakeholder groups which makes them more likely to adopt environmental strategies (Williamson et al. 2006) compared to firms in less resource-intensive industries.

Although these arguments intuitively make sense, empirical evidence is scarce. An exception is Graafland et al. (2003) who study a sample of Dutch firms and find that firms in the metal manufacturing and construction sectors are more engaged in environmental practices than firms in the financial service sector and retail sector. Building on the terminology as used in Uhlaner et al. (2012) and Brand and Dam (2009) we formulate the following hypotheses:

Hypothesis 2a: The tangibility of a firm's business sector is *positively* related to engagement in greening processes.

Hypothesis 2b: The tangibility of a firm's business sector is *positively* related to engagement in greening product and service offerings.

Type of market served.

In line with our previous argument on sector's tangibility, we suggest that the markets served are related to the type of environmental practice. From the stakeholder perspective we argue that firm's decision-makers will focus their environmental strategies towards those primary stakeholder groups that are most relevant to them. We hypothesize that firms that serve consumer markets are more likely to be associated with product innovation as a means to create competitive advantage (Orsato 2006; Porter and van der Linde 1995). With a growing concern for the environment, final consumers increasingly value the environmental attributes of products and services and are willing to pay a premium. This holds in particular when the choice for and the use of green products is observable by others which is more likely the case when final consumers are served (Gershoff and Irwin 2012). For firms serving business markets (in particular in the case of semi-finished products), it is more difficult to differentiate their product offerings to final consumers. Hence in the latter case return on additional investments in eco-design and eco-efficient product attributes is likely to be lower. In sum, we expect greening processes to prevail when business markets are served and greening product and service offerings to prevail when consumer markets are served. We formulate the following hypotheses accordingly:

Hypothesis 3a: Selling to business markets rather than consumers directly is *positively* related to engagement in greening processes.

Hypothesis 3b: Selling to business markets rather than consumers directly is *negatively* related to engagement in greening product and service offerings.

External support.

Financial and non-financial resources are crucial for any firm in order to start, grow and survive. One of the fundamental differences between large and small firms is their actual access to resources, in particular financial resources (Ang 1991; Berger and Udell 1998). Small firms often do not have enough financial resources to support their activities and investments and mainly rely on internal sources such as personal savings and retained profits whereas large firms have access to a wider range of resources including equity finance and term loans (Berger and Udell 1998). Regarding green behavior, literature has stressed that small firms find it difficult to engage in environmental practices because of the financial costs involved (Roberts et al. 2006; Simpson et al. 2004; Pacheco et al. 2010).

Next to a lack of financial resources, small firms are considered to have low standards of "ecoliteracy" (Tilley 1999; Bradford and Fraser 2008), i.e. although small and medium-sized firms may have the willingness to become more environmentally active, they lack the ability or conditions. Indeed, many small and medium-sized firms are deficient in their knowledge of environmental legislation (Simpson et al. 2004) and skills needed to implement environmental practices. This lack of knowledge may be overcome by external support such as advice and assistance from public and private institutions.

We expect that the providers of both financial and non-financial support exercise influence on the decision-making processes. However, we believe that non-financial support is less binding than financial support. The role of the primary stakeholder groups in case of financial support is expected to be more influential than in case of non-financial support. Some empirical evidence reveals that small and medium-sized firms are more in need of financial rather than non-financial assistance when engaging in environmental practices. That is, Pimenova and Van der Vorst (2004) show that small and medium-sized firms are twice as likely to report that financial aspects are obstacles to environmental implementations compared to a lack of information. In sum, we hypothesize the following:

Hypothesis 4a: Receiving external support is *positively* related to engagement in greening processes. This positive relationship is stronger for external financial support than for external non-financial support.

Hypothesis 4b: Receiving external support is *positively* related to engagement in greening product and service offerings. This positive relationship is stronger for external financial support than for external non-financial support.

Environmental legislation.

A sharp increase in environmental regulation in the past four decades (United Nations 2012) points at a strong conviction that government intervention serves as an effective mechanism to curb environmental degradation. As a secondary stakeholder, legislative bodies influence environmental decision-making by means of firms by gaining or retaining their license-to-operate (Halme and Laurila 2009) or avoid penalties for noncompliance. However, the effectiveness of environmental regulation as a driver of environmentally friendly behavior of firms remains debated (Kassinis 2012). Whereas the effect of environmental legislation on firm performance has received considerable attention in literature (Margolis et al. 2007; Russo and Fouts 1997) the impact on the extent and types of environmental practices has not (Halme and Laurila 2009; Kassinis 2012). In addition, the debate is dominated by environmental behavior *relative* to legislation in terms of compliance. The distinction between proactive and reactive environmental strategies plays an important role in this context (Bianchi and Noci 1998; Buysse and Verbeke 2003). Several authors suggest that small and medium-sized firms tend to adopt reactive strategies (i.e. not go beyond compliance) because proactive strategies require additional resources and skills (Bianchi and Noci 1998; Russo and Fouts 1997). However, the extent to which firms are compliant with environmental legislation ignores the stringency of regulation which is relevant in a cross country setting. Indeed, being compliant in Turkey may involve different effort than being compliant in Sweden. Given that we focus on actual environmental practices as discussed in Section 2, we take account of the stringency of environmental legislation.

Environmental legislation can take many forms and much research is devoted to assessing different regulatory instruments. Following Coglianese and Anderson (2012), these environmental laws and regulations can broadly be divided into five categories: (1) means standards (i.e. installation of pollution control technologies), (2) performance standards (i.e. standards to limit firms' emission levels), (3) environmental taxes and emission trading (i.e. putting a price on the release of pollution), (4) information disclosure (i.e. firms are required to publically report on the pollution they emit), and finally, (5) management-based regulation (i.e. firms are forced to undertake certain management activities such as environmental planning). To the best of our knowledge, there are no studies that investigate the effect of these regulations on types of environmental practices. However, it is interesting to note that all these different regulations, irrespective of their effectiveness, seem to be related to operational processes. Despite the fact that sustainable development includes the ecological impacts and resource intensity throughout the entire life cycle of products and services (Côté et al. 2006) it seems easier for regulative institutions to address negative externalities such as 'greenhouse gasses' and waste resulting from actual operational processes than to convince firms to change the products and services they are offering. With few exceptions of products and services that are extremely harmful to the environment or to the general public such as chemical weapons, it is more likely that regulations focus on operational processes. Hence, assuming that environmental legislation indeed influences the decision-making of firms, we expect that the stringency of environmental legislation has a stronger influence on greening processes because *how* products and services are being produced is more liable for legislation than *what* is being produced. Hence, we do not hypothesize a significant relationship between environmental legislation and greening product and service offerings, but formulate the following hypothesis for greening processes:

Hypothesis 5: Stringency of environmental legislation is *positively* related to engagement in greening processes.

5.3 Data and method

Data source

To investigate small and medium-sized enterprises' engagement in environmental practices we use information from the Flash Eurobarometer survey on "small and medium-sized enterprises, resource efficiency, and green markets" (no. 342) that was conducted on behalf of the European Commission. Telephone interviews were carried out with about 11,000 businesses in the 28 Member States of the

European Union and an additional 2,100 in Albania, Iceland, Israel, Liechtenstein, Macedonia, Montenegro, Norway, Serbia, Turkey, and the United States. This chapter focuses on the environmental practices of small and medium-sized enterprises; firms with more than 250 employees are therefore excluded from the sample. The observations from Albania and Montenegro are excluded as well because of data limitations.[16] Together with other data restrictions – mainly the exclusion of observations with missing values for one or more main variables or control variables – the final sample consists of 7,700 small and medium-sized enterprises.

The telephone interviews were conducted by TNS Political & Social between January 24 and February 10, 2012. TNS is an established organization in the area of international data collection and has been consistently responsible for the execution of Flash Eurobarometer surveys from September 2011 onwards. In addition, TNS has been in charge of the fieldwork for standard Eurobarometer surveys from 2004 onwards. TNS therefore has vast experience in data collection among firms – like in the present survey – and persons, the associated field work, and translating questionnaires for (Flash) Eurobarometer surveys.

Firms were randomly drawn from an international business database[17] with a stratification procedure along the dimensions of firm size (three categories: 1-9 employees; 10-49 employees; 50 employees or more) and sector (four categories: manufacturing; retail; services; industry). Hence, the survey covers businesses employing at least 1 person in the manufacturing (NACE C), retail (G), services (H/I/J/K/L/M) and industry (B/D/E/F) sectors. Quotas are used for each of the resulting 12 cells, and possibly adjusted to ensure enough observations in each cell. At the same time, the projected sample size is 100, 200, 300, 400, or 500, depending on the particular country.[18] A centralized e-call center was used from which all interviews were carried out.

This Flash Eurobarometer survey is the first extensive survey on the topic of small and medium-sized firms and green markets that includes relevant information on the green economy. A description of the variables that are included in our analyses is given below.

Dependent variables

Greening processes

To measure their engagement in greening processes, small and medium-sized firms reveal their investments in resource efficiency as a percentage of annual turnover. Following the World Commission on Environment and Development (WCED 1987), sustainable development entails the reduction of environmental impacts by improving resource efficiency including reducing material intensity, maximizing use of renewable resources, and enhancing recyclability energy intensity (Côté et al. 2006).

[16] Specifically, information about the stringency of environmental legislation is not available for Albania, and there are too few Montenegrin observations to draw reliable conclusions on basis of the regressions in Section 5.

[17] The exact source from which the sample is selected is not revealed by TNS because of confidentiality issues.

