

Social Innovation & Social Entrepreneurship: Conceptual Insights & Empirical Contributions

Vorgelegt von
Master of Arts
Elena Mostovova
geb. in Novosibirsk, Russland

von der Fakultät VII – Wirtschaft und
Management der Technischen Universität Berlin
zur Erlangung des akademischen Grades

Doktor der Wirtschaftswissenschaften
- Dr. rer. oec. -

genehmigte Dissertation

Promotionsausschuss:

Vorsitzende: Prof. Dr. Karola Bastini

Gutachter: Prof. Dr. Jan Kratzer

Gutachter: Dr. Michel L. Ehrenhard

Tag der wissenschaftlichen Aussprache: 20. November 2018

Berlin 2019

Preface

During the last few years the concepts of social innovation and social entrepreneurship experienced an enormous drive in academic research, civic society discourse and on the political agenda. Both concepts are associated with overcoming social challenges of our time (e.g. UN millennium goals, UN Sustainable Development Goals 2016). The research community discusses how we can support the further development of social innovation and social entrepreneurship, regarding the important societal role prescript to both of them (e.g. EFI 2016). The phenomena however often appeared in different discourses: Social innovation was more on the radar of political institutions and social entrepreneurship was in the focus of academic research. At the same time several scholars defined social innovation as a core part of social entrepreneurship, as the latter may represent institutional layout to produce social innovations (social innovation school of social entrepreneurship). The vagueness and heterogeneity of the understanding of both phenomena and its interceptions in academic research resulted in complications for the application of quantitative methods and opened a gap between political commitment towards social innovation and social entrepreneurship and the current state of academic research. The difficulties in understanding of the overall population of social entrepreneurs and the ensuing inability to gather full information to apply probability sampling techniques, confront the research community with the question on how can we still resort to quantitative methods to be able to give empirical based arguments to diminish existing gap. Thus taking into account the limitations of a rather young field of research, this dissertation sets an objective to contribute to the field uppermost by conceptualization efforts and empirical work, which in the end yield relevant and innovative insights into the subject.

Table of Contents

Preface	I
Table of Contents	II
List of Figures	VI
List of Tables.....	VII
1. Executive Summary	1
2. Introduction	7
2.1 Motivation & Research gap.....	7
2.2. Four articles in this dissertation	10
2.3 Integrative framework	13
2.4 Empirical setting	14
3. ARTICLE I: Mapping Social Innovation and Social Entrepreneurship Concepts in Academia: Structural Literature Review	16
Abstract	16
3.1 Introduction	17
3.2 Conceptual intersections and first systematization attempts.....	19
3.2.1 Systematization attempts: The concept of social innovation	19
3.2.2 Systematization attempts: The concept of social entrepreneurship.....	21
3.2.3 Conceptual intersections.....	23
3.3 Methodology	25
3.4 Mapping social innovation and social entrepreneurship concepts in academia: The results of structural literature review	28
3.4.1 Overview of the publishing activity	28
3.4.2 Influential journals and papers	29
3.4.3 The scope of research areas.....	33
3.4.4 Definitional analysis.....	34
3.4.5 Influential concepts	35

3.5 Final discussion	40
3.5.1 Conclusion.....	40
3.5.2 Theoretical and practical implications	42
3.5.3 Limitations and future research.....	43
3.6 References	46
4. ARTICLE II: Successfully Venturing for Social Change: An Empirical Typology of Businesses for the Social Good.....	51
Abstract	51
4.1 Introduction	52
4.2 Understanding social entrepreneurship: Approaching a phenomenon in evolution.....	54
4.2.1 First conceptual typology	54
4.2.2 Different types - different social impact?.....	57
4.3 Research methodology	59
4.3.1 Data collection.....	59
4.3.2 Cluster analysis	60
4.3.3 Verifying the model	61
4.4 Bricoleur, mediator or constructionist? Evidence on the different types of social entrepreneurs	62
4.5 Final discussion	68
4.5.1 Conclusions	68
4.5.2 Outlook: Practical and theoretical implications	70
4.6 References	73
5. ARTICLE III: Increasing Social Entrepreneurship and its Social Value Generation.....	78
Abstract	78
5.1 Introduction	79
5.2 Theoretical background and hypotheses	82
5.2.1 Social value generation	82
5.2.2 Business model strength as driver for social value	84

5.2.3 Intentionality – the degree of social purpose orientation	85
5.2.4 Personal confrontation and professional experience	87
5.2.5 Networks	89
5.3 Research Design	91
5.3.1 Empirical setting and data collection	91
5.3.2 Choice of Method.....	92
5.3.3 Operationalization of variables	93
5.4 Data analysis and Results	96
5.4.1 Verifying the model	96
5.4.2 Results and discussion.....	98
5.5 Conclusions and future research	102
5.5.1 Summary	102
5.5.2 Theoretical and practical implications	103
5.5.3 Outlook.....	104
5.6 References	106
6. ARTICLE IV: On the Economics of Social Innovation: A Conceptual Framework and First Empirical Study	114
Abstract	114
6.1 Introduction	115
6.2 Related literature	116
6.2.1 Historical development	116
6.2.2 Conceptualisation attempts	119
6.3 A concept of social innovation – an economist’s view	122
6.3.1 The main criterion – how is the social surplus distributed?	123
6.3.2 Two types of market failures and social innovation cases – Necessity or social choice-based change?	124
6.3.3 Definitional clarifications.....	129
6.3.4 A tentative list of policy issues	131

6.4 Observation, measure and application	132
6.4.1 Data	132
6.4.2 Coding exercise	135
6.4.3 Descriptive Results.....	137
6.5 Conclusion and directions for future research.....	143
6.6 References	146
6.7 Endnotes	152
7. Overall Conclusions	154
7.1 Key results.....	154
7.2 Theoretical and practical implications	156
7.3 Limitations and future research.....	158
8. Total References.....	160
Appendix 1	176
Appendix 2	178
Appendix 3	180

List of Figures

Figure 1-1 Integrative framework of the dissertation.....	6
Figure 3-1 Social innovation and social entrepreneurship papers in sample, number per year	29
Figure 3-2 The distribution of the articles on research areas, in percent	34
Figure 4-1 Number of articles on social entrepreneurship in academic journals.....	55
Figure 4-2 Pie chart for proportion size of clusters in the sample, in %.....	64
Figure 5-1 Conceptualization of social value generation for social entrepreneurs	85
Figure 5-2 Operationalization the model in AMOS.....	93
Figure 5-3 Operationalization of intentionality.....	95
Figure 5-4 Results of structural equation model	98
Figure 6-1 Target fields of social innovation projects in Europe (N=957), shares	138
Figure 6-2 Target groups of social innovation projects in Europe (N=957), shares	139
Figure 6-3 Main tasks performed and underlying technologies in social innovation projects in Europe (N=957), shares.....	140
Figure 6-4 Legal status of social innovation projects in Germany (subsample), business sector innovations and civil society organisations in Germany, shares.....	141

List of Tables

Table 3-1 Data sample and research process.....	26
Table 3-2 Citation rates of the papers in sample	27
Table 3-3 Eight journals, covering 37% of social innovation articles	30
Table 3-4 Top cited social innovation articles with above 100 citations in SSCI	30
Table 3-5 Eight journals, covering 48% of social entrepreneurship articles.....	31
Table 3-6 Top cited social entrepreneurship articles with above 250 citations in SSCI.....	32
Table 3-7 The most influential definitions of social innovation in academia	36
Table 3-8 The most influential definitions of social entrepreneurship in academia	40
Table 4-1 Profiles of three clusters: means	65
Table 5-1 Correlations of the variables in the model	97
Table 5-2 Summary of hypotheses and research findings.....	101

1. Executive Summary

The main purpose of this doctoral dissertation is to improve our understanding of social innovation and social entrepreneurship phenomena and the process of social value creation. The four articles presented below I) feed the arena of conceptualization efforts and II) make empirical contributions on the types of social ventures as well as operationalization and measurement of social value generation. The main research questions corresponding to the articles in this dissertation therefore are:

RQ 1: Do scientists from different research areas refer to the same or different concepts of social innovation and social entrepreneurship and which are the most influential authors and journals?

RQ 2: Can we find distinct empirical types of social ventures and what are their characteristics?

RQ 3: How can we measure the intentionality and social outcomes of social ventures and what are the most important factors leading to high social value generation?

RQ 4: Can we develop an economic framework for social innovation for better verifiability of the phenomenon and fruitful interactions between academic research and policy practices?

Previous research has shown that both concepts of social innovation and social entrepreneurship are not yet tight and are lacking verifiability and further clarification. Both of them are associated with the fostering of social progress and overcoming grand challenges of our time. Previous scholars have mostly focused on conceptual questions and differentiation between social and traditional innovations and ventures, the hybridity of the ventures and the process of opportunity recognition and value creation. Previous research also

suggests that the current levels of social innovation and social entrepreneurship are not yet sufficient to fulfill the prescript roles of drivers for social change. It also underlines the need to close the gap between societal and political commitment to more social innovation and social entrepreneurship and the state of academic research. This is important for the design of support systems that could improve the quantity and quality of social innovation and social entrepreneurship activities.

Four main challenges are discussed in this doctoral dissertation. The first one is fragmented understanding of the phenomena social innovation and social entrepreneurship and its distinction from the traditional counterparts. The second one is the variety of organizational layouts and types of social entrepreneurs. The third one is the process of social value creation and its measurement. Finally, the fourth one is the challenge to understand the overall population of social entrepreneurs and to apply quantitative approaches. In response, the first article addresses a pressing need to better understand the phenomena of social innovation and social entrepreneurship, highlighting its relation to each other and mapping out the most influential concepts, journals and authors according to academic research areas. The second paper contributes to the advancement of social entrepreneurship by distinguishing three empirical types that are of practical relevance. It moreover puts under the test the key conceptual typology introduced by Zahra et al. (2009), proves its relevance for the empiric reality and extends it. The third paper contributes to social value measurement question and conceptualization of intentionality of social entrepreneurs, based on the social entrepreneurship, hybrid organizations and impact measurement streams. It further contributes to the discussion on success factors of traditional versus social entrepreneurship. The fourth article introduces a micro economic framework of social innovation based on the concept of social surplus distribution. It also discusses social innovation as an increasingly important target for innovation policy and presents the process of data collection based on purposive

sampling technique. Based on exploratory analysis it maps and describes organizational layouts and institutional arrangements of social innovation projects.

The empirical setting of this research is the lack of information on the total population of social ventures and the inability to gather a representative sample. Replying to the call of many scholars on more quantitative explorative analysis, this dissertation applies purposive sampling technique to collect data, which enables the usage of quantitative methods. **Methods used** combine the structural literature analysis, coding techniques and various methods of quantitative analysis. For the literature analysis structural techniques with bibliographical elements were used. For the empirical part, the collected sample comprises social ventures available from various prize competitions, support programs and incubators that explicitly target innovative social ventures (15 sources, with a total number of 957 cases). The sources were analyzed on target fields, target populations, main activities and underlying technologies. The online survey conducted on the sample with available contact information (total number of cases: 775) analyzed institutional layouts, motivation, business model orientation, social and economic performance and its measurement, financial strategies, networks and prior experience. A response rate of 20% (155 social ventures) was achieved. The main methods applied to test the hypotheses are cluster analysis and structural equation modeling. As regards software, Atlas.ti, STATA, SPSS and Amos are used for data analysis.

Results suggest that social innovation and social entrepreneurship occur across different sectors and are studied in various research areas. Social innovation appears more within the political discourse and is distributed more in various research areas, often presenting case studies and appearing in papers of funding institutions. The academic discussion on social entrepreneurship appears to be more consistent. This dissertation also suggests that a tight economic framework of social innovation can be suggested based on the process of social surplus distribution between the private innovator and the rest of the society and the notion of

market failures. Further results confirm that social ventures vary according to their institutional layout, societal scale and social value they produce, which allow us to distinguish three empirical types of social ventures that are of practical relevance. It demonstrates that the landscape of social ventures is diverse and there is no one-fits-all solution for targeting social challenges as well as designing supportive systems. These findings are further developed by examining the factors leading to higher social value generation and conceptualizing the intentionality of social ventures. The results suggest that it is the combination of a reliable business performance and a balance between social and economic orientation of social entrepreneurs that creates higher social value.

Contribution to theory is that this dissertation firstly, displays different appearances of the phenomena in various academic research areas and reveals influential discussions, key contributors and most influencing definitions, recognized by the academic community. This work is thus helpful for future researchers, who wish to tie to and to contribute to the research field with their publications. Secondly, it revises the first-ever conceptual typology of social entrepreneurs of Zahra et al. (2009) and applies it to a range of social ventures existing today, suggesting an empiric based typology. Thirdly, this dissertation contributes to the stream of research on social impact measurement and empirically tests an output and outcome theorem. Fourth, it suggests an operationalization of a bi-dimensional orientation of social entrepreneurs, the so called intentionality, and adds into the discussion on differences of commercial and social entrepreneurship. Fifth, it offers a conceptual framework for social innovation based on the concepts of market failures and producer and consumer surplus. Finally, from a **methodological** point of view, this dissertation contributes to further development of empirical research on social ventures and the approaches of explorative data collection.

Practical implications are that this doctoral thesis suggests success factors and business model alignment that social venture practitioners may pay attention to in order to stimulate higher social outcomes. Making a contribution to understanding of complex institutional layouts of social ventures varying on societal scale, and the social outcomes they generate, this dissertation provides evidence for governmental institutions and funding organizations aimed at investing in social impact. It also suggests design parameters for social innovation policies and supporters of social entrepreneurship, and analyzes the heterogeneous set of actors involved in the governance and implementation of current policies and support schemes.

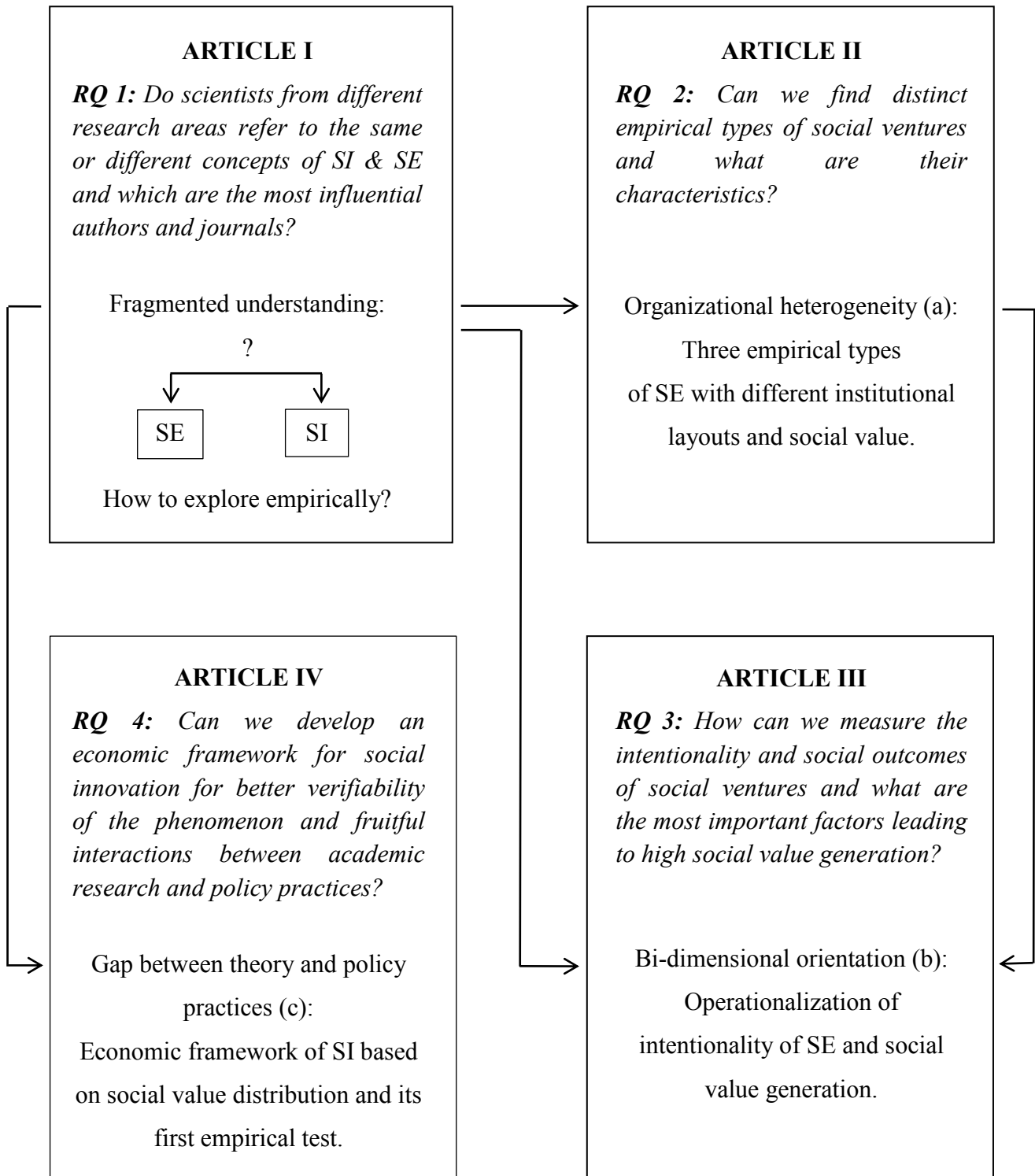


Figure 1-1 Integrative framework of the dissertation

The links between the articles show where the revealed questions for further research originate.

2. Introduction

2.1 Motivation & Research gap

Social innovations and social entrepreneurship have been increasingly recognized as key to overcoming pressing social challenges of our time. Seen as a driver to solve social, economic and environmental problems, both phenomena experienced pronounce growth of interest in academic research and as a target for politics during the last decades (Austin, Stevenson & Wei-Skillern 2006, Estrin, Mickiewicz & Stephan 2013, Short et al. 2009, Weber et al. 2012). Although social innovation and social entrepreneurship seem to provide great opportunities to serve social needs, their current level of deployment is not yet sufficient to achieve a long-term shift in our production and consumption systems. The design parameters needed for actors aiming to promote social innovations and social entrepreneurship are still in shortage not at last due to the fact that academic research does not provide enough arguments and recommendations for future policies. As a result, the efficient support systems remain lacking and the existing gap between academic research and a growing commitment to social innovation and social entrepreneurship as instruments for overcoming social challenges hinders the leveraging of both phenomena. This dissertation initially was motivated by the intention to reduce this gap and contribute to the further support of both social innovation and social entrepreneurship activities through academic research.

There are several challenges scholars are confronted with in the field. First, the interpretation of the specific content of social innovation and social entrepreneurship, especially the qualification of “social” by policymakers and scholars across disciplines, have produced a wide variety of ideas on definition of the phenomena and its meaning for economic and social development. As both phenomena address social problems and often occur when established systems cannot provide satisfactory solutions, they naturally intersect in the conceptualization

attempts of some scholars. For example social entrepreneurship is often seen as an organizational enactment of social innovations, which offers cost-effective solutions in forms of innovative business models (Nicholls et al. 2015). Or social entrepreneurs are defined as heroic individuals, who "use innovation to create social change" and "exploit social innovation with an entrepreneurial mindset" (Moor 2009, Bornstein 2004, Perrini & Vurro 2006, Roberts & Woods 2005). Following previous researchers, we agree that to fully understand the implications of both phenomena it is important to take into account the insights from both literature streams (Curiha, Benneworth 2015).

Second, although both social innovations and social entrepreneurship aim to bring social change (Dees 2001, Gillwald 2000, Mair and Marti 2006, Peredo and McLean 2006), their outcomes may overlap with those of traditional forms of innovation and entrepreneurship. Those also often tend to produce social changes, for example as a side product of a technological development (Hochgerner 2010, Mair and Noboa 2003). This fact adds to the vagueness of the concepts, its conceptual ambiguity and operationalization problems. Following previous scholars, this dissertation suggests that the "social" part depends on the way social value is distributed between the entrepreneur or innovator and the rest of the society as well as on the prevalence of social mission over the business goals.

Third, as social innovation and social entrepreneurship are about social change, the impact assessment is a question of a high interest. However, as there is no agreed definition and therefore no agreed performance measures (Nicholls et al. 2015), social performance indicators are thus fragmented and in its infancy. Moreover, it is difficult to detect whether changes have had been appeared if the social venture had not existed, as it is often not easy to attribute social changes solely to a one social venture (Khel, Then, Münscher 2012, Vanclay 2002). Consequently, the social value creation and the associated long-term social impact of social ventures are difficult to measure. Nevertheless, success of a social venture is above all

defined through the social value it generates and the study of social outcomes thus represents one of the central ways to understand the phenomenon (Dacin et al. 2011).

Fourth, the landscape of social entrepreneurs is diverse. They differ with regard to the scale of society they address, organizational layouts they choose, the outcomes they generate, the intentions they have and the way they evaluate their social performance. This variety is mainly rooted in the bi-dimensional nature or so called double-bottom line of social entrepreneurs, which expresses the simultaneous focus on social mission and necessity to generate revenues to stay operative. In this dissertation we call it the “intentionality” of a social entrepreneur. Combining revenue goals with social mission, social entrepreneurs often resort to hybrid organizational structures for their ventures, which fuel its empirical complexity and variety of its forms.

Finally, the variety of approaches to social innovation and social entrepreneurship, the absence of the relationship between those, as well as the lack of a unifying paradigm lead to a lack of information on the total population of social ventures and a general inability to gather full insight. Thus, qualitative methods as case studies prevail, though the attempts of explorative quantitative research start to grow. This doctoral thesis represents an attempt to collect data for a quantitative study as called for by various authors (Austin et al., 2006, Corner & Ho 2010, Meyskens et al. 2010). Though not being representative, this sample yet allows yielding relevant and innovative insights into the real-world characteristics of today’s social ventures.