[18] An overview of the numbers of interviews in each country and names of the TNS institutes that are responsible for data collection is provided on page 4 of the following document of the European Commission: http://ec.europa.eu/
public_opinion/flash/fl_342_anx_en.pdf.

These resource efficient activities are similar to the ones referred to in our dataset which is why we call the dependent variable “greening processes”. The extent to which small and medium-sized firms invest in resource efficient activities is therefore used as an indication for their engagement in greening processes. We distinguish between no investments (0% of annual turnover), minor (1%-10%), substantial (11%-50%) and large (51% or more) investments.[19]

Greening product and service offerings

The involvement in greening products and service offerings is measured in a similar way, ranging from no involvement at all to specific percentages of a firm’s most recent annual turnover. We distinguish between no involvement (0% of annual turnover), minor (1%-10%), substantial (11%-50%) and large (51% or more) involvement in green products and services.[20]

Independent variables

Firm size

We distinguish between micro firms (1-9 employees; reference category), small firms (10-49 employees) and medium-sized firms (50-249 employees).

Sector tangibility

We follow the suggestions of Uhlaner et al. (2012) and Brand and Dam (2009) that the exploitation of natural resources and the capacity to have a negative impact on environment depend on the firm’s sector in which it is active. We adopt a classification of the industry in terms of the tangibility of the sector, distinguishing between (tangible) products, tangible services, and intangible services. In line with Uhlaner et al. (2012) and Brand and Dam (2009) we define sector tangibility as a sector’s use of natural resources as well as its potential to pollute.

Specifically, tangible product sectors include manufacturing (NACE C) and construction (F), and also mining and quarrying (B), electricity, gas, steam and air conditioning (D), and water supply, sewerage and waste management (E). Tangible service sectors include wholesale and retail (NACE G), transportation and storage (H), and accommodation and food service (I). Finally, intangible service sectors include information and communication services (J), financial and insurance activities (NACE

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[19] SMEs are first asked the following question: “What actions is your company undertaking to be more resource efficient?” One or more alternatives can be selected from the following list of resource efficient activities: saving water, saving energy, using predominantly renewable energy, saving materials, minimizing waste, selling crap material, and recycling. Actions not listed may also be answered. If an SME undertakes at least one resource efficiency action a follow-up question is asked about the fraction of last year’s turnover the SME has invested to be more resource efficient. The following answer possibilities are read out by the interviewer: 1%-5%; 6%-10%; 11%-30%; 31%-50%; 51%-75%; and 76%-100%. These intervals have been transformed into 1%-10%, 11%-50%, and 51%-100% by the authors.

[20] The relevant question in the questionnaire is “Does your company offer green products or services?” If this question is answered affirmatively, a second question is asked about the percentage of turnover that the green products or services represent (“How much do these green products or services represent in your turnover of the latest available fiscal year?”). The intervals in the questionnaire have been transformed into 1%-10%, 11%-50%, and 51%-100% by the authors.

K), real estate activities (L), and professional, scientific and technical activities (M). Sectors that represent intangible services are treated as the reference category.

Type of market served

We use a categorical variable to take account of the type of market being served: the consumer market (reference category), the business market, or the public administration market. The classification is based on a self-report from the interviewee where the relevant question is “Is your company selling its products or services directly to consumers, to other companies, or to public administration?” small and medium-sized firms can also serve combinations of these three markets; this possibility is taken into account by means of a separate category for this variable in the regressions.

External support

To evaluate the influence of external support on small and medium-sized enterprises’ engagement in environmental practices, we use two questions depending on the type of environmental practice. One question refers to small and medium-sized enterprises’ external support regarding greening processes: “Which type of external support does your company get in relation to its environmental actions?” The answer possibilities are no external support, non-financial external support (e.g., advice or other non-financial assistance from private consulting companies), and financial external support (e.g., grants, or private funding from banks, friends or relatives). The second question relates to the offering of green products and services: “Which type of external support does your company get for the production of its green products and services?” The same answer possibilities apply as for the first question on green processes. The category representing no external support will be used as the reference category in our regressions.

Environmental legislation

We include a country-specific measure of the stringency of environmental legislation, following Manderson and Kneller (2012), which captures differences in environmental policy across countries. The stringency of environmental legislation was obtained by assessing country experts’ opinions about the question “How would you assess the stringency of your country’s environmental regulations?” (Global Competitiveness Index 2012, World Economic Forum). Low values indicate lax regimes whereas a high value indicates that a country’s environmental regulations belong to the world’s most stringent. In our set of countries low values can be found for Bulgaria, Greece, Romania, United Kingdom, and Turkey (values below 4) and high values for Austria, Denmark, Finland, Germany, the Netherlands, and Sweden (values above 6).

Control variables

Environmental practices

First of all, we control for each type of environmental practice in our regression models. That is, when explaining small and medium-sized enterprises' involvement in greening processes we control for the fact whether small and medium-sized firms are engaged in greening their product and service offerings, and *vice versa*. We expect a positive correlation between both types of environmental practices.

We include three additional control variables: firm age, a firm's proactive versus reactive behavior in terms of its compliance with environmental legislation, and the presence of an environmental management system. Country dummy variables are added to the model specifications to control for country-specific influences.

Firm age

There is reason to assume a priori that firm age influences the extent to which small and medium-sized firms engage in environmental practices. On the one hand, Neubaum et al. (2004) suggest that the liability of newness, resource scarcity and persistent concerns about venture survival experienced by young firms could influence their ethical behavior in a negative way. On the other hand, Hockerts and Wüstenhagen (2010) suggest that young firms would be more susceptible to be involved in environmental practices.

Firm age is included as a categorical variable distinguishing between firms that have been in existence for 2 years at most (reference category), between 3 and 5 years, between 6 and 10 years, and more than 10 years.

Proactive versus reactive

Firms could show proactive or reactive behavior in terms of their compliance with environmental legislation. Firms are considered to adopt reactive strategies if they comply with environmental legislation whereas proactive strategies are carried out if firms go beyond environmental legislation where environmental concerns could even belong to a firm's top priorities (Bianchi and Noci 1998). A dummy variable capturing this proactive versus reactive typology is created with value 1 if firms go beyond environmental legislation and value 0 if firms comply with legislation but do not wish or are not able to go beyond.

Environmental management system

Environmental management system is a dummy variable that assesses whether a firm has implemented an environmental management system (value 1) or not (value 0).

The exact definitions and some descriptive statistics of the variables can be found in table 11.

Table 11. Summary statistics and definitions.

Variable	Categories/definition	%
Dependent variables:		
Greening processes	- 0% of annual turnover[#]	9
	- 1%-10% of annual turnover	84
	- 11%-100% of annual turnover	7
Greening product/service offerings	- 0% of annual turnover[#]	71
	- 1%-10% of annual turnover	14
	- 11%-50% of annual turnover	7
	- 51%-100% of annual turnover	7
Independent variables:		
Firm size	Number of employees:	
	- 0-9[#]	77
	- 10-49	19
	- 50-249	4
	Last year's turnover:	
	- <100k euro[#]	30
	- 100k-500k euro	36
	- 500k-2 million euro	22
	- >2 million euro	12
Sector tangibility	- Intangible services[#]	23
	- Tangible services	44
	- Tangible products	33
Type of market served	- Consumers only[#]	32
	- Other companies only	25
	- Public administration only	2
	- Multiple markets	42
External support (processes)	- None in relation to processes[#]	52
	- Non-financial external support only	33
	- Financial external support	15
External support (products/services)	- None in relation to products/services[#]	70
	- Non-financial external support only	13
	- Financial external support	17
Environmental legislation (country variable)	Question: "How would you assess the stringency of your country's environmental regulations?"	Mean: 4.99; St. dev.: 0.90
Control variables:		
Firm age	- 2 year or less[#]	5
	- 3 to 5 years	15
	- 6 to 10 years	21
	- >10 years	59
Proactive versus reactive	1 if small and medium-sized firms goes beyond compliance; 0 otherwise	21
Environmental management system (environmental management system)	1 if small and medium-sized firms uses at least one environmental management system; 0 otherwise	19

Source: Flash Eurobarometer survey on "small and medium-sized enterprises, resource efficiency, and green markets" (no. 342, 2012) or Global Competitiveness Index (2012, World Economic Forum) for environmental legislation. Numbers in the last column represent percentages of firms belonging to a specific category. The sample consists of 7,700 observations except for external support for processes (7,201 observations) and external support for products/services (2,307 observations). The numbers are weighted according to firm size and sector. [#] Reference category in regressions.

There are very few small and medium-sized firms (only 70 in total) that have large investments (more than 50% of annual turnover) in greening processes. We therefore merge the upper two categories and proceed with three categories for this dependent variable: no investments (0% of annual turnover), minor investments (1%-10% of turnover), and a remaining category indicating substantial or large investments (11%-100% of turnover). For greening product and service offerings we maintain the four original categories.

5.4 Results

Results on the extent of engagement

In this subsection we focus on the *extent* of environmental practices of small and medium-sized enterprises. Table 12 shows the distributions of the two dependent variables for each country. A first observation is that many small and medium-sized firms are involved in greening their processes. That is, almost one tenth of all small and medium-sized firms (9%) are not engaged in greening their processes at all. The 0% belonging to Portugal and the United States stands out, together with the high percentages of no engagement in some Eastern or Southeastern European countries such as Estonia (31%), Macedonia (29%), Romania (23%) and Lithuania (21%). These percentages are in sharp contrast with the observation that on average more than two thirds of small and medium-sized firms (71%) do not offer green products and services. Interestingly, the average supply of green products and services is rather high with 15% of all small and medium-sized firms having more than 10% of their turnover represented by green products and services. High percentages with this respect are found in Northern European countries such as Norway (27%), Sweden (22%) and Finland (17%). Low percentages, on the other hand, can again be observed in some Eastern and Southeastern European countries such as Hungary (1%), Croatia (7%), Macedonia (7%) Bulgaria (8%), Romania (10%), but also in Portugal (4%) and Turkey (5%).