The above described challenges confronted the authors of this dissertation with the complexity of framing the field and application of quantitative methods. Given the ambiguous variety of understandings and conceptual interceptions of the phenomena in different disciplines, the lacking evidence from quantitative empirical approaches on any types of

heterogeneous social ventures and the under-researched possibilities of social outcomes measurement, following research questions were identified. What are the central concepts and authors as recognized by the research community? Are there any types of social ventures that can be crystalized and how can we further operationalize and measure the process of social value generation?

2.2. Four articles in this dissertation

This doctoral dissertation addresses the named challenges in four articles. The first article raises a hypothesis on the different appearances of the phenomena in academic research and maps out influential academic concepts, definitions, authors and journals by the research area. For that it applies structural literature analysis. This article furthermore uncovers the link between social innovation and social entrepreneurship phenomena from a new methodological perspective. Following the results presented in this article, future researchers will be able to better understand the notion of both social innovation and social entrepreneurship and pursue the influencing academic discussion, based on the research area the scholars are most interested in. This article is also useful for new researches who aim to make a valuable contribution in the field with their publications.

Research question 1: Do scientists from different research areas refer to the same or different concepts of social innovation and social entrepreneurship and which are the most influential authors and journals?

*Title: Mapping social innovation and social entrepreneurship concepts in academia:
Structured literature review.*

The second article addresses the organizational variety of social entrepreneurs and aims for achieving a typology of social ventures on empirical grounds. Based on cluster analysis, the findings suggest that there are types of social ventures that show distinct characteristics in terms of mission, structural layout, range and issue addressed, but also with regards to motivation, experience, outreach as well as the ways of monitoring and evaluating social performance. While simultaneously proving the empirical foundations of Zahra et al.'s (2009) seminal conceptual typology, this article uncovers a new empirical type of social entrepreneurs, which we call social mediators. The article further calls for a new conceptualization of impact measurement to understand social entrepreneurship today. It suggest that social impact varies with the type of social venture and is informative for governmental institutions and funding organizations interested in understanding how to support entrepreneurs that solve social problems.

Research question 2: Can we find distinct empirical types of social ventures and what are their characteristics?

Title: Successfully venturing for social change: An empirical Typology of social businesses for social good.

Joined work with: Maren Borkert.

The third article addresses the problem of understanding and measurement of social value generation by social entrepreneurs. It builds on the conceptual streams, which suggest that social outcomes above all define success of social ventures and that major success factors of

traditional entrepreneurs cannot be directly applied to design strategies to improve social entrepreneurial success. The statistical model applied in the article addresses the interplay of the variables potentially contributing to social value creation. This article moreover addresses the question of operationalization of intentionality of social entrepreneurs and the balance between social mission and reliable business model. From a methodological point of view, our study contributes to a more refined and differentiated analysis of social impact measurement. The management implications on the performance measurement system as well as output and outcome theorem are useful for both ventures practitioners and support actors.

Research question 3: How can we measure the intentionality and social outcomes of social ventures and what are the most important factors leading to high social value generation?

Title: Increasing social entrepreneurship and its social value generation.

Joined work with: Ingo Michelfelder.

The fourth article studies social value distribution as a main criterion for defining social innovation. It introduces a conceptual framework from an economic perspective grounded in microeconomics of innovation and knowledge on benefits distribution between the innovator and society. It offers the first framework for social innovation based on the concepts of market failures, producer and consumer surplus. This theoretical framework is further supported by an empirical study that addresses the conceptual assumptions by mapping social innovations and introducing the main categories of institutional arrangements and projects that are involved in the generation and diffusion of social innovations. Addressing the problem of conceptual vagueness, different theoretical backgrounds among scholars and

policy experts, this article contributes towards filling the existing gap between political and policy commitment towards social innovation and the current state of academic research.

Research question 4: Can we develop an economic framework for social innovation for better verifiability of the phenomenon and fruitful interactions between academic research and policy practices?

Title: On the economics of social innovation: A conceptual framework and first empirical study.

Joined work with: Alexander Cuntz and Dominique Foray.

2.3 Integrative framework

The four articles in this doctoral thesis contribute to our understanding of either the concept of social innovation or social entrepreneurship or both (see Figure 1-1). The first article provides the evidence on the most influencing definitions and key papers and journals in the field. It shows that more research is required on (a) organizational layouts as well as on (b) bi-dimensional nature of social entrepreneurs and the different success factors of traditional versus social entrepreneurship. It further discusses (c) the existing gap between political commitment and academic research due to the heterogeneous understanding of both phenomena and its partial interception.

The possibilities of the empirical exploration of the questions revealed in the first article are addressed in further three articles. As first, the possibilities of data collection were studied and a sample was build, which allowed the application of quantitative methods in the second and third article. For those articles, an online survey has been conducted. The second article addresses the organizational heterogeneity question by searching for empirical types of social

ventures applying cluster methods. Indeed, it reveals three distinct types in the organizational variety of social entrepreneurs. The third article addresses the question of conceptualization and operationalization of bi-definitional orientation of social entrepreneurs, which we call “intentionality”. It further introduces a structural equation model, which reflects the success factors for social ventures and how do they differ from those of traditional entrepreneurs. Both the second and the third article also examine the question of social value generation. The second article suggests that social value produced by the venture can be best measured against its competitors operating on the same scale of society. The third one than tests the process of social value generation through output and outcome theorem and suggests the antecedents for higher social value creation. The fourth article introduces a conceptual framework to social innovation, replying on conceptual vagueness problem and research gap between political interest and academic research discussed in the first article. It defines social innovation based on the way the social surplus is distributed and uses both a moderate and a severe market failures exploration principle to define two cases of social innovation. It moreover analyses institutional arrangements involved in support measures of social innovations.

2.4 Empirical setting

To answer the research questions formulated above, this doctoral thesis combines various methods. For the first article a structured literature analysis with bibliographical elements was applied. This approach allowed a systematic and purposeful search of relevant literature and creation of a bibliographic database for subsequent analysis. For the further articles, the authors examined how can we quantitatively explore social ventures if there is still no consensus on its definition and total population and have chosen the purposive sampling method that at least enables explorative research, which provides insights from an empirical

work. A purposive sampling approach represents a recognised explorative method, which was recently successfully applied in social entrepreneurship research by several scholars (Mair et al. 2012, Meyskens et al. 2010, Moss et al. 2011, Stevens et al. 2014). The collected data sample accumulates around thousand innovative social ventures available from respective prize competitions and incubators (total number of 15 sources). For the second and the third article an online survey with a total number of 155 social ventures (response rate of 20%) was conducted to test the hypotheses. The second article applies a hierarchal cluster analysis, using a part of the features collected in the online survey. It reveals empirical types of social entrepreneurs, based on the set of distinctive characteristics as scale of operation, structural layout, performance measurement, networks and prior experience. The third article uses social equation modelling to test the output and outcome theorem in the process of social value creation and to reveal success factors for the higher social outcomes. The fourth paper analyses the descriptive data available from the sample using Atlas.ti software. It introduces the main categories of social ventures such as target fields, groups, missions, main activities performed and legal status. It also applies governance analysis of institutional arrangements that are involved in the promotion of social ventures.

3. ARTICLE I: Mapping Social Innovation and Social Entrepreneurship Concepts in Academia: Structural Literature Review

Abstract

In the last decades, the concepts social innovation and social entrepreneurship experienced a surge of interest in academic research, civil society discourse and political agendas. Both concepts are associated with the fostering of social progress and are considered as having a pronounced role in overcoming social problems. However, the understanding of the concepts is still fragmented and varies with the institutional context and research area, as well as the author's motivation and orientation towards a specific community. Making a contribution to the literature on social innovation and social entrepreneurship, which aims to shed more light on the heterogeneous understanding of these phenomena, this paper conducts a structural literature review mapping out influential academic journals, authors and concepts, while classifying the papers respectively to their citation rates, year of publication and research area. This paper also discusses conceptual interceptions and enables researchers to tie to and to make valuable contribution to the field.

Key words: social innovation, social entrepreneurship, entrepreneurship, science mapping

3.1 Introduction

During the last few decades, the discussion on social innovation and social entrepreneurship, both emerging areas of scientific investigation, spiraled with a remarkable rate. In the context of more ethical, responsible and socially inclusive economies, growing self-sufficiency of the citizens and systematic retreat of the governments from the provision of public goods (Dacin et al. 2011, Nicholls 2006), social innovation and social entrepreneurship are both seen as important drivers of social change and have gained particular attention in academia.

At the same time numerous institutions and organizations such as business unions, governments, private corporations, universities and foundations such as Ashoka, Schwab and TEPSIE foundations are attempting to highlight the societal role of social innovation and social entrepreneurship and reinforce the discussion in politics and media (Chell et al. 2010, Christie and Honig 2006).

Literature review reveals a lack of a coherent theoretical framework for both phenomena: Many authors have noted that current research is still largely phenomenon driven and its agenda is not clearly defined (Howaldt and Schwarz 2010, Kesselring and Leitner 2008, Mair and Marti 2006, Nicholls 2010, Phillips et al. 2015, Short et al. 2009, Weerawandena and Mort 2006). Much of the debates in academia are still concentrated on conceptual questions, mostly focusing on the description and explanation of the phenomena. Besides several case studies, conceptual research predominates over empirical research. Diversity of examples of social innovations and social entrepreneurship and therefore their conceptual interpretation as found in literature, reflects the complexity of the issue and indicates its conceptual vagueness. Finally, according to the corresponding scholarly literature, both phenomena often appear in the same discourse, which adds on complexity of the issue.

In the context of the quickly growing academic interest to social innovation and social entrepreneurship as well as the attributed role in overcoming social problems and high political relevance, this article addresses fragmented conceptual understanding of the both phenomena and is especially useful for researchers who are interested in getting orientation in the field of social innovation and/or social entrepreneurship research and in optimizing their publishing strategy. It is also interesting for those willing to build a bridge between political interest and academic research and those interested in promoting the role of both phenomena to overcome social challenges of our time.

With respect to the heterogeneous comprehension and conceptual intersections of these phenomena, this article addresses following research questions:

- 1) Conceptual intersections: How are the both concepts linked?
- 2) Conceptual definitions: Do scientists provide any or own conceptual definitions in their studies? Do scientists from different research areas refer to the same or different concepts? And which are the most influential ones?
- 3) Publishing activity: How does the general publishing activity in terms of the year and research area look like? Which journals and authors are contributing the most? Are there yearly trends? What are the differences in the publishing activity for both concepts?
- 4) Publishing strategy: How can future researchers tie to and make valuable contributions with their publications in the field?

The article is structured as follows: The first chapter provides a macro perspective on conceptual problems through literature overview, the second introduces methodology and the third chapter provides results of the subsequent structural literature review with bibliographical elements. The last chapters discuss findings, theoretical and practical implications.

3.2 Conceptual intersections and first systematization attempts

3.2.1 Systematization attempts: The concept of social innovation

Several authors made attempts to provide a critical systematization of the existing approaches to social innovation in different disciplines. Neumeier (2012) proposes three approaches for understanding social innovation: 1) new means of enterprise organization; 2) catalysis of social change in the society; and 3) improvements on a group level. According to the author, the term “can refer to the effort, method, result or change initiated by collaborative actions.” (Neumeier 2012, p. 49-50) Some similarities can be found in the analysis of Andrea Bassi (2011). She divides current definitions of social innovation into three categories: pragmatic, systematic, and managerial. The first category is a narrow one that reflects an economic approach to social innovation, and examines it in the context of a social enterprise with an individual perspective on the social innovator. Under the second category, Bassi combines broad sociological concepts that refer to the change in aspects of the social system and the collective aspect of the social innovation process. The last category is a hybrid of the two previous ones. It focuses on the collective changes in the whole society solving a social problem, while highlighting the effectiveness and efficiency of innovations from a management perspective. Caulier-Grice et al. identify five approaches: description of social change, description of social entrepreneurship, an aspect of business strategy for the effective growth, a new implementation for meeting social needs and a model of governance (Caulier-Grice et al. 2012). All these systematization attempts commonly refer to two main approaches – sociological and economical.

Sociological concepts, which mostly refer to social change, are often criticized as being very general (Kesselring and Leitner 2008, Neumeier 2012). A good illustration of this problem is provided by the definition of Wolfgang Zapf, which was suggested in 1994 in the context of modernization theory. Zapf defines social innovation as follows: “Social innovations are new ways to reach aims, in particular new organizational forms, new regulations, new lifestyles, which alter the direction of social change and which solve problems better than former practices. They should be worth being imitated and institutionalized.” (Zapf 1989, translated by Kesselring 2015, p.154) The concept introduced by Zapf is broadly formulated and is not easy applicable for empirical research. This definition refers to organizational forms such as specific salary systems, new forms of need satisfaction such as private cars, new forms of participation, education and even new lifestyles (Kesselring and Leitner 2008).

However, this definition of social innovation is seen as a benchmark in social science (Kesselring and Leitner 2008) and the important idea of institutionalization of social innovation provided by Zapf was reinforced by subsequent researchers. Howaldt and Schwarz suggest that the acceptance of a new social practice or new combinations of social practices by recipients and their institutionalization, should be seen as a criterion of social innovation (Howaldt and Schwarz 2010). Similarly, Gillwald refines the concept of Zapf and puts the main focus on the diffusion and stability of social innovation, and argues that social innovations are to a lesser extent defined by their innovativeness, but more by their consequences (Gillwald 2000).

Whereas in sociology the focus is mostly directed to the relation of social innovation to social change, social innovation research in economics tend to focus on institutional dimensions and on intern and extern conditions that influence the innovation process (Kesselring and Leitner 2008, Howaldt, and Schwarz 2010). In their definitions, economic concepts on social innovation mostly refer to the well-being of recipients. Poll and Ville defined social innovation as “any new ideas with the potential to improve either the macro-quality of life or

the quantity of life” (Pol and Ville 2009, p. 17). The improvement of the macro-quality of life is understood as the growth of valuable choices that refer to the well-being on the group level, but not necessarily for each resident (Pol and Ville 2009). Dawson and Daniel (2010) also refer to the well-being on a group level, formulating four elements of social innovation: the challenge the social group is faced with, the complex process reliant on context, the goals directed on improvement of social well-being, and the people in the group who share the goals.

3.2.2 Systematization attempts: The concept of social entrepreneurship

Bacq and Janseen noted several similarities in the conceptual development processes of entrepreneurship and social entrepreneurship phenomena. Similarly to the entrepreneurship concept some years ago, social entrepreneurship represents a phenomenon-driven concept that was initiated by practitioners and still lacks a unifying paradigm (Bacq and Janseen 2011). More concretely, Dees (1998) refers the appearance of the concept of social entrepreneurship to the establishment of the funding organization Ashoka that gave impulse for the emergence of the centers of social entrepreneurship in universities and to a number of other foundations as Schwab and Skoll Foundations (Dees 1998). Tapsell and Woods also note that the experience of practitioners became significant for the development of the concept (Tapsell and Woods 2010). However, except for very few academic papers, this field of scientific research was acknowledged as an important issue of investigation only in the nineties (Bacq and Janseen 2011, Weerawandena and Mort 2006).

According to Nicholls (2010), two conceptual traditions on social entrepreneurship can be distinguished: Social innovation tradition, which emphasizes the social value and process of

social change, and “business-like social action”, which follows business logic and commercial models. The first tradition discusses political transformations and empowerment in the context of social changes and the second one refers to the recognition of new market opportunities for business (Nicholls 2010). Similarly, Bacq and Janssen (2011) divide social entrepreneurship concepts into social innovation and social enterprise schools of thought. The authors note, that most definitions fall into the first category. Tracey and Phillips (2007) also identify two approaches for social entrepreneurship, namely positive social change, where success is measured by how social objectives are achieved (often with the help of philanthropy and subsidies), and socially creative commercial enterprises, which reinvest in social problems or develop new products. However, the scholars highlight that both of these approaches may overlap. Mair and Marti (2006) reveal three approaches: Social entrepreneurship as a catalyst for social change, such as non-profit initiatives creating social value (often through alternative funding and business strategies) and business social responsibility.

Several researchers made attempts to identify the basic elements on which social entrepreneurship concepts are based. According to Dacin et al (2010), the conceptual definitions found in social entrepreneurship literature are based on four factors: The personality of the social entrepreneur, the operating sector (performed activities and establishment manner), processes and resources used (social versus economic characteristics), and mission and outcomes (solving social problems and creating social value) (Dacin et Al. 2010). Following Choi and Majumdar, who analyzed approaches to social entrepreneurship in academic literature, five components constitute the basic characteristics of social entrepreneurship: social value creation (social issues, social wealth, social mission), social entrepreneur (initiator and innovator), social entrepreneurship organization (various sectors, organizational forms), market orientation (efficiency and effectiveness, financial

sustainability and self-sufficiency) and social innovation (innovative activity for social change) (Choi and Majumdar 2014).

The problem of generalization of the conceptual definitions was noted not only by social innovation researchers. Dees (1998) was the first who pointed out the dilemma between defining social entrepreneurship too broadly and too narrowly. Dacin et al (2010) concluded that a decade later this problem was not yet solved and emphasized the promise and importance of further theoretical research on social entrepreneurship. The scholars also suggested a number of research opportunities for further conceptual developments such as institutions and social movements, networks, culture, identity and cognition (Dacin et al. 2011).

3.2.3 Conceptual intersections

Different authors highlight the link between the concepts of social innovation and social entrepreneurship. Austin, for example, sees “an innovative activity with a social objective” as a core part of both social innovation and social entrepreneurship (Austin et al. 2006). Dawson and Daniel (2010) also highlight social objective as a driver behind both activities, and Phillips et al. (2015) suggest that social entrepreneurship is moving within the social innovation system, in which actors address social issues (Phillips et al. 2015). Indeed, as shown above, various authors pointed out that social innovation constitutes an integral aspect of the social entrepreneurship concept (Bacq and Janssen 2011, Choi and Majumdar 2014, McLean et al. 2012, Strauch et al. 2011). What both concepts commonly share is that social outcomes still prevail over the innovativeness (Austin et al. 2006, Gillwald 2000).

Social innovation is multi-disciplinary by nature and may occur in different sectors (Caulier-Grice et al. 2012, Schmitz et al. 2013). Furthermore, it can be shared by any number of people interested in it, e.g. family, local communities, organizations and the whole society (Dawson and Daniel 2010). Similarly, social entrepreneurship may occur in various sectors, legal forms and sizes, deviating from organizational forms that can limit their potential (Hemingway 2005, Austin et al. 2006, Nicholls 2008, Witkamp et al. 2011). Moreover, Kistruck and Beamish extend the idea of sectoral distinction of social entrepreneurship, and describe various approaches where social entrepreneurship is seen not only as a non-profit or for-profit phenomenon, but also as a hybrid of two sectors or as a sector-independent phenomenon (Kistruck and Beamish 2010).

For the both concepts, the question of the distinction of “social” innovation and “social” entrepreneurship as independent phenomena often plays a central role. The analysis of social innovation is often engaged in discussion on how it differs from technological innovation and business innovation, whereby the research on social entrepreneurship emphasizes the importance of comparative analysis with commercial or traditional entrepreneurship. Social innovation is therefore contrasted from the concept of technological and business innovation through contraposition of its aims: social practice versus technological offering, social purpose versus profit maximization (Howald and Schwarz 2010, Mulgan 2007). Though, their aims are different, the outcomes may overlap, for example, when social innovation leads to improvement of economic performance or is not possible without a technological basis (Hochgerner 2010). Thus, some scholars focus on technology-enabled social innovations (Schweitzer et al. 2015). Austin et al. (2006) summarize the differences of social entrepreneurship from commercial entrepreneurship through four indicators: mission, market failure, resource mobilization and performance measurement. Mair and Noboa (2003) suggest to differentiate traditional and social entrepreneurship through personality, the nature of social

innovation/opportunities and the distinct outcomes. Similarly to the discussion on technological versus social innovation, this distinction cannot be seen as dichotomous – their elements may overlap. Some authors also try to define “social” by separating definitional analysis of the phenomena “social” and “entrepreneurship” (Mair and Marti 2006, Peredo and McLean 2006, Tan et al. 2005).

3.3 Methodology

To map social innovation and social entrepreneurship concepts in academia, structural literature analysis was applied. Firstly, EBSCO library database was chosen as a resource for data collection with a number of limitation criteria (Table 3-1). EBSCO was selected as it is a comprehensive database with high quality abstracting, allowing precise search. The databanks available in EBSCO were narrowed to three suitable ones - Business Source Premier, SocINDEX with Full Text, and Political Science Complete. Afterwards, only papers published in academic journals, peer reviewed and written in English language were chosen- a criterion of a high quality research source (Webster and Watson 2002). No limitations were placed on the time period throughout the search process.

The analysis was conducted as follows: The terms “social innovation” and “social entrepreneurship” were searched in the title of the paper, its abstract, key words and subject terms, refined by applying the limitation criteria listed above (Table 3-1). The search was performed in September 2017, and resulted in 349 articles for social innovation and 613 for social entrepreneurship (42 of these articles included both terms). Additionally, in order to ensure a high-standard level and define influential journals, authors and concepts, the second quality criterion was applied. The articles were proofed based on their citation rates – a

commonly employed criterion of intellectual influence and relevance (Lockett and McWilliams, 2005). For this step Web of Science database was used. Web of science is one of the most widespread and frequently used databases, which in addition provides the Social Science Citation Index and precise research area indexing (Chadegani et al.2013). The inclusion of the two databases – EBSCO and Web of Science – contributes to more accurate depiction of the scientific landscape. In the second step, only the articles with the Social Science Citation Index of minimum 3 were used for the subsequent analysis. This particular citation level was chosen to maximize the number of papers in the sample, while excluding those with only “accidental” citations of 1 or 2. Moreover, all of the journals chosen have an impact factor assigned. As a result, the total number of relevant papers was narrowed to 89 for social innovation and to 179 for social entrepreneurship.

Data collection	Social Innovation	Social Entrepreneurship
	EBSCO Databanks: Business Source Premier, SocINDEX with Full Text, Political Science Complete. Limitation criteria: academic journals, peer reviewed, English language.	
	349 papers	613 papers
	Quality/influence check: SSCI, min. 3 Times Cited, journals with impact factor	
	89 papers	179 papers
	57 journals	88 journals
Analysis of papers	89 papers on social innovation and 179 papers on social entrepreneurship were investigated on the subject of relevant use of the concepts, the year of publishing, influential journals and authors, research areas; as well as on the availability of conceptual definitions.	