Table 12. Country averages greening processes and greening product/service offerings.

	Obs.	Greening processes			Greening product/service offerings			
		0%	1%-10%	11%-100%	0%	1%-10%	11%-50%	51%-100%
European Union:								
Austria	209	4	90	6	63	12	15	10
Belgium	207	10	85	5	72	13	9	6
Bulgaria	256	15	78	8	75	17	3	5
Croatia	146	10	87	3	77	16	0	6
Cyprus	95	9	84	7	76	10	8	5
Czech Republic	257	8	89	3	78	10	5	6
Denmark	268	16	81	3	68	16	8	8
Estonia	176	31	67	1	81	7	3	9
Finland	327	4	91	5	67	16	8	9
France	314	3	95	1	71	16	11	2
Germany	268	7	88	5	61	21	12	6
Greece	294	15	80	5	66	11	5	17
Hungary	215	6	85	8	88	11	1	0
Ireland	189	2	97	1	58	21	8	13
Italy	221	6	87	7	67	16	8	9
Latvia	281	14	79	6	76	9	6	9
Lithuania	272	21	73	6	76	13	6	4
Luxembourg	108	7	90	3	71	14	13	2
Malta	67	15	81	4	89	1	6	4
Netherlands	243	6	82	11	72	11	7	9
Poland	346	8	84	8	67	17	7	9
Portugal	234	0	88	12	75	21	1	3
Romania	225	23	70	7	83	7	3	7
Slovakia	289	6	89	5	68	16	6	9
Slovenia	293	11	71	18	63	13	12	13
Spain	262	2	92	6	74	14	7	5
Sweden	283	6	85	9	65	13	17	5
United Kingdom	270	2	93	5	66	17	5	12
Other countries:								
Iceland	91	11	87	1	72	16	6	7
Israel	101	13	75	12	70	17	4	9
Liechtenstein	65	8	89	3	71	15	4	10
Macedonia	129	29	62	8	80	13	1	6
Norway	233	5	91	4	53	20	17	10
Serbia	113	8	82	10	78	11	4	7
Turkey	211	8	67	25	85	10	4	1
United States	142	0	95	5	64	24	5	7
Total	7,700	9	84	7	71	14	7	7

Source: Flash Eurobarometer survey on “small and medium-sized enterprises, resource efficiency, and green markets” (no. 342), 2012.

The numbers represent percentages of the national sample belonging to a category, and are weighted according to firm size and sector. The sample consists of 7,700 observations.

5.4.1 Results on the conditions of influence on engagement

Next, we investigate the *conditions* under which small and medium-sized firms engage in environmental practices by performing ordered logit regressions. Before turning to the regression results we first address potential concerns for the presence of multicollinearity. Table 13 shows the Spearman correlation coefficients between the independent and control variables. The correlation coefficients and variance inflation factors (VIF; not tabulated, but all below 10; Hill and Adkins 2001) do not raise a concern for multicollinearity. The only noteworthy correlation is that between the two measures of firm size (0.62) which will be included in separate model specifications later on. The highest VIF values are found for the categories of firm age, but they are still comfortably smaller than the critical value of 10 as suggested by Hill and Adkins (2001).

Table 13. Correlation table.

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.
1. Firm size: employees																		
2. Firm size: turnover	0.62																	
3. Tangibility: intangible services	-0.05	-0.06																
4. Tangibility: tangible services	-0.03	0.03	-0.29															
5. Tangibility: tangible products	0.06	0.02	-0.43	-0.73														
6. Market type: consumers	-0.15	-0.21	-0.03	0.16	-0.12													
7. Market type: companies	0.12	0.13	0.01	-0.07	0.06	-0.37												
8. Market type: public administr.	0.03	0.03	0.04	-0.04	0.01	-0.08	-0.09											
9. Market type: multiple markets	0.01	0.06	0.01	-0.06	0.05	-0.50	-0.57	-0.13										
10. Support processes: none	-0.14	-0.13	0.06	0.02	-0.06	0.04	-0.01	-0.04	-0.01									
11. Support processes: non-financial	0.10	0.11	-0.03	-0.02	0.04	-0.06	0.03	0.02	0.03	-0.72								
12. Support processes: financial	0.06	0.03	-0.04	0.00	0.03	0.03	-0.02	0.03	-0.02	-0.41	-0.34							
13. Support product/serv.: none	-0.10	-0.06	0.02	0.07	-0.08	0.03	-0.02	-0.06	0.00	0.34	-0.09	-0.32						
14. Support product/serv.: non-fin.	0.07	0.04	-0.01	-0.05	0.05	-0.07	0.02	-0.01	0.04	-0.20	0.24	-0.05	-0.59					
15. Support product/serv.: financial	0.06	0.04	-0.02	-0.04	0.05	0.02	0.00	0.08	-0.04	-0.22	-0.12	0.43	-0.67	-0.21				
16. Environmental legislation	-0.01	0.19	0.04	-0.02	-0.01	-0.06	0.02	-0.03	0.04	0.02	0.01	-0.04	0.09	-0.04	-0.07			
17. Firm age	0.24	0.28	-0.05	0.01	0.03	-0.05	0.01	-0.01	0.03	-0.04	0.05	-0.01	0.00	0.06	-0.05	0.09		
18. Proactive versus reactive	0.12	0.13	0.02	-0.01	0.00	-0.05	0.02	0.01	0.02	-0.09	0.04	0.08	-0.02	-0.02	0.04	0.06	0.03	
19. Environm. management system	0.25	0.22	-0.07	-0.06	0.11	-0.10	0.03	0.03	0.04	-0.20	0.11	0.13	-0.18	0.10	0.12	-0.02	0.10	0.15

Source: Flash Eurobarometer survey on “small and medium-sized enterprises, resource efficiency, and green markets” (no. 342), 2012.

Spearman correlation coefficients are calculated. The correlations are based on 7,700 observations except for external support for processes (7,201) and external support for products/services (2,307).

The estimation results are displayed in two tables: table 14 provides the results of small and medium-sized firms' engagement in greening processes.

Table 14. Ordered logit regression. Dependent variable: *greening processes*.

	Model 1		Model 2		Model 3		Model 4	
	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE
Hypothesis 1:								
Size: 0-9 empl.#								
Size: 10-49 empl	0.31***	(0.08)			0.01	(0.11)	0.30***	(0.08)
Size: 50-249 empl.	0.17	(0.10)			-0.58***	(0.15)	0.15	(0.10)
Size: <100k euro#								
Size: 100k-500k euro			0.30**	(0.11)				
Size: 500k-2 million euro			0.42***	(0.11)				
Size: >2 million euro			0.27*	(0.11)				
Hypotheses 2a and 2b:								
Tangibility: intangible services#								
Tangibility: tangible services	0.27*	(0.11)	0.25*	(0.11)	0.28	(0.18)	0.29**	(0.11)
Tangibility: tangible products	0.58***	(0.10)	0.57***	(0.10)	0.60***	(0.17)	0.59***	(0.10)
Hypotheses 3a and 3b:								
Market type: consumers#								
Market type: companies	-0.15	(0.10)	-0.15	(0.10)	-0.12	(0.13)	-0.08	(0.09)
Market type: public administr.	-0.60*	(0.24)	-0.61*	(0.24)	-0.33	(0.35)	-0.47	(0.24)
Market type: multiple markets	0.01	(0.09)	-0.01	(0.09)	-0.12	(0.12)	0.02	(0.09)
Hypotheses 4a and 4b:								
Support: none#								
Support: non-financial					0.21	(0.12)		
Support: financial					0.89***	(0.12)		
Hypothesis 5:								
Environmental legislation							-0.06	(0.04)
Control variables:								
Green products/services: none#								
Green products/services: 1%-10%	0.39***	(0.10)	0.39***	(0.10)	0.12	(0.14)	0.41***	(0.10)
Green products/services: 11%-50%	0.58***	(0.13)	0.56***	(0.13)	0.59***	(0.16)	0.55***	(0.13)
Green products/services: 51%-100%	0.83***	(0.13)	0.82***	(0.13)	1.00***	(0.14)	0.77***	(0.12)
Age: 1-2 years#								
Age: 3-5 years	0.19	(0.21)	0.20	(0.21)	0.28	(0.28)	0.12	(0.21)
Age: 6-10 years	-0.08	(0.20)	-0.07	(0.20)	-0.12	(0.27)	-0.13	(0.20)
Age: >10 years	0.01	(0.19)	0.03	(0.19)	-0.03	(0.26)	0.03	(0.19)
Proactive versus reactive	0.34***	(0.08)	0.34***	(0.08)	0.20	(0.11)	0.36***	(0.08)
Environm. management system	0.82***	(0.08)	0.84***	(0.08)	0.23*	(0.10)	0.85***	(0.08)
Country dummies	YES		YES		YES		NO	
Wald test country dummies	184.44***		180.29***		162.57***		–	
Number of observations	7,700		7,700		7,201		7,700	
Pseudo (McFaddden) R^2	0.07		0.07		0.10		0.05	

Estimated coefficients (Coeff.) are shown together with standard errors (SE) between parentheses. Estimated thresholds are not shown.
Ordered dependent variable *greening processes*: 1) Does not engage in green processes; 2) 1%-10% of annual turnover; 3) 11%-100% of annual turnover. Category 1 is not taken into account in model 3 (binary logit model).
*** *p*-value≤0.001; ** *p*-value≤0.01; * *p*-value≤0.05 (two-sided tests). # Reference category.