Table 3-1 Data sample and research process

Looking at citation rates in detail (Table 3-2), the same number of papers on social innovation has citation rate fewer than 10 and between 10 and 50 citations. The number of papers with more than 50 citations on social innovation reaches 19%. There are 13.5% fewer papers with low citation number (under 10 times cited) on social entrepreneurship than on social

innovation, and 6% more papers on social entrepreneurship than on social innovation with the rate over 50. Moreover, there are substantially more papers with very high citation numbers on social entrepreneurship as those on social innovation, as will be demonstrated in the analysis of the top cited articles below.

Citation Number	Social Innovation	Social Entrepreneurship
under 10 citations	36 (40,5%)	48 (27%)
10 till 50 citations	36 (40,5%)	86 (48%)
above 50 citations	17 (19,0%)	44 (25%)

Table 3-2 Citation rates of the papers in sample

Next, the papers in the sample were analyzed based on the year of publication, the number of authors, the number of citations, the journal and its impact factor, and the research area, based on the scope notes of the Social Science Citation Index. Afterwards, the papers were screened to verify that they refer to the concepts of social innovation and social entrepreneurship. Fifteen papers on social innovation and 32 papers on social entrepreneurship did not provide any discussion or conclusions on the concepts. Finally, the articles were read in detail in order to analyze whether any conceptual definitions were given or discussed in the paper. Finally, available conceptual definitions were analyzed.

3.4 Mapping social innovation and social entrepreneurship concepts in academia: The results of structural literature review

3.4.1 Overview of the publishing activity

The literature review reveals that academic research on social innovation and social entrepreneurship gained its momentum in the past decade. Short et al. (2009) and Weber et al. (2012) also observe the tremendous growth in the number of articles from the nineties to the beginning of the new century. Analysis of paper publication years in the sample shows that 78% of papers on social innovation were published after 2007, indicating that most papers were published in the last ten years. Taking into account that only one paper published from 2016 fulfils the limitation criterion on the number of citation, this number is expected to increase shortly. This is further illustrated through the distribution of social entrepreneurship papers: 96% have been published after 2003 and over half of those after 2010.

During the last decade, the appearance of the both concepts in peer reviewed academic journals has considerably increased (Figure 3-1). For “social innovation”, eleven articles were published before 2002 and 78 articles after 2002. Most publications were released in the years 2010, 2012 and 2013. As for social entrepreneurship, only five papers discussed this concept before the years 2000 and 174 after. The peak was achieved in the year 2010 with 39 articles being published. It is important to note the role of the citation criteria in the sample, which can lead to the exclusion of newer or uncited articles (see last chapter on limitations).

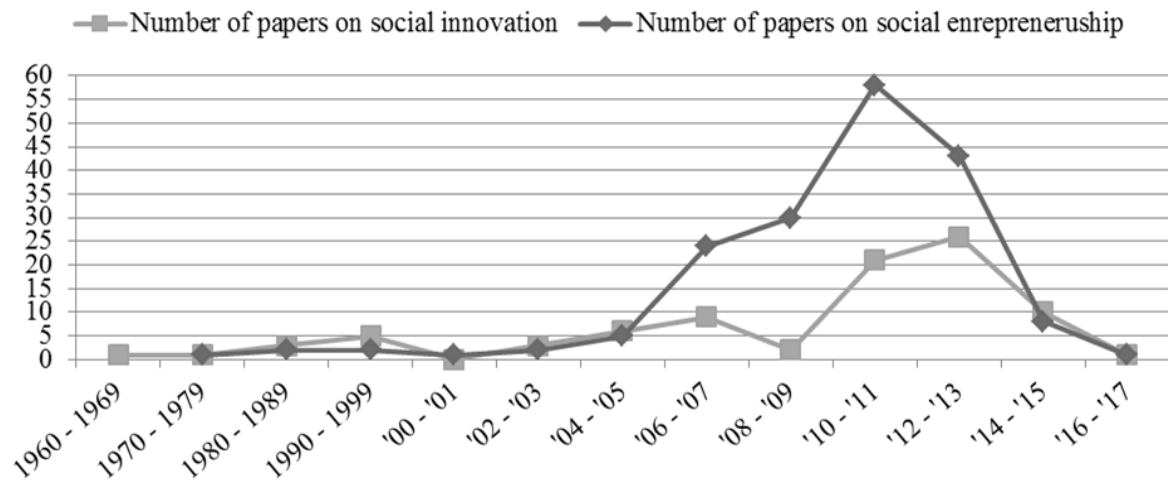


Figure 3-1 Social innovation and social entrepreneurship papers in sample, number per year

3.4.2 Influential journals and papers

All in all, 89 social innovation articles are published in 57 journals. Fifteen journals cover a half of the articles (53%), whereas eight journals presented in the Table 3-3 cover 37%. Comparing to the journals presented in the social entrepreneurship section below, the journals in Table 3-3 show a much lower impact factor.

Journal	Number of articles in sample: years											IF
	before	2000	2003	2005	2007	2009	2010	2011	2012	2013	2014	
Urban Studies (Routledge) (6)				5					1			2.36
European Urban & Regional Studies (5)				1	4							2.08
International Journal of Technology Management (5)							5					1.04
Ecology and Society (4)							1	1		1	1	2.84
Journal of Business Ethics (4)						1	2		1			2.34
American Journal of Community			3									2.11

Psychology (3)											
Human Relations (3)	3										2.62
Journal of Cleaner Production (3)									2	1	5.72

Table 3-3 Eight journals, covering 37% of social innovation articles

Urban Studies includes three articles with more than 100 citations and *Ecology and Society* includes three of articles with above 50 citations, whereas other highly cited articles are each published in a separate journal. Seven articles received more than 100 citations and are listed in Table 3-4.

Article	Author	Journal
Governance innovation and the citizen: The Janus face of governance-beyond-the-state (2005), citation rate: 435	Swyngedouw, E.	Urban Studies (Routledge).
Business models for sustainable innovation: state-of-the art and steps towards a research agenda (2013), citation rate: 173	Boons, F., Lüdeke-Freund, F.	Journal of cleaner Production
Social Entrepreneurship: A Critique and Future Directions (2011), citation rate: 139	Dacin, M.Tina, Dacin, Peter A.	Organization Science
Growing grassroots innovations: exploring the role of community-based initiatives in governing sustainable energy transitions (2012), citation rate: 139	Seyfang, G., Haxeltine, A.	Environment and planning, Government and Policy
The political process of innovation (1991), citation rate: 124	Frost, Peter J., Egri, Carolyn P.	Research in Organizational Behavior
Towards alternative model(s) of local innovation (2005), citation rate: 124	Moulaert, F., Martinelli, F., Swyngedouw, E., González, S.	Urban Studies (Routledge).
A Sociological Institutional Approach to the Study of Innovation in Governance Capacity (2005), citation rate: 102	González, S., Healey, P.	Urban Studies (Routledge).

Table 3-4 Top cited social innovation articles with above 100 citations in SSCI

179 social entrepreneurship articles are published in 88 journals, where eight of them cover almost half of the articles (48%) (Table 3-5), including two leading Journals with a high impact factor, namely *Entrepreneurship: Theory & Practice* (IF=4.92) and *Journal of business Venturing* (IF=5.77). The journals listed in Table 5 include not only journals with an exclusive focus on entrepreneurship, but also those which do not specifically emphasize entrepreneurship. Looking on the publication year of the articles in these journals in detail, more recent papers published after 2012 were found in two journals with the highest impact factor. All in all, the journals listed in Table 3-5 seem to influence the current discussion on the subject.

Journal	Number of articles in sample: years														IF
	before 2000	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
Entrepreneurship: Theory & Practice (23)				1	1	1		8	4	2	3	2	1	4.92	
Journal of Business Ethics (21)	1		2				3	9	2	4				2.35	
Entrepreneurship & Regional Development (13)					2	1		6	3		1			1.78	
Journal of Business Venturing (10)							3				4	1	2	5.77	
Academy of Management Learning & Education (7)					1				1	5				2.43	
Journal of World Business (7)				6				1						3.46	
Journal of Management Studies (5)							1			3	1			3.96	
International Small Business Journal (5)					3		1				1			3.68	

Table 3-5 Eight journals, covering 48% of social entrepreneurship articles

Entrepreneurship: Theory & Practice includes five articles with more than 100 citations, and *Journal of World Business* four of those, whereby three of those papers have citation rate over 250. Top most cited articles with above 250 Citations are listed in Table 3-6.

Article	Author	Journal
Social Entrepreneurship Research: A Source Of Explanation, Prediction, And Delight (2006), citation rate: 640	Mair, J., Marti, I.	Journal of World Business
Social And Commercial Entrepreneurship: Same, Different, Or Both? (2006), citation rate: 597	Austin, J., Stevenson, Ho., Wei-Skillern, J.	Entrepreneurship: Theory & Practice
Institutional Entrepreneurship In Emerging Fields: Hiv/Aids Treatment Advocacy In Canada (2004), citation rate: 561	Maguire, S., Hardy, C., Lawrence, T.B.	Academy of Management Journal.
A typology of social entrepreneurs: Motives, search processes and ethical challenges (2009), citation rate: 368	Zahra, S. A., Gedajlovic, E., Neubaum, D., Shulman, J. M.	Journal of Business Venturing
Social entrepreneurship: A critical review of the concept (2006), citation rate: 336	Peredo, A. M., McLean, M.	Journal of World Business
The Marketization Of The Nonprofit Sector: Civil Society At Risk? (2004), citation rate: 281	Eikenberry, A. M., Kluver, J. D.	Public Administration Review
Contextualizing Entrepreneurship-Conceptual Challenges and Ways Forward (2011), citation rate: 274	Welter, F.e	Entrepreneurship: Theory & Practice
Investigating social entrepreneurship: A multidimensional model (2006), citation rate: 261	Weerawardena, J., Sullivan Mort, G.	Journal of World Business

Table 3-6 Top cited social entrepreneurship articles with above 250 citations in SSCI

The distribution of the number of authors looks similar for the both concepts. If one divides a sample into 3 groups – one author, two authors and 3 or above authors – the proportions appear comparable for the both samples. In total 71% of social entrepreneurship papers are published by more than one author: 35% by two authors and 36% by three or more. 29% of papers have single authorship. Similarly, 76% of articles on social innovation are published

by two authors and (35%) by three or more authors, while every fourth article by a single author.

3.4.3 The scope of research areas

Most social innovation articles are assigned to two or more research areas, and only 29 articles refer to one research area. Although the number of social innovation articles is lower in comparison to social entrepreneurship, the diffusion of articles through various research areas is higher. Around 20% of social innovation articles fall into urban studies or environmental sciences and ecology (4% on social entrepreneurship), while another 20% fall into the research area business and economics (55% on social entrepreneurship). The rest falls in various areas from public administration and engineering to psychology and social work (Figure 3-2). Interestingly, the five most highly cited social innovation papers all fall into environmental sciences and ecology and urban studies research areas, and two into business and economics.