Each table shows four model specifications. Model 1 tests Hypotheses 1, 2 and 3, and, therefore excludes the external support and environmental legislation variables. Country effects are controlled for by dummy variables. Model 2 provides an additional test of Hypothesis 1 by including another proxy for firm size, that is, turnover, while again country dummy variables are included. Model 3 tests Hypothesis 4 and adds the external support variable to the model specification. Note that this variable is defined only for firms that engage in environmental practices which reduces the estimation sample, mainly for green products and services.[21] Country dummy variables are included in model 3 as well. Finally, model 4 zooms in on the stringency of environmental legislation; this country-level variable replaces the country dummies.[22]

For models 1-3 the result of a Wald (chi squared) test for the joint significance of the country dummy variables is shown. The results for the country dummy variables are not reported but are available upon request.

Model 1 in table 14 suggests a positive relationship between firm size and greening processes: small firms (10-49 employees) have a higher probability of engaging in greening processes than micro firms (1-9 employees). Table 15 focuses on greening product and service offerings.

[21] This means that the lowest category of the dependent variable is excluded in model 3 in tables 14 and 15. As a result, for greening processes a binary logit regression is performed in model 3 in table 14. For greening product and service offerings an ordered logit regression with three categories is performed in Model 3 in table 15.

[22] The external support variable is not included in model 4.

Table 15. Ordered logit regression. Dependent variable: *greening product/service offerings*.

	Model 1		Model 2		Model 3		Model 4	
	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE
Hypothesis 1:								
Size: 0-9 empl. #								
Size: 10-49 empl	-0.01	(0.06)			-0.19*	(0.10)	-0.03	(0.06)
Size: 50-249 empl.	0.01	(0.07)			-0.11	(0.12)	0.02	(0.07)
Size: <100k euro#								
Size: 100k-500k euro			0.29***	(0.08)				
Size: 500k-2 million euro			0.28**	(0.09)				
Size: >2 million euro			0.31***	(0.09)				
Hypotheses 2a and 2b:								
Tangibility: intangible services#								
Tangibility: tangible services	0.44***	(0.08)	0.42***	(0.08)	-0.09	(0.14)	0.41***	(0.08)
Tangibility: tangible products	0.37***	(0.08)	0.37***	(0.08)	0.41**	(0.13)	0.35***	(0.08)
Hypotheses 3a and 3b:								
Market type: consumers#								
Market type: companies	-0.25***	(0.07)	-0.29***	(0.08)	0.69***	(0.13)	-0.27***	(0.07)
Market type: public administr.	-0.07	(0.19)	-0.11	(0.19)	0.02	(0.32)	-0.08	(0.19)
Market type: multiple markets	0.31***	(0.06)	0.27***	(0.07)	0.29**	(0.11)	0.29***	(0.06)
Hypotheses 4a and 4b:								
Support: none#								
Support: non-financial					-0.03	(0.12)		
Support: financial					0.38***	(0.11)		
Hypothesis 5:								
Environmental legislation							0.18***	(0.03)
Control variables:								
Green processes: none#								
Green processes: 1%-10%	0.56***	(0.13)	0.53***	(0.13)	-0.62**	(0.23)	0.61***	(0.13)
Green processes: 11%-100%	1.21***	(0.16)	1.20***	(0.16)	0.06	(0.27)	1.17***	(0.16)
Age: 1-2 years#								
Age: 3-5 years	-0.08	(0.16)	-0.09	(0.16)	0.34	(0.26)	-0.05	(0.15)
Age: 6-10 years	-0.05	(0.15)	-0.09	(0.15)	0.18	(0.24)	-0.01	(0.15)
Age: >10 years	-0.12	(0.14)	-0.18	(0.14)	0.08	(0.23)	-0.06	(0.14)
Proactive versus reactive	0.61***	(0.06)	0.60***	(0.06)	0.69***	(0.09)	0.61***	(0.06)
Environm. management system	0.37***	(0.06)	0.36***	(0.06)	0.07	(0.09)	0.34***	(0.06)
Country dummies	YES		YES		YES		NO	
Wald test country dummies	206.09***		187.68***		62.75**		–	
Number of observations	7,700		7,700		2,307		7,700	
Pseudo (McFadden) R^2	0.04		0.04		0.06		0.03	

Estimated coefficients (Coeff.) are shown together with standard errors (SE) between parentheses. Estimated thresholds are not shown.

Ordered dependent variable *greening product and service offerings*: 1) Does not offer green products/services; 2) 1%-10% of annual turnover; 3) 11%-50% of annual turnover; 4) 51%-100% of annual turnover. Category 1 is not taken into account in Model 3.

*** p-value≤0.001; ** p-value≤0.01; * p-value≤0.05 (two-sided tests).

Reference category.

A firm's engagement in offering green products and services (model 1, table 15) is independent of firm size in terms of the number of employees.

We replace the number of employees with annual turnover in model 2 in tables 14 and 15. The smallest small and medium-sized firms (total turnover less than 100.000 euro) are less likely to engage in greening processes than small and medium-sized firms with turnovers greater than 100.000 euro. We conclude that we do not find evidence for a strict positive linear relationship between firm size and greening processes but that especially the middle-sized small and medium-sized firms (those with 10-

49 employees or those with turnovers between 500.000 and 2 million euro) are most likely to engage in greening processes. For greening products and services we see a different pattern. Note that the specification with the number of employees did not reveal a significant relationship. The results for turnover point at one particular size class – small and medium-sized firms with a maximum turnover of 100.000 euro – that has a disadvantage regarding engagement in greening products and services. Additional tests show that the coefficients of the three largest turnover groups are not significantly different from each other. In sum, we find partial support for Hypothesis 1.

As expected small and medium-sized enterprises' commitment to be involved in process related environmental practices is highest in tangible sectors (model 1, table 14). With respect to greening product and service offerings (model 1, table 15) our results show a similar pattern. Hypotheses 2a and 2b are supported.

Model 1 in table 14 shows that small and medium-sized firms that sell directly to consumers and small and medium-sized firms that sell to other companies are equally likely to engage in greening processes. Furthermore, model 1 in table 15 reveals that small and medium-sized firms that serve the consumer market are more likely to offer green products and services than small and medium-sized firms that serve the business market. Hence, Hypothesis 3a is not supported whereas Hypothesis 3b is supported.

Model 3 in tables 14 and 15 adds the external support variable to the model specification. It appears that firms that receive external financial support are more likely to engage in greening processes or greening product and service offerings than firms that receive non-financial support or no external support at all. The significant positive relationship between larger involvement in both types of environmental practices and external support holds only true for financial support rather than non-financial support. This means that Hypotheses 4a and 4b are partially supported.

Regarding a country's stringency of environmental legislation (model 4) we find a significant positive association with greening product and service offerings. This result suggests that a stringent legislation encourages firms to actively take on environmental activities, but only in case of green products and services which is in contrast with Hypothesis 5.

When analyzing the results for the control variables, table 14 and table 15 provide consistent results for firm age, proactive versus reactive behavior, and the presence of an environmental management system. Firm age is consistently unrelated to the environmental practices of small and medium-sized enterprises. Small and medium-sized firms that go beyond compliance in terms of environmental legislation are more likely to engage in environmental practices than small and medium-sized firms that comply with legislation. An expected significant and positive relationship is found for environmental management system. Finally, the two types of environmental practices are related in the sense that each type enters the model specification significantly with a positive sign.

5.4.2 Additional analyses

An implicit assumption in the ordered logit model is the parallel regression assumption.[23] We use the Wald test by Brant (1990) to test whether this assumption is violated in each model specification. Not surprisingly, an omnibus test reveals that the assumption is violated for the models, partly due to the inclusion of the many country dummy variables. If we focus on our independent variables, there are not many occasions for which the parallel regression assumption is violated. For greening processes, the assumption is violated for both size variables. A detailed view by means of binary logit regressions (see footnote 9) reveals that firm size is relevant primarily for distinguishing between no involvement in greening processes and at least some involvement, i.e. a significant positive coefficient is found for the first binary logit regression.[24] For greening product and service offerings the “companies” category of served market type is again relevant for distinguishing between no involvement and at least some involvement, i.e. a significant negative coefficient for the first binary logit regression is found. For the environmental legislation variable the assumption is also violated but the coefficients are still significant and positive for each implied binary logit regression. In sum, we can rely on the results from the standard ordered logit model as presented in tables 14 and 15, with the notion that the results for a small number of variables are driven by the small and medium-sized firms without any involvement in environmental practices. All results can be obtained from the authors.

We perform two robustness checks.[25] *First*, we use a different dependent variable to measure a firm’s engagement in green processes, thereby focusing on the number of actions a firm undertakes to be more resource efficient rather than the currently used intensity in terms of annual turnover. The relevant question from the questionnaire is “What actions is your company undertaking to be more resource efficient?” Seven options are read out by the interviewer to the respondent: saving water, saving energy, using renewable energy, saving materials, minimizing waste, selling scrap material to another company, and recycling. A firm may select one or more alternatives while actions not listed may also be answered. This leads to a total number of resource efficiency actions. We perform a Poisson count regression to investigate the determinants of the number of resource efficiency activities more closely. The results are in accordance with the current results as displayed in table 14. An exception is the stringency of environmental legislation which is significantly positively related to the number of resource efficiency activities (Hypothesis 5).

Second, we perform multi-level (hierarchical) ordered logit regressions with a country-level random intercept to assess the influence of a country’s stringency of environmental legislation more

[23] An ordered logit model with J categories implies J-1 binary logit regressions: category 1 is contrasted with categories 2,…, J; categories 1 and 2 are contrasted with categories 3,…, J, and so on. The parallel regression assumption states that the coefficients of a variable are similar for each implied binary logit regression.

[24] Interestingly stringency of environmental legislation has a significant positive coefficient for the first binary logit regression and a significant negative coefficient for the second binary logit regression. When performing the Wald test the environmental management system variable was excluded from the calculations. This is because the Brant test can only be computed if all independent variables are retained in each implied binary logit model. This is problematic for environmental management system because it shows very little variation for the lowest category of the dependent variable. Note that the Brant test does not have to be calculated for model 3 in table 14 because a binary logit model does not impose the parallel regression assumption.

[25] The corresponding regression results are not shown here but are available from the authors upon request.

adequately. The results for this country-level variable remain qualitatively similar compared to the current results in model 4 in tables 14 and 15.

5.5 Discussion and concluding remarks

This chapter aims to understand in which environmental practices small and medium-sized firms tend to engage and whether the driving factors differ across types of environmental practices. The two types of practices being distinguished are *greening processes* and *greening product and service offerings*. The present work takes a stakeholder perspective to formulate hypotheses.

5.5.1 Discussion of results

Regarding the extent of environmental practices, we observe that the majority of small and medium-sized firms (91%) are involved in greening processes to some extent whereas nearly one third of small and medium-sized firms (29%) offer green products and services. There exist highly “specialized” small and medium-sized firms in the area of green products and services given the high average percentages of turnover that are represented by green products and services. This is particularly true in some Northern European countries. Relatively low percentages of both types of environmental practices can be observed for small and medium-sized firms in the Southeastern and Eastern European region.

Our distinction between environmental practices related to operational processes and products and services is one of the distinguishing elements of the present work. Results point at different conditions under which small and medium-sized firms engage in both types of environmental practices. These differences are evident for firm size, the market being served, and the stringency of environmental legislation.

The results for firm size are different than we hypothesized. Whereas we expected a linear positive relationship between firm size and greening processes we notice that this type of environmental practice is most likely to be conducted by the middle-sized small and medium-sized firms – both in terms of employees and turnover – suggesting an inverted U-shaped relationship. Small and medium-sized enterprises’ engagement in green products and services, on the other hand, seems to be largely independent of firm size. There is one exception: we find that the smallest small and medium-sized firms in terms of turnover are the least likely to be involved in greening their product and service offerings. The possibility that small and medium-sized firms have an advantageous position regarding engaging in this type of environmental practice – which we mentioned as an option in Section 3 – is refuted. Certainly, the present research has shown that the relationship between firm size and environmental behavior depends on the type of environmental practice. However, the dynamics are complex, the relationships depend on the proxy used for firm size and on the degree of involvement in environmental practices, and, hence, more research is needed in this area to completely disentangle the influence of firm size on different types of environmental practices.

Regarding the market served, our results suggest that customers have more influence on the extent to which small and medium-sized firms engage in green products and services than on small and medium-sized enterprises' involvement in greening processes. This tentative conclusion is based on the finding that small and medium-sized firms that serve consumers are more likely to engage in greening their products and services than small and medium-sized firms that serve other companies. Such a difference between serving consumer markets and business-to-business markets is not found for greening processes. Although a direct effect of customers seems to be absent in the case of greening processes, the existence of an indirect effect is a fruitful path for future research. For example, ecological attributes of products and services often rely on their mode of production such as the production of organic food (Orsato 2006). A close relationship between ecological attributes of products and their mode of production is also motivated by a high correlation between the two dependent variables under investigation, i.e. greening processes and greening product and service offerings. Hence, the type of market served could influence small and medium-sized enterprises' engagement in greening processes in an indirect way via green attributes in products and services. Noteworthy with respect to the market served is that small and medium-sized firms that serve exclusively to public administration are least likely to engage in greening processes. This calls for further research on the effectiveness of green public procurement that is seen as a powerful policy tool, in particular in the European Union, to provide a strong stimulus for eco-innovation and a more resource-efficient economy (European Commission 2012b).

With respect to environmental regulation we also observe dissimilar influences on both types of environmental practices. We find that stringent environmental legislation has a positive influence on greening product and service offerings but no significant influence on greening processes. Stringent environmental legislation may well indicate that environmental issues are legitimized as a broad social goal. This legislation could then influence the demand for eco-products and, as a consequence, create opportunities for small and medium-sized firms in terms of greening their product and service offerings. With respect to greening processes – while assuming that operational processes are more liable to environmental regulations than products and services – a ceiling effect may be at play. The ceiling effect suggests that imposed procurement regulations tend to result in lower ethical standards that firms set for themselves (Baden et al. 2009; Harwood and Humby 2008). Noteworthy in this respect is also that the number of actions a firm undertakes to be more resource efficient is positively related to stringent environmental legislation whereas the actual investment in resource efficient activities is not related to legislation. The exact mechanisms behind our results call for further research. Furthermore, taking account of sector-specific legislation may provide interesting additional insights in this context. Relevant country-level characteristics to be included in future work are normative cultural aspects or the actual level of a country's environmental degradation.

Next to the dissimilar influences of the above-mentioned characteristics, we observe that the influences of external support and sector tangibility do not differ across both types of environmental practices. Interestingly, our results raise questions concerning the effectiveness of non-financial support: for both types of practices provision of external non-financial support is unrelated to small and medium-sized enterprises' environmental engagement. On the contrary, financial support seems to be more effective. However, we are limited in our possibilities to draw conclusions on the effects of specific types of financial support such as venture capital, bank investment, or public funding. The number of firms that receive these kinds of support are rather limited in our dataset.

5.5.2 Implications

Now, what can we learn with respect to stakeholder theory and environmental engagement of small and medium-sized enterprises? As stated above, the results suggest that different conditions influence small and medium-sized enterprises' decision-making for both types of environmental practices. Indeed, stakeholder theory serves as a meaningful perspective in explaining these results such as in the case of the market being served. However, no general conclusions can be drawn from our analysis with regards to stakeholder groups other than suggesting that the influence of stakeholders groups differ across types of environmental practices. We are limited in our possibilities to isolate groups of stakeholders, to investigate their influences, and to compare the effects on types of environmental activities. For example, firm size and the tangibility of a firm's business sector are used as a proxy for the small and medium-sized enterprises' susceptibility to primary and secondary stakeholder groups. Disentangling these broad groups into more specific groups of actors such as employees, managers, suppliers and communities will serve as a fruitful next step. In addition, a temporal approach is lacking in the current set-up. Hence, it is difficult to understand how firms react to stakeholder pressures in particular since firm-stakeholder relationships evolve over time (Kassinis 2012; Ancona et al. 2001). In other words, the stakeholder perspective is useful in the context of small and medium-sized firms and environmental practices. However, a more nuanced understanding of influential stakeholders is required including their particular claims, needs, and interaction across time. This offers ample opportunities for future research.

5.5.3 Limitations

Next to the above mentioned limitations (data limitations with respect to external financial support, and the impossibility to distinguish between specific stakeholder groups), this study suffers from additional limitations. First of all, tangibility is measured at sector-level in the present study, whereas tangibility could also refer to the specific product or service that an small and medium-sized firms offers. This product-specific information is not known because of restrictions of the available data.

A second limitation of the current study refers to the potential presence of social desirability bias. In general, social desirability could bias the validity of research findings that are based on survey data (Nederhof 1985). In consumer research, for example, there may be discrepancies between attitudes towards sustainable consumption and displayed intentions (e.g., Vermeir and Verbeke 2005) or between stated preferences and actual behavior (e.g., Carrington et al. 2010). Although we do not deal with consumer behavior in our context, it could be the case that respondents' answers related to our dependent variables do not reflect the real tendency of the company to be involved in environmental practices. Unfortunately we are unable to control for this tendency to show social desirability behavior.[26] Two factors however, may reduce the social desirability bias in our case. First, an important source of heterogeneity in social desirability bias is the country context. Importantly we control for cross-country differences – and, hence, reporting heterogeneity across countries – by means of country dummies.[27] Second, the answers of our ordered dependent variables are provided in intervals. The intervals are chosen to be rather wide (0%, 1%-10%, 11%-50%, 51%-100%), and are even wider than in the original questionnaire. Applying this interval technique reduces social desirability bias compared to a situation where exact percentages are requested from the interviewee.

5.5.4 Concluding remarks

In the present work we research the drivers of environmental practices in small and medium-sized firms, and if that behavior changes according to the different types of environmental practices. We distinguished two types of environmental practices: engagement in greening processes and in greening product and service offerings.

We conclude that firm-level characteristics have an impact on the environmental behavior of small and medium-sized firms and affects in different ways depending on the types of environmental practices. The firm size affects positively the enrollment in green processes, medium firms are the most prone to have such environmental behavior, compared to small firms. There is no relation to size and greening product and service offerings. Small and medium-sized firms that are in tangible sectors and that receive financial support have a higher probability to enroll in both environmental practices. The engagement in greening product and service offerings is affected by the type of customers served, while greening processes is not. Moreover the engagement in greening product and service offerings is positively influenced when environmental legislation is more severe.