Around 40% of the social entrepreneurship papers are assigned to two or more research areas, the other 60% - to one. More than half of the papers fall into business and economics. The second larger groups after business and economics are constituted by 11% of papers in public administration and 10% of papers on social sciences-other topics, followed by several other research areas. Nevertheless, the influential discussion is taking place in traditional research area of business and economics, as high cited social entrepreneurship articles with above 100 citations were all found in this research area. Thus, in this area, the impact of social entrepreneurship research has been considerable relative to other research areas.

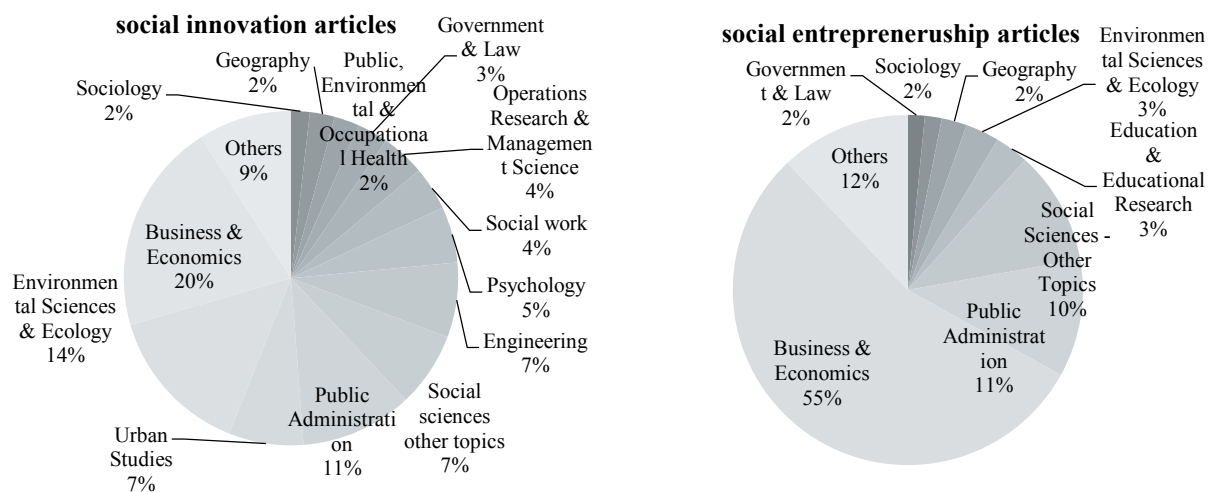


Figure 3-2 The distribution of the articles on research areas, in percent

3.4.4 Definitional analysis

In several articles in the sample, social innovation or social entrepreneurship respectively appear amidst several other notions, and the papers do not provide any conclusions, discussions, or clarifications of the concepts. 15 papers in the social innovation sample did not discuss the concept of social innovation explicitly. A large number of social innovation articles refer to a concrete example of a new social practice such as local grassroots activist and multi-stakeholder collaborations, and new civil practices such as participatory budgeting in urban development, community based partnerships, direct-to-consumer energy consumption, changes in governmental processes, and healthcare as projects of the European Society for Immunodeficiency. Thus, these articles mostly characterize new social practices of the civil society as the citizen's response to environmental or urban change or healthcare, mostly without any conceptual discussion of the term. 37 articles do not provide any conceptual definitions, whereas ten authors give their own definitions and sixteen refer to the definitions given by other authors.

32 papers in the social entrepreneurship sample did not discuss the concept of social entrepreneurship. They refer instead to entrepreneurship in general, or describe other entrepreneurial concepts (e.g. institutional entrepreneurship, collegial entrepreneurship and corporate social responsibility), mostly regarding social entrepreneurship as one of the examples of emerging concepts in the field of entrepreneurship. Thus, around 82% of papers handle the concept of social entrepreneurship explicitly. 51 articles do not define social entrepreneurship at all, whereas the major part of the articles provides a definition or an understanding of the concept the paper refers to. Twelve articles provide own definitions and the remaining ones (85 papers) use definitions introduced by other authors.

3.4.5 Influential concepts

The most important definitions the papers in this analysis refer to are presented in Table 3-7. The most cited definitions are acknowledged as influential ones. Talking about social innovation papers, the definition of Frank Moulaert was cited in six papers in various years by various authors, whereas his own articles (including those with co-authors) were found 4 times in the sample. All papers citing his definition except one are published in the research areas environmental sciences & ecology and urban studies journals *European Urban & Regional Studies*, *Urban Studies* and *Global Environmental Change - Human and Policy Dimensions*. The concept of social innovation in territorial development – the area to which Moulaert itself defines his concept - introduces “an alternative view of urban development, focused on satisfaction of human needs” (Moulaert et al 2007). Thus, Moulaert can be acknowledged as the most influential author at least for this research area.

Authors	Number of articles	Definition	Research area
Moulaert and Nussbaum 2005a Moulaert et al 2005b	6	Social innovation then means innovation in social relations of governance combined with the satisfaction of basic needs as revealed by the new relations of governance (2005a). We especially stress three dimensions, preferably occurring in interaction with each other: 1) Satisfaction of human needs that are not currently satisfied, either because ‘not yet or because ‘no longer’ perceived as important by either the market or the state... 2) Changes in social relations, especially with regard to governance, that enable the above satisfaction, but also increase the level of participation of all but especially deprived groups in society. 3) Increasing the socio-political capability and access to resources needed to enhance rights to satisfaction of human needs and participation. (2005b)	environmental sciences & ecology, urban studies
Mulgan 2007	4	Social innovation refers to innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly diffused through organizations whose primary purposes are social.	business & economics, operations research & management science, engineering
Phills, Deiglmeier, Miller 2008	3	A novel solution to a social problem that is more effective, efficient, sustainable, than existing solutions and for which the value created accrues primarily to society as a whole rather than private individuals.	business & economics

Table 3-7 The most influential definitions of social innovation in academia

The definitions of Mulgan (2007) and Phills, Deiglmeier and Miller (2008) were cited four and three times respectively. These definitions are illustrative of the managerial perspective on social innovation. The papers are published in business and economics, engineering, and operations research & management science. In contrast to the social entrepreneurship

definitions published in the same research areas, the influential definitions here are published in the papers of supporting intuitions, namely Center of social innovation in Stanford and Skoll Centre for social entrepreneurship, whereby Geoff Mulgan is furthermore the founder of Yong foundation. Thus, these papers have rather political, supportive and “call for action” character.

The most influential definitions of social entrepreneurship are presented in Table 3-8. Those introduced by Mair and Marti (2006) can be characterized as the most influential ones, followed by Austin et al. (2006) and Dees (1998). Several papers also refer to the concepts formulated by Zahra et al., Nicholls, Mort and Weerawandena, Peredo and McLean, Chell. The articles of Mair and Marti (2006), Austin et al. (2006), and Zahra et al. (2009) are to be found in the list of the most cited articles on social entrepreneurship (Table 3-6).

The definition of Dees is often acknowledged as being the first theoretical concept of social entrepreneurship as well as the one of most common use (Tracey and Phillips 2007, Marshall 2010, Sud et al. 2009). Although it was formulated in 1998, it was cited often in recent years. Dees views social entrepreneurship as a combination of “the passion of a social mission with an image of business-like discipline, innovation, and determination“(Dees 1998, p.1), while an individual social entrepreneur is seen as a key aspect of the concept. Dees’ definition is based on ideas of value creation, innovation and change agents, pursuit of opportunity and resourcefulness formulated by Say, Schumpeter, Drucker, and Stevenson. Nevertheless, the author notes that his definition is “idealized” (see Table 3-8).

Mair and Marti associate economic outcomes with social entrepreneurship and refer to social versus economic wealth, which Chell later defines a double bottom line that exercises pressure on social entrepreneurs. Mair and Marti argue that social entrepreneurship “gives higher priority to social value creation—by catalyzing social change and/or catering to social

needs—than to value capture” (Mair and Marti 2006, p. 42). Social value creation as well as exploitation and pursuit of new opportunities are the common aspects across the most influential definitions presented in Table 3-8. Zahra et al. refer to the social wealth created through primary activities of the social entrepreneur.

The key point in the definition of Austin et al. is the innovativeness of the social value creating activity. The authors argue that social entrepreneurship activity “is characterized by innovation or the creation of something new rather than simply the replication of existing enterprises or practices” (Austin et al. 2006, p. 371). Nicholls, Peredo and McLean, Mort and Weerawandena also refer to innovativeness as an integral part of social entrepreneurship. Austin et al. further suggest that social innovation may occur across private, public and third sectors, which was also argued by Nicholls and Chell later on.

The overwhelming part of the papers in the sample (except two) which cited the definitions listed in Table 3-8 (also) refer to the research area of business and economics. Eight papers also refer to public administration and to social sciences respectively. The definitions of Mair, Marti and Dees are also cited in six papers on education. Thus, it can be concluded that although the studies can be found in several research areas, the most influential discussion is taking place in business and economics.

Author	Number of Articles	Definition	Research area
Mair And Marti 2006	15	First, we view social entrepreneurship as a process of creating value by combining resources in new ways. Second, these resource combinations are intended primarily to explore and exploit opportunities to create social value by stimulating social change or meeting social needs. And third, when viewed as a process, social entrepreneurship involves the offering of services and products but	business & economics, education & educational research, public administration, social sciences - other topics, health care sciences &

		can also refer to the creation of new organizations.	services
Austin, Stevenson, Wei-Skillern 2006	10	Innovative, social value creating activity that can occur within or across the non-profit, business and/or public/government sectors.	business & economics, public administration, social sciences - other topics, public, environmental & occupational health, biomedical social sciences
Dees 1998	9	Social entrepreneurs play the role of change agents in the social sector, by: (1) Adopting a mission to create and sustain social value (not just private value), (2) Recognizing and relentlessly pursuing new opportunities to serve that mission, (3) Engaging in a process of continuous innovation, adaptation, and learning, (4) Acting boldly without being limited by resources currently in hand, and (5) Exhibiting a heightened sense of accountability to the constituencies served and for the outcomes created.	business & economics, public administration, social sciences - other topics, public, environmental & occupational health, biomedical social sciences
Zahra et al. 2009	6	Social entrepreneurship “encompasses the activities and processes undertaken to discover, define, and exploit opportunities in order to enhance social wealth by creating new ventures or managing existing organizations in an innovative manner”.	business & economics, public administration, social sciences - other topics,
Nicholls 2008	4	Social entrepreneurship is a set of innovative and effective activities that focus strategically on resolving social market failures and creating new opportunities to add social value systemically using a range of resources and organizational formats to maximize social impact and bring about change. Simply put, social entrepreneurship is defined by its two constituent elements: a prime strategic focus on social impact and an innovative	business & economics, social sciences - other topics

		approach to achieving its mission	
Mort, Weerawar- dena 2006	3	The entrepreneurship leading to the establishment of new social enterprises and the continued innovation in existing ones''	business & economics, public administration
Peredo, McLean 2006	3	Social entrepreneurship is exercised where some person or group aims either exclusively or in some prominent way to create social value of some kind, and pursue that goal through some combination of (1) recognizing and exploiting opportunities to create this value, (2) employing innovation, (3) tolerating risk, and (4) declining to accept limitations in available resources'	business & economics, public administration
Chell 2007	2	The process of 'recognizing and pursuing opportunities with regard to the alienable and inalienable resources currently controlled with a view to value creation'	business & economics, public administration

Table 3-8 The most influential definitions of social entrepreneurship in academia

3.5 Final discussion

3.5.1 Conclusion

In the face of new social ideologies and the growing recognition for social responsibilities by economies, as well as growing enthusiasm of the civic society, social innovation and social entrepreneurship - both phenomenon-driven concepts - gained attention in academia in the last decades. A lack of unifying paradigms is criticized in a number of conceptual papers, whereby empirical research is mostly descriptive and explorative, and qualitative research prevails over quantitative.