Our study offers several take-home messages. *First*, it shows that the extent to which small and medium-sized firms engage in environmental practices differs strongly across types of practices, and across firms, and countries. *Second*, the study points at dissimilar influences of characteristics on types of environmental engagement. This also suggests that the influence of stakeholders differs across types of environmental practices. *Third*, the dominant idea that small firms are reluctant to invest in environmental practices because they perceive this as an additional burden is clearly more nuanced. A distinction between different types of environmental practices is of added value in this discussion. More research is needed to understand what the influence is of different stakeholder groups on these types of environmental practices and, ultimately, to what extent this knowledge indeed contributes to a more sustainable society.

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[26] For example by means of social desirability scales that are sometimes included in questionnaires (Nederhof 1985). The Marlowe-Crowne Social Desirability Scale (Crowne and Marlowe 1960) is a well-known and often-used example.

[27] It is known that ordered logit models allow for reporting heterogeneity across several dimensions such as the country dimension which is known as “index shifting” (Lindeboom and Van Doorslaer 2004). The threshold parameters that are estimated in the context of the ordered logit model are made country-specific by means of the inclusion of country dummies. Hence, differential response behaviors across countries are controlled for.

6. CONCLUSION

This thesis researches the determinants of entrepreneurship that is driven by a social mission. We propose a conceptual framework for social entrepreneurship based on a typology of organizations. This typology encompasses individual and institutional level and characterizes organizations according to their systematic core features and distinguishes them among each other's. At the organizational level we draw from organizational identity literature and social entrepreneurship literature to understand the multiple objectives of social organizations and develop a typology built on two organizational identities: a normative identity and a utilitarian identity. Normative identity is expressed through different values such educational or cultural, that can be either embedded in a social mission (Moss et al. 2011; Thompson and Doherty 2006) or pursued for other purposes. Utilitarian identity can be expressed through economic goals that will impact on different choices of organizational forms (such as for-profit and non-profit). Many organizations combine both identities and the balance between them have a strong impact on how the organization is created and managed. We conclude that there are four types of organizations: social non-profit organizations, hybrids (or social for-profit firms), non-social non-profit organizations and for-profit firms. Each type of organization have particular strategic challenges and implications concerning profit constraints, revenue structures, employee structures and tax treatment. The balance between identities is difficult to manage and can create strategic uncertainty over time (Moss et al. 2011; Townsend and Hart 2008). At the individual level, we considered the importance of the entrepreneur identity to the typology. Entrepreneurs' identity influences every step of the entrepreneurial process (Nielsen and Lassen 2012; Sarasvathy 2008). The impact of the social entrepreneurs' motivations in the pursuit of social entrepreneurship is still underdeveloped, and we aim to understand the impact that motivations have on the creation of different organization, empirically testing the organizations' typology and linking the social entrepreneurial motivations with the goals and type of organizations that are created. Based on a qualitative approach, with primary data gathered through interviews we conclude that the four types of organizations in the typology are originated by different motives. Our findings reveal that entrepreneurs that expressed motivations as attaining a social mission, empathy, accomplishment, closeness to social problems and prioritize social value focus chose to create a social non-profit organization. Moreover we conclude that individuals who create non-profit organizations can have other normative motives that are not embedded in a social mission. The two individuals from the non-social non-profit organizations, declared that they have other normative motives that were not associated with a social mission. Such finding supports literature that argues that non-profit organizations can be created to attain other goals that are not directly related with a central social mission (Rose-Ackerman 1996). Additional results show that entrepreneurs that expressed motivations like achieving a social mission or an environmental problem and that place equal value on social or environmental and economic value creation created a hybrid organization. The entrepreneur who created a for-profit firm expressed accomplishment as a motive and a prioritization of economic value creation. In sum, the range that individual's motivations have influence their enrollment in social entrepreneurship as well as the type of organizations that they create. This empirical results validate the conceptual typology by concluding that the four types of organizations presents core differences at the organizational and at the entrepreneur's level. We apply a theoretical sampling and selected organizations across the different types of organizations outlined by the organizations' typology and despite of the non-representativeness of the sample it shows patterns that support previous literature that argue that social entrepreneurs are skilled people (Harding 2006; Van Ryzin et al. 2009). Our results show that the individuals interviewed are highly educated, with different backgrounds of tertiary education as: social sciences (5 individuals), humanities (3), business sciences education (6), engineering (1) and natural sciences (1). The diversified set of fields of education among social entrepreneurs highlights that they come from multidisciplinary areas and suggests that those different backgrounds can motivate an individual to pursue a social mission.

To deepen our knowledge on the role that human capital has on the probability of individuals pursuing entrepreneurial endeavor for normative aims instead of economic value creation we examined the general and specific components of education and experience. We adopted a quantitative approach using econometric models, namely binary probit models to understand what influences the probability of an individual to be a non-profit entrepreneur, using individuals' human capital as a predictor for that choice. We conclude that entrepreneur human capital, in the general and specific components, influence the enrollment in non-profit entrepreneurship. General human capital encompassing labor market experience and education affects positively the probability of an individual to engage in a non-profit organization. Entrepreneurs in the non-profit sector are highly educated individuals, tertiary education revealed the most prominent effect when compared to primary education level. This result validates the patterns observed in the primary data that suggest highly skilled individuals. Specific human capital also impacts positively non-profit entrepreneurship. We studied different educational backgrounds, concluding that humanities and social sciences have the strongest effect on the probability of an individual to take part in non-profit entrepreneurship, however engineering and technologies and business sciences education also showed a positive impact. Moreover the diversity of educational backgrounds that was present in the theoretical sample is also validated through the quantitative approach. Specific work experience in the non-profit sector and previous entrepreneurial experience in a Non-profit organization displays a strong effect on the engagement on non-profit entrepreneurial activity. Our results are in agreement with authors that stress that for non-profit entrepreneurs the previous experience of owning or managing an organization gives them the confidence that they have competences to start an organization enabling them to start another (Harding 2006; Van Ryzin et al. 2009). In sum, non-profit entrepreneurs are highly educated, mainly with a humanities or social sciences educational background with labor market experience and industry and entrepreneurial experience in the non-profit sector. We also analyzed the effect of demographic characteristics such as gender. Through the qualitative study we observed that women were prone to engage in social entrepreneurship, 60% of our sample was constituted by women. Although we could not generalize this results since it was a small theoretical sample, the results driven by the econometric models were in agreement, evidencing that female gender has a positive influence on the enrollment of non-profit entrepreneurship. Therefore we conclude that women are more prone to engage in entrepreneurship that aims to achieve social and other normative values rather than economic value.

To address environmental values, an important motivation mentioned by the social entrepreneurs in the interviews, we analyze the environmental behavior of organizations. We access how they are embedding such values by investigating environmental practices related to production processes and to products and services. Entrepreneurs that are motivated by environmental values, according to our results, also balance such goal with economic aims therefore we studied for-profit firms, more specifically small and medium enterprises. This is in agreement with a stream of literature that states that social entrepreneurs want to provide innovative solutions that are sustainable financially, encompassing social and environmental goals (Cohen & Winn, 2007; Dean and McMullen, 2007; Thake and Zadek 1997). We used a qualitative approach through econometric models, more specifically order logit models to investigate differences across small and medium-sized firms regarding their engagement in environmental behavior. We conclude that environmental behavior of small and medium-sized firms are influenced by firm characteristics. By distinguishing different environmental behavior we conclude that firm level characteristics influence the engagement in green product and service offerings and green processes differently. The type of customers served only affects small and medium-sized firms' engagement in greening product and service offerings. Moreover, small and medium-sized firms are more likely to engage in greening their product and service offerings when environmental legislation is strict. There is a positive relationship between firm size and greening processes. Finally we conclude that small and medium-sized firms active in resource-intensive or tangible sectors and small and medium-sized firms that receive financial support are more likely to be involved in both environmental practices.

This thesis contributes to the academia by setting a coherent framework for social entrepreneurship focusing on the motivations and characteristics that influence individuals to pursue social entrepreneurship, as well as understanding the core characteristics, opportunities, strategic challenges and the practices of different organizations that aim to achieve social, environmental or economic goals - both separately or combined. The explanation of core concepts both at the organization and individual level contributes to the development and maturity of social entrepreneurship as a scientific field of enquiry. We propose a typology of organizations centered on the distinctive features of: non-profit organizations, social organizations (social non-profit and social for-profit or hybrid), and for-profit firms. We empirically tested the typology using the entrepreneur's motivations to understand if these four types of organizations resulted from different motivations. We concluded that depending on different combinations of motivations entrepreneurs engage in different types of organizations. Motivations represent an important factor to understand the process of engaging in a social organization and the reason why some entrepreneurs prioritize social over economic value creation. Furthermore, by adopting the human capital theory (Becker 1964) we contribute to the literature by acknowledging that human capital influence non-profit entrepreneurship, in particular, claiming attention to the importance that social sciences and humanities have on the probability to participate on non-profit entrepreneurship. Concerning the analyses of the drivers of environmental practices, it contributes to the literature by extending the predominant focus on large firms focusing on small firms and medium-sized firms and address the call to consider differentiation between different types of environmental practices when assessing firm behavior.

The present work also offers insights to public policy. At the individual level, the positive impacts that the different education backgrounds have on the probability of engaging in non-profit entrepreneurship shows that it is important to design formal or informal education programs that supports non-profit entrepreneurship among students in non-business fields of education as well as fostering non-profit organizations as an alternative business model. This could promote a greater inclusiveness of populations traditionally under-represented in entrepreneurship. At the organizational level the proposed typology clarifies the objectives and impact of each type of organization, helping governments to design more suitable laws to support different types of entrepreneurship.

Third, practitioners can benefit from this research by acknowledging the different types of ventures and the different opportunities and challenges that each of them face, in order for them to create a proper organizational strategy.

The work presents some limitations. The qualitative analyses is useful to provide detailed explanation and generate theoretical propositions, however it has limitations regarding results generalization, therefore the findings related with social entrepreneurs motivations can only be generalized within our sample and not to the total population of social entrepreneurs. In our quantitative study, regarding the determinants on individual's participation in non-profit entrepreneurship, we could not capture the social mission of the organizations. Therefore we were restricted to analyze non-profit versus for-profit because we have access to the legal form. Additionally we do not have any information on psychological traits or motivations of the individuals, in order to validate the results driven by the primary data. Therefore these limitations does not allow us to research the motivations of social and non-social entrepreneurs and to test the typology understanding if the different combinations of motivations will lead to the enrollment in distinct type of organizations. Concerning the chapter of firm's environmental practices the study can be affected by a potential existence of social desirability bias that can have a negative impact on the validity of research findings that are based on survey data (Nederhof 1985). It may happen that the individuals answers related to our dependent variables do not express the real tendency of the company to be involved in environmental practices. However we are unable to control for this tendency to show social desirability behavior.

Regarding future work, we will test the typology through econometric models using secondary data. Furthermore we will continue to develop the conceptual framework in order to take into account a dynamic view of the possible changes in organizational form of organizations. As well to dissolve the strict barriers between the different types of organizations and evolve to a continuum of organizations, discussing borderline cases. Moreover the motivations framework should be improved by using data triangulation as a methodological approach and the motivations of populations traditionally under-represented such as women in the social entrepreneurship should be analyzed with further research.

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ANNEX

Table 16. Interview's matrixes of analysis

Organization	Social mission	Closeness to social problems	Empathy
Nariz Vermelho	Our primary mission was to Bringing Joy to children smile. Also in the back office, people have to be good professionals and equally important, have a good heart, this is one of the core values, our inside also has to reflect our positive values		The clown has an emphatic capacity of understanding the other, it is surprising because at a first sight the clown is very different, out of the box but its essence is the same as ours. The clown connects the humanity that people have using a non-rational path, it uses the body and the heart. For a solidarity cause people get involved because they want to help to attain a specific cause or to help other people. For empathy and sympathy which is interesting.
Champalimaud Foundation	The expression that the founder used on his will was medical area, the founder wanted to focus on the prevention and care of diseases and we tried to build everything around his idea with the resources that he granted to the foundation. We do not have a social mission.		
Calouste Gulbenkian Foundation	We do not have a mission, the foundation statutes foresees four different statutory areas: art, education, science and charity. The founder did not establish a mission, the administration board has broad skills within the selected areas to attain the society needs.		
Sair da Casca	We have a societal mission that is to optimize our costumer's social and environmental impacts, and everything that is connected with sustainability, corporate social responsibility and social entrepreneurship.		
Entrajuda			

Sapana	My life goals were never to marry or have children, neither a car nor a house. I wanted to change the world, win the Nobel peace prize.		Since early age I understood that I had empathy with other people, and I was in a privilege position so I had to use my voice to help them.
Roetz	I was working for a consultant and one of my last projects was doing a project on remanufacturing that is a sustainable concept. I thought it was a very nice and clean business case and think about to develop a concept around that, using bicycles. In Netherlands we have millions of them and every year about a million get destroyed. Then we took social entrepreneuring to set the basis to build the company around. We work together with shelter workplaces with people that has some disability. For us social, sustainable and economical aims are the most important, also we have a goal to do everything in a fair and honest way.		
Kembé	Our mission is to fight poverty through social entrepreneurship and we do it by creating new jobs in local communities, making sure those jobs are helping entrepreneurs to improve their lives.		
Terra dos Sonhos		I had an uncle that was living in my house, and for a year and a half I watch him die of cancer. Coping with his death was a very hard process. I am a positive person, I always face problems focusing on the good side. I do not know if this is a motivation for my desire to make other people dream come true.	
Ensina-me	We wanted to create job positions for disable people that otherwise wouldn´t be employed, I wanted to prove that using a strategic approach these people can succeed, they can have a work and be productive, that is more important that being rich.	One of the co-founders was a colleague of mine and she became disable because of an accident that she suffered during work, and our goal was to provide a work place for her and to other disabled people.	
Tela Bags	For us the environmental factor is a core value. The idea to create Tela Bags started the first edition of Rock in Rio, in Lisboa, due to a surplus of advertising screens to promote the festival. Our goal was to re-use those screens and give them a second life, changing them into unique bags, made of high quality materials and a great design.		

Saúde Criança	I am a physician that wants to change the world and end the poverty and I have not quit. I was working in a hospital and I realized that the medical act has its limitations (…) Our mission is to break the vicious cycle of readmission of people in the hospital complementing health care with psychosocial care. The services that the hospital provided were not enough so I thought I had to create an organization to attain those social needs. Not to replace the role of the state but to complement the medical service with the psychosocial component of the illness. The government cannot satisfy all the necessities and there is not a spirit of citizenship, people pay their taxes and think that already served their duty.	Once, a mother of a little girl that had 23 pneumonia came to me saying: “I do not have money to by the medicine, she is going to die, can you keep her?” And I said no, but I will help. ”. Our methodology was not top-down, we listen hundreds of families that were discharged from the same hospital.	The problems are clear to all of us (the physicians), the father went to the doctor but he does not have the money to pay for the medicine, we were digging a hole in the sand. But being a social entrepreneur is to get in touch with a reality, and breathe through the problem, stepping into someone else’s shoes and starts to identify the problem. We do not know the answer but we keep trying knowing that somehow that answer will be built collectively.
Casa Seis	We created an organization with a motivation focused on helping people to develop themselves as an active citizen, helping to solve their social problems of integration. The things we do are aimed at mitigating problems. The governmental help is not enough to overcome unemployment. This is an important matter, without a salary there is no money to provide the basic well-being, and then comes psychological problems, domestic violence, everything is interconnected. Therefore we feel the necessity to attain this problem.	I started to work when I was seventeen, and I had a strike of reality, but I was always keen to share what I had with others. I was working in Brazil in a rich school but I also saw the poor kids, I saw both sides and dealing with children issues always fascinated me. I am Italian. Emigration and intercultural issues are important to me. I came to Portugal in 92, and I lived in Belgium for a long time and I have already worked in areas related with education, languages, youth, poverty, emigration and labor and I am still motivated by such issues and to keep on help other people.	
Reklusa	I wanted to change lives and empower people. I realize that inmates they have a lot of free time and no occupation or training, so I started to explore their talents. We started to do some patchwork bags and as I have good commercial skills I sold plenty to my friends. (…) It has to do with the way I am, if I understand that there is something wrong or it could be done in a better way I try to change it.	It all started when I began to volunteer for visiting inmates with other non-profit organization in 2000. I was there for almost ten years before starting our organization.	

Socio Investment Exchange (BVS)	That comes a point in life when we need a mission, other goals than profit seeking, and I felt motivated by this project. Our mission is to provide funding for other social organizations so they can scale up and be sustainable. Social organizations may replace the role of the State hereby they are paid, most of IPSS and other organizations depend on governmental funding that derive from the social security budget. I do not know if it has to be that way, I would not choose that way. Firms can make donations but corporate social responsibility is not a core aspect to them, and the (economical) crises lead to a decrease in the donations.		
TESE	The founders were students and have the will to help deprived populations in African countries as well as apply the knowledge and skills that they acquired. From the beginning our core dimensions encompassed social and environmental mission.		This will to help others is something that always were a part of me. Also there is a side that should not be undermined that is connected to our ego, and by being in leadership positions we as social entrepreneurs need to be critic and be introspective on what we do and how we do it.

Table 16. Interview's matrixes of analysis (continuation)

Organization	Sustainability	Social Value focus	Accomplishment
Nariz Vermelho		We create a non-profit organization because we want to achieve a mission without having profit as our main goal. In a for-profit organization people invest in order to receive, being a non-profit solidarity organization means to give something to others, people engage in non-profit organizations because they identify themselves with the work, it gives them pleasure.	This is a dream, we love clowning, it is touching, and a regular job in the artistic context is very rare. This is something that comes from within.
Champalimaud Foundation			
Calouste Gulbenkian Foundation			
Sair da Casca		Sair da Casca is not a social enterprise, is a traditional one, we aim for profit maximization and we distribute them to our shareholder. We have some similarities with social enterprises characteristics. The success of our organization is firstly the financial result, secondly the market recognition, and thirdly the happiness of our employees.	I decided that my future project would be to combine my experience as a volunteer in several ONGs, the social impact and mission that they have with my journalism background, by being an observer and to disseminate information and I wanted to do it by creating a business. A project like this survives because you have anger and think about it 24 hours a day, give up everything else and it is very difficult for a team take it. The project will change according to the entrepreneur
Entrajuda		For us the mission is fundamental, we work in the social sector. The surpluses are important for the organization in the sense that they are reinvested in the institution to the creation of new projects and to employ more people, etc. But for social enterprises in general, profits might be reinvested or not, depending on the goals of each one.	