Given this starting point, this article makes an attempt to analyze how both concepts are implemented by the scientific community. First, the literature overview raises a hypothesis on the different appearance of the phenomena in academic research areas. Second, further structural literature analysis with bibliographical elements is conducted, identifying the most influential concepts and authors classified by research area. This part builds the core of the study.

The literature analysis highlights that social objective is seen as a driver behind both phenomena and social outcomes tend to prevail over innovativeness. Social innovation and social entrepreneurship can occur across different sectors and therefore are studied in various research areas. The two most common research areas contributing to social innovation research are environmental and urban studies as well as business and economics and public administration, covering over the half of the distribution together. *European Urban & Regional Studies*, *Urban Studies (Routledge)* and *International Journal of Technology Management* journals contribute the most to the discussion. The concepts of F. Moulaert, G. Mulgan and J. Phillips et al. can be seen as the most influential ones in the academic discussion on social innovation. The influential discussion on social entrepreneurship is unsurprisingly taking place in the research area of business and economics that covers more than half of the distribution. The influential academic discussion is taking place in this research area, as the journals with the highest number of papers on the investigated subject as well as the most cited papers are found in these research areas. The two most contributing Journals are *Entrepreneurship: Theory & Practice* and *Journal of Business Ethics*. The concepts from J. Mair and I. Marti, J. Dees, J. Austin et al and Zahra et al. are the most influential ones in the academic discussion on social entrepreneurship.

It is important to note, that influential papers on social innovation in the area of business and economics are published by support institutions. This reveals an important difference to social

entrepreneurship, as social innovation appears more within the political discourse. In addition, papers on social innovation often present case studies, examining new civil society practices, mostly without any conceptualization of the term.

Several articles on social innovation and social entrepreneurship are published in other research areas, illustrating the heterogeneity and multi-disciplinarity of current research. Nevertheless, there are only few social entrepreneurship papers that simultaneously cover several research areas. This shows that the discussion on social entrepreneurship in academia appears to be more consistent.

3.5.2 Theoretical and practical implications

The multifaceted research possibilities on social innovation and social entrepreneurship provide high potential and a creative space for scholars interested in understanding the phenomena in their fascinating versatility. The question remains: Do we need an overarching conceptual definition for each of both concepts to bring academic research forward? Or will the generalization lead to the loss of those versatility and creativity, which attracts a large amount of new researchers now?

The present article suggests taking a research area of interest as a starting point for the further orientation in the field for a new researcher. Getting to know publishing activity on the both concepts helps to get orientation in a heterogeneous, fast developing field, join the ongoing discussion and optimize publishing strategy and make a valuable contribution to the field. Following the results of structural literature analysis presented in this article, future researchers will be able to better understand in which journals the influential discussion is taking place and which authors contribute to those discussions the most, based on the research

area the scholars are most interested in. Based on the results presented in the Tables 3-4 – 3-8, the scholars can identify to which journal in their discipline they may desire to apply for publication, which papers published in that journal should be discussed carefully, what are the key papers in the field that should be mentioned in the literature review and to which definition the scholars should refer as recognized in the research area.

The fact that the current article focuses on the influential concepts, as recognized by the community, builds one of the main differences from the previous systematization attempts. Thus, the most influential definitions, as mentioned in this article, are explicitly those to which the academic community itself refers the most. Furthermore, this article provides a new methodological perspective to the conceptual debates in the field of social innovation and social entrepreneurship by examining the both concepts through its conceptual interceptions and complementing it with comparative insights from structural literature analysis.

In addition, given the discordance between high political interest to social innovation and more consistent academic research on social entrepreneurship, this article represents a first step towards the better orientation between the both concepts for those willing to build a bridge between political interest and academic research and those interested in promoting the role of the both phenomena in overcoming social challenges of our time.

3.5.3 Limitations and future research

Taking into account the database-centered methodological approach with the number of limitation criteria for the structural literature analysis, it is unlikely that every applicable study was included to the analysis. Limitations of this study comprise the databases that were used (EBSCO literature database for selection of articles and Web of Science for validation of the

quality through citation index), the search criteria (title, abstract, subject terms), criteria for journals (peer reviewed, English language) and for the papers (citation number). Given the combination of the timeline with the citation criteria leads to the exclusion of the papers with extremely low or absent citation rates and also to the exclusion of rather new papers, which have not been cited yet.

Nevertheless, research questions of this article primarily concentrate on the influential discussion on both concepts, which demands the limiting criteria, e.g. the most cited authors and concepts. Thus, although the view of both phenomena may be not complete, the study provides meaningful census on academic literature and introduces an important contribution to the conceptual progress and synthesis of current scientific discussion.

In addition, the analysis was conducted by one researcher. However, this analysis has a descriptive character and is based on features already given in databases. Thus, the features are not prescribed or attributed but described by the author. The determination of the presence or absence of definitions in papers tends to have low failure rates.

Moreover, the subject term “social entrepreneurship” can be viewed as critical, because several other research streams as for example that on hybrid organizations often claim to be a part of the research field, although they do not directly apply the term “social entrepreneurship”. However, if the author will include all the additional terms that could be associated with this research field, the number of articles for analysis will increase significantly and the dataset would not be suitable for the initial research questions, which primarily refer to the influential definitions of “social innovation” and “social entrepreneurship” provided by scholars. Nonetheless, it seems to be an important and interesting proposition for the future research.

Similarly, the future scholars should integrate the grey literature on social innovation as, for example, the sustainability-oriented innovation in interdisciplinary studies, in order to shed more light on the contemporary social innovation activity. Furthermore, the theoretical nomological network of the two constructs social innovation and social entrepreneurship could represent an interesting explorative study.

To sum up, taken into account the conceptual heterogeneity and fragmented understanding of the phenomena in current research, future research should put more emphasis on the influential concepts, authors and journals as well as on intersections of social innovation and social entrepreneurship concepts, as identified in this article. It should explore further the development of a research agenda for one or both conceptual domains, reviewing emerging concepts and modifications of the existing ones with the growth of empirical research. It is also important to pay attention to communities, emerging inside of both research fields, and how they relate to the influential discussion. Finally, more related studies are important to increase transparency and enhance management of the concepts for both researchers and practitioners.

3.6 References

- Austin, J., Stevenson, H., Wei-Skillern, J. (2006). Social and commercial entrepreneurship: same, different, or both? *Entrepreneurship: Theory & Practice*, 30 (1): 1-22.
- Bacq, S. and Janseen, F. (2011). The multiple faces of social entrepreneurship: A review of definitional issues based on geographical and thematic criteria. *Entrepreneurship & Regional Development*, 23 (5/6): 373-403.
- Bassi, A. (2011). *Social Innovation: Some Definitions*. ESSE, Social Entrepreneurship in a Global Context. Retrieved from: <http://www.esse.unibo.it/paper.pdf>.
- Chadegani, A. A. et al. (2013). A comparison between two main academic literature collections: Web of Science and Scopus databases. *Asian Social Science*. Retrieved from: <http://www.ccsenet.org/journal/index.php/ass/article/view/26960>.
- Caulier-Grice, J., Davies, A, Patrick, R., Norman, W. (2012). *Defining Social Innovation*. TEPSIE. Retrieved from: www.tepsie.eu/index.php/publications.
- Chell, E. (2007). Social enterprise and entrepreneurship – Towards a convergent theory of the entrepreneurial process. *International Small Business Journal*, 25 (1): 5–26.
- Chell, E., Nicolopoulou, K., Karata-Özkan, M. (2010). Social entrepreneurship and enterprise: International and innovation perspectives. *Entrepreneurship & Regional Development*, (6): 485-493.
- Choi, N. and Majumdar, S. (2014). Social entrepreneurship as an essentially contested concept: Opening a new avenue for systematic future research. *Journal of Business Venturing*, 29: 363–376
- Christie, M.J. and Honig, B. (2006). Social entrepreneurship: New research findings. *Journal of World Business*, 41: 1–5.
- Dacin, P.A., Dacin, M.T., Matear, M. (2010). Social entrepreneurship: Why We Don't Need a New Theory and How We Move Forward From Here. *Academy of Management Perspectives*, 24 (3): 37-57.

- Dacin, M.T., Dacin P.A, Tracey P. (2011). Social entrepreneurship: A critique and future directions. *Organization science*, 22 (5): 1203-1213.
- Dawson, P., Daniel, L. (2010). Understanding social innovation: a provisional framework. *International Journal of Technology Management*, 51 (1): 9-21.
- Dees, J.G. (1998). *The meaning of social entrepreneurship*. Duke Fuqua School of Business. Retrieved from: <http://community-wealth.org/sites/clone.community-wealth.org/files/downloads/paper-dees.pdf>.
- Davies, A., Caulier-Grice, J., Norman, W. (2012). *An Introduction to Innovation Studies for Social Innovators. A literature review of the methods and enabling conditions for innovation*. TEPSIE. Retrieved from: www.tepsie.eu/index.php/publications.
- European Commission. (2013). *The Guide to Social Innovation*. Available at: <http://s3platform.jrc.ec.europa.eu/documents/10157/47822/Guide%20to%20Social%20Innovation.pdf>.
- Gillwald K. (2000). *Konzepte sozialer innovation*. Working paper. Wissenschaftszentrum Berlin für Sozialforschung, Berlin.
- Hemingway, C. (2005). Personal Values as A Catalyst for Corporate Social Entrepreneurship. *Journal of Business Ethics*, 60: 233–249.
- Hochgerner, J. (2010). Considering the social relevance of innovations. In: *Social Innovation: Concepts, research fields and international trends*, preface, ed. J. Howaldt and M. Schwarz. IMO International Monitoring.
- Howaldt, J. and Schwarz, M. (2010). *Social Innovation: Concepts, research fields and international trends*. IMO International Monitoring.
- Kesselring, A. and Leitner, M. (2008). *Soziale Innovation in Unternehmen*. ZSI. Retrieved from: https://www.zsi.at/attach/Soziale_Innovation_in_Unternehmen_ENDBERICHT.pdf.
- Kesselring, A. (2015). *Social innovation in private companies: an exploratory empirical study*. Retrieved from: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2531771.