Sapana	As long as entrepreneurship is perceive as social, people forget about the economic aspect. We need to create sustainability independently from the target group that we aim to impact. For us the main priority is our target population as well as the organization values and the second priority is to guarantee funding. The funding is managed in a way that promotes sustainability and synergies that allows spanning the project itself.	The funding is decreasing and depending from subsidies is a mistake, we have to be sustainable. There are two aspects related to profit, first economy is a social science and second we save money to the governments with our projects. Sapana has to be perceived as a non-profit organization because is mandatory by law, with a social mission from the beginning but financially sustainable. I create a non-profit organization but it could be a business since the functioning is the same. People that want to work with me are volunteers before becoming paid employees. I am a volunteer and I will be until I can provide an income for them first. Social sector is still seen the "poor thing", then wages are "poor things", and this should not be like this, because we work like crazies from 12 to 16 hours a day.	I left the organization I bought a one-way ticket to Nepal and did a SWOT analyses to the idea of doing consultancy to local NGOs. In India we establish the project of my life, that's where I feel myself as the best human being.
Roetz	When we had to decide of what business should look like we decided to start a sustainable business which also means making it socially sustainable and not outsourcing everything from Taiwan or China, but trying to do it in a local basis. Almost all social enterprises are startups, because it´s more difficult to rebuilt an enterprise than to be a social one, if you start right with your social dimensions it will pass to your products and the core of your business.	For me is important to build a company that is social, sustainable but also financially successful, because if you are not economically sustainable obviously you cannot achieve your other goals, so they are all equally important. Roetz co-founder and I we both have very good jobs and we started this and it really shows courage but also builds trust with people because they know that we are not doing it for the money because we had it and we decided to do something with that money.	I was working for a big consultant and one of my last projects there involved remanufacturing, a sustainable concept that take materials that have been used before in products and you use those materials again. I thought it was a very nice and clean business case and think about to develop a concept around that and bicycles were perfect and then we took social entrepreneuring to set the basis to built the company around. And then I left Delloite and took two months to develop those ideas, and trying to find funding and to set up this company the best.
Kembé		I am not sure if a non-profit status it is better or worse, but I think that are differences from social entrepreneurs that do it for-profit. I also encourage that as well in the end if they gain money and they can do it as a job. I cannot do it on a daily bases, I have another job. Maybe in ten years Kembe exists and became a bit bigger I could quit my job and become a social entrepreneur earning money on that and at the same time helping other people, it would be great.	I wanted to do volunteering for a long time and I became interested in volunteering tourism. But sometimes you go for an orphanage work with the kids and the impact that you have is low and the costs associated are not very efficient. I thought that we could use the same money and invest in a project. The benefit from it all apart from travelling, is how proud I am for actually doing something and also helping others.
Terra dos Sonhos	As many institutions in the beginning we could not generate revenue's therefore our biggest challenge has been ensure the project's sustainability, in the way that we defined it.	In a near future we hope to generate revenues that can cover much of the operational costs, so that we diminish our dependency on external funding. To meet the ambition that we have for our social project we would need a bigger team, and for that we would have to raise more funds.	

Ensina-me	I never thought in creating a paid job position with the organization, my first objective was to create jobs for disable people. My job as a professor was flexible enough to allow me to coordinate both things. I create a for-profit organization to induce a specific impact on people perception, the disable people that work for us have a specific profile to work and must take it serious and not like a random volunteer work. I think institutions lack a commercial mindset, are dependent on subsidies, and do not have the culture to produce something, and there are less subsidies as less capacity to employ people. We wanted to have a commercial approach therefore it must be a for-profit firm. Concerning the typology[28] we are a hybrid enterprise
Tela Bags	The environmental factor is a core value but the economic factor is also very important for the firm sustainability. Our organization is not a social organization because we are for-profit. According to this typology[29] I would say that Tela Bags is a hybrid firm with an environmental mission and a for-profit legal structure.
Saúde Criança **Casa Seis**	The municipality asked us to help the relocation of an immigrant and deprived community our main motivation is to help them and one day give back the association to the population members. Entrepreneurship comes up like it is the Panacea, as we all born entrepreneurs…I could say that what we do can be classified as entrepreneurship. Before entrepreneurship was always connected with profit, while in social entrepreneurship the wealth is not only perceived in monetary value. Job creation, promoting better relationships between people with different cultural background, and creating a community spirit are also good impacts. The founders and people working in management positions are all working as volunteers

[29,3] The typology used is the one presented in chapter 2.

Reklusa		My goal was never the money, I wanted to change their lives and empower people. In the beginning we felt the necessity to establish a legal form, Portugal does not recognize the organizational form of social enterprise so we could be a cooperative or an IPSS, and so we choose the latest. I would like that Reklusa was could unit profits with social mission. There is a lot of prejudice in the third sector concerning the profit, due to some troubles and lack of transparency in the organizations. We could say that we have a social business that aims for profit as a means to achieve sustainability, however the profit is to reinvest in our stakeholders and not on the shareholders or in our institution so that we can create more jobs and spread our activity to other prisons. There is a feeling of distrust, even in my circle of friends, people do not believe that I work full time and do not have an income. Sometimes I get frustrated and tired, I would like to be paid, I think it would give me more motivation to continue.	I was born with this entrepreneurial spirit, I have a restless spirit I am always looking to get things started, and motivate people. But I never thought that this would become like a dream come true.
Socio Investment Exchange (BVS)		There is not a legal structure that defines the social enterprise, and in my opinion it should have rules concerning the profit distribution. There could be more social business; we are still deeply rooted in our religious background and the charity mindset that motivates the choice for non-profit legal structure. Sometimes non-profit organizations have higher costs than a commercial firm to do the same thing. I think that limiting an organization to be non-profit is limiting its action, the access to major funds and to be competitive.	
TESE	The organization was created with a focus on sustainability, we wanted to create services that were sustainable and the revenues resulting from consultancy would be reinvested in the other projects that we were developing. Therefore we would not be so dependent from subsidies. The sustainability were the most difficult aspect but it was always present.	We do not go to the non-profit sector to in search of money, because we will not get it, we have to be extremely motivated and be resilient.	Personal motivations are linked to the challenges that it represents professionally, to pursue a noble cause, and personal fulfillment and joy by knowing that we are doing good. Nowadays is also linked with the ability to solve problems and the fulfilment that we take to change people's lifes.

Table 17. Interview's matrixes of analysis

Organization	Social Entrepreneurship Definition of the interviewees	Social Entrepreneur Definition of the interviewees
Sair da Casca		I think people are born entrepreneurs. The entrepreneur is to always be thinking about the next project, is almost an addiction. One of the features of the social entrepreneur is to be individualistic, resilient. A social entrepreneur is a person who can be in an NGO or a social enterprise, sometimes it is a person who works in a regular company that develops a project, an intrapreneur.
Entrajuda	In our understanding the mission is critical for social entrepreneurship, they work in the social sector. The surpluses can only be seen as important for the company, but as a logic of reinvestment in the institution for new projects, to hire more people to develop an enterprise component that is not yet covered.	
Sapana	I do not think social entrepreneurship it's for everyone because while entrepreneurship is seen as a social one forgets about the financial aspect. In my opinion it creates independence and sustainability in the target audience for which the organization implements the project. It is necessary to be innovative, to perceive a solution in a problem.	As a social entrepreneur You have to be critic and be aware of your skills, you have to think that you know very little and the more you know less you know. It is an act of personal humility, conscience, dignity as a human being, and you must defend human rights.
Roetz	A social enterprise should be a normal enterprise almost with the difference that asides from profit and maximizing your profit that is basically the intention of every company it should be other goal that is equally important, for us that is sustainability and social. And also we have a goal to do everything in a fair and honest way so social entrepreneurship should have that, a second or a third goal, which is not economic, either social or sustainable that is equally important.	
Kembé	Through social entrepreneurship, we create new jobs making sure those current jobs and entrepreneurs are able to improve their work and lives.	Entrepreneurship is in my gens.
Ensina-me	In England social enterprises are those in which a percentage of profits must be reinvested in the company and perhaps that was the goal however we do not have such a model.	

Saúde Criança		The entrepreneur realizes that we can afford to have the courage to know nothing, but he steps out of the problem to think about it. Being a social entrepreneur is to get in touch with a reality, and breathe through the problem, stepping into someone else's shoes and starts to identify the problem. Overall it is a huge problem, much larger than the solution. It's a person who can stay in a mental area of resilience. Because you do not know the answer, but it is there, somehow that answer will be built collectively. The social entrepreneur becomes a leader when he clearly perceives the leadership of others. He begins to gather different people toghether with different knowledge, and has a great power to convince others to help him because you start to realize that it is not for his own benefit. The social entrepreneur, if I had to describe in one word would be joy.
Casa Seis	When we talk about entrepreneurship was always linked to profit, the company will make profit. While in social entrepreneurship the value created is also seen in other things rather than money.. We see the value through integration of deprived communities in employment system, in the improvement of intercultural relations between people, in being more responsible for their neighborhood. This to me is an impact, a result of social entrepreneurship.	Entrepreneurship arises as if it was the Panacea, Not everyone can be an entrepreneur.
Reklusa	Social entrepreneurship happens when an entrepreneur identifies a problem a need and tries to come up with a solution. The entrepreneur must have many features, it has to be a very stubborn person, who accepts risks, courageous, very persistent and must believe that even with all the difficulties that we have, things will be alright, and even if run poorly he cannot give up.	I was born with this entrepreneurial spirit I am a person with a restless spirit I am always looking for things to do, to push the people.
Socio Investment Exchange (BVS)	Social entrepreneurship is defined by the mission and the will to change the world, the will to do something to benefit other human beings.	
TESE	Social entrepreneurship Is a way to create institutions that promote social benefits. Social innovation is an answer that generates social change by satisfying some unmet social need, in a particular way by promoting social inclusion by empowering different actors in deprived communities.	The social entrepreneur aims to be fulfilled, to be be useful and solve society problems. Since we are in leadership positions, we must be aware of ego, and be critic regrading what we do. We need to be resilient. The social entrepreneurs are the vehicle to promote change and social transformation. They create something new that leads to a systemic change through social innovation.