- Kistruck, G.M. and Beamish, P.W. (2010). The Interplay of Form, Structure, and Embeddedness in Social Intrapreneurship. *Entrepreneurship: Theory & Practice*, 34 (4): 735-761.
- Kopf, H. et al. (2013). Vorwort. In: *Soziale Innovationen in Deutschland*, ed. H. Kopf et al., 9-11. Springer VS.
- Kotsemir, M., Abroskin, A., Meissner, D. (2013). *Innovation Concepts and Typology – An Evolutionary Discussion*. Higher School of Economics, Working Paper BRP 05/STI/2013.
- Lockett, A. and McWilliams, A. (2005). The balance of trade between disciplines: do we effectively manage knowledge? *Journal of Management Inquiry*, 14 (2): 139–150.
- Maclean, M., Harvey, C., Shaw, E., Cordon, J. (2012). *Social Entrepreneurship and Community Renewal*. Paper Presented at BAM Conference, Cardiff University.
- Mair, J. and Noboa E. (2003). *Social entrepreneurship: How intentions to create social enterprise get formed*. IESE Business School, Working Paper 521.
- Mair, J. and Marti I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41 (1): 36-44.
- Marshall, R.S. (2011). Conceptualizing the International For-Profit Social Entrepreneur. *Journal of Business Ethics*, 98 (2): 183-198.
- Miller, T. L. and Wesley, L.C. (2010). Assessing Mission and Resources for Social Change: An Organizational Identity Perspective on Social Venture Capitalists' Decision Criteria. *Entrepreneurship: Theory & Practice*, 34 (4): 705-733.
- Moulaert, F. (2012). Social Innovation: Institutionally Embedded, Territorially (Re)produced. In: MacCallum, Moulaert, Hiller and Haddock (ed.) *Social Innovation and Territorial Development*. Surrey: Ashgate Publishing Limited: 11-24.
- Neuhaus, C. and Daniel, H.-D. (2008). Data sources for performing citation analysis: An overview. *Journal of Documentation* 64 (2): 193-210. doi:10.1108/00220410810858010.

- Neumeier, S. (2012). Why do Social Innovations in Rural Development Matter and Should They be Considered More Seriously in Rural Development Research? - Proposal for a Stronger Focus on Social Innovations in Rural Development Research. *Sociologica Ruralis*, 52 (1): 48-69.
- Nicholls, A. (2008). *Social entrepreneurship: New models of sustainable social change*. Oxford: Oxford University Press.
- Nicholls, A. (2010). The Legitimacy of Social Entrepreneurship: Reflexive Isomorphism in a Pre-Paradigmatic Field. *Entrepreneurship: Theory & Practice*, 34 (4): 611-633.
- Parkinson, C. and Howorth, C. (2008). The language of social entrepreneurs. *Entrepreneurship & Regional Development*, 20 (3): 285-309.
- Peredo, A.M. and McLean, M. (2006). Social entrepreneurship: A critical review of the concept. *Journal of World Business*, 41 (1): 56-65.
- Phillips, W., Lee, H, James, P., Ghobadian, A., O'Regan, N. (2015). Social innovation and social entrepreneurship: A systematic review. *Group & Organization Management*, 40 (3): 428-461.
- Pol, E. and Ville, S. (2009). Social innovation: buzz word or enduring term? *The Journal of Socio-Economics*, 38 (6): 878-885.
- Rosted, J. et al. (2009). *The new nature of innovations*. Study report to the OECD Committee for Industry, Innovation and Entrepreneurship (CIIE). Copenhagen: FORA.
- Schmitz, B., Krlev, G., Mildemberger, G., Bund, E.; Hubrich, D. (2013). *Paving the Way to Measurement – a Blueprint for Social Innovation Metrics. A short guide to the research for policy makers*. TEPSIE. Available at: www.tepsie.eu/index.php/publications.
- Short J. C., Moss T.W., Lumpkin G.T. (2009). Research in Social Entrepreneurship: Past Contributions And Future Opportunities. *Strategic Entrepreneurship Journal*, 3: 161–194.
- Strauch M., Schröder A., Schmitz N. (2011). Social Entrepreneurship – Forschungsperspektiven. In: *Soziale Investitionen. Interdisziplinäre Perspektiven*, ed. J. Anheier, A. Schröder, V. Then, 205-224. Springer SV.

- Sud, M., VanSandt, C. C., Baugous, A. (2009). Social Entrepreneurship: The Role of Institutions. *Journal of Business Ethics*, Supplement 1, 85: 201-216.
- Tan W., Williams, J., Tan T. (2005). Defining the 'Social' in 'Social Entrepreneurship': Altruism and Entrepreneurship. *International Entrepreneurship and Management Journal*, 1: 353–365.
- Tapsell P. and Woods C. (2010). Social entrepreneurship and innovation: Self-organization in an indigenous context. *Entrepreneurship & Regional Development*, 22 (6): 535-556.
- Tracey P. and Phillips N. (2007). The Distinctive Challenge of Educating Social Entrepreneurs: A Postscript and Rejoinder to the Special Issue on Entrepreneurship Education. *Academy of Management Learning & Education*, 6 (2): 264-271.
- Webster, J. and Watson, R.T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. *MIS Quarterly* 26 (2): xiii–xxiii.
- Weber, C., Kröger, A., Lambrich, K. (2012). Scaling Social Enterprises – A Theoretically Grounded Framework. *Frontiers of Entrepreneurship Research*, 32 (19), Article 3.
- Weerawandena J. and Mort G.S. (2006). Investigating social entrepreneurship: A multidimensional model. *Journal of World Business*, 41: 21–35.
- Witkap M.J., Raven R. P., Royakkers L.M. (2011). Strategic Niche Management of Social Innovations: the Case of Social Entrepreneurship. *Technology Analysis & Strategic Management*, 6: 667-681.

4. ARTICLE II: Successfully Venturing for Social Change: An Empirical Typology of Businesses for the Social Good

Abstract

Social entrepreneurship is considered both an indicator for rising social problems in the world and key to solving them. Analysing 155 social ventures awarded for innovativeness, we found three empirical types of social entrepreneurs - social bricoleurs, social mediators and social constructionists. Our findings suggest that each type of social entrepreneur shows distinct characteristics with regard to its impact on different levels of society, its structural layout and social mission. Highlighting that there is no one-fits-all-solution, our study is informative for anyone interested in promoting social entrepreneurship and its impact on the grand challenges of our time.

Key words: social entrepreneurship, types of entrepreneurs, social impact, social innovation, bricolage, cluster analysis.

Joined work with Maren Borkert.

4.1 Introduction

Around the world, social entrepreneurship is growing and gaining attention from policymakers, academics, practitioners and the public alike. In the face of the systematic retreat of governments from the provision of public goods, of new political ideologies that stress citizens' self-sufficiency and adhere to market-driven models of welfare (Dacin, Dacin and Tracey 2011, Nicholls 2006), social entrepreneurship is seen as a powerful driver to overcome the side effects of market economy (i.e. societal and/or environmental costs). As the market and the state, on their own, are unable or unwilling to regulate and solve the unparalleled challenges at various levels of society, social entrepreneurship is seen as an important means to provide solutions to new and old social challenges that have not yet been successfully resolved.

Pointing the attention to unsolved social needs, social entrepreneurs introduce innovative business models and cost-effective solutions that are of interest to emerging and so-called developed economies alike. The cuts in state funding and the soaring costs for non-profit organizations in developed economies only add to social ventures gaining ground (Wolverton 2003, Zahra, Gedajlovic, Neubaum and Shulman 2009). As recent research shows, non-profit organizations increasingly embrace market-driven strategies in order to respond to new opportunities for social value creation, raising demands for higher revenues and organizational efficiency (Liu, Eng and Takeda 2015, Morris, Webb and Franklin 2011).

Even if social entrepreneurship as an activity is developing quickly around the world, it is a relatively recent field of research and its theoretical foundations are still ill-defined. Social entrepreneurship is often used interchangeably with concepts such as social economy, third sector, non-profit, social enterprise and social entrepreneur, adding to conceptual ambiguity and operationalisation problems. Social entrepreneurship is also context sensitive, in the sense

that the geographical and cultural contexts impact on how it is understood and applied. As Kerlin (2006), Defourny and Nyssens (2008) point out, social entrepreneur, social entrepreneurship and social enterprise do assume very different meanings in the United States and in Europe, for example.

One of the main reasons for the theoretical vagueness of social entrepreneurship seems to be rooted in its bi-directional, i.e. economic and social, orientation that fuels its empirical complexity and the hybridity of its forms. Social entrepreneurs combine revenue goals with serving social needs and thus operate within for-profit and non-profit institutional structures. This ‘double bottom line’ (Dorado 2006, Chell 2007, Kistruck and Beamish 2010) confronts social entrepreneurs with the challenge to balance social value creation with market realities (Austin, Stevenson and Wei-Skillern 2006, Dees 2001, Miller and Wesley 2010, Weerawandena and Mort 2006). It is their simultaneous orientation on economic and social goals which is the common denominator of many definitions of social entrepreneurship (see, for instance, Dees 2001, Lasprogata and Cotton 2003, Peredo and McLean 2006, Seelos and Mair 2006). As a result of their focus on serving social needs and achieving their social mission, Morris et al. (2011) note, social entrepreneurs depend more on external financial support and struggle to invest their resources in fund-raising. In the face of the described conceptual ambiguity, there is a strong need to empirically study and better understand this phenomenon with a view to further theorizing and supporting the development of social entrepreneurship.

In line with previous research, we agree that social ventures are shaped by different motives, address social issues in various ways and resort to distinct business models. Our study shows that in empirical reality, we can find clusters of social ventures that can be classified as different types. Referring to one of the most highly cited papers on social entrepreneurship, our findings partly confirm the conceptual typology of social entrepreneurs suggested by

Zahra et al. (2009), while simultaneously offering a more granulated insight into their real-world characteristics. Building on previous work by Hayak, Kirzner and Schumpeter, Zahra et al. (2009) suggest three types of social entrepreneurs, namely social bricoleurs, social constructionists and social engineers. These differ from each other in scale, scope and focus. Analysing 155 social ventures awarded for their innovativeness, we investigate if Zahra's et al. (2009) classification holds true in reality.

Our results show the rich spectrum of today's social ventures. We can see how they differ in terms of mission, range and issues addressed, but also with regards to their social outcomes as well as ways of monitoring and evaluating their performance. While proving the real-world relevance of Zahra et al.'s classification, our study calls for a greater attention towards digital innovation, cross-border human networks and a new conceptualization of impact measurement to understand social entrepreneurship today.

4.2 Understanding social entrepreneurship: Approaching a phenomenon in evolution

4.2.1 First conceptual typology

In the academic discourse, social entrepreneurship is a rather young topic and publications on the matter are relatively low in numbers. While single articles on social entrepreneurship managed to make their appearance in the landscape of academic journals already in the 1990s, it was not before the world economic crisis that social entrepreneurship was addressed on a regular basis. As analyses of both the EBSCO and Scopus databases show, production and discussion of scientific knowledge on the matter blossomed particularly after 2008/2009

(Figure 4-1). In both of the queried databases the number of published articles in academic journals, with the limitation criteria on title, key words and abstract, experienced enormous growth in the last eight to nine years, indicating that social entrepreneurship is gaining a lot of interest as a field of study.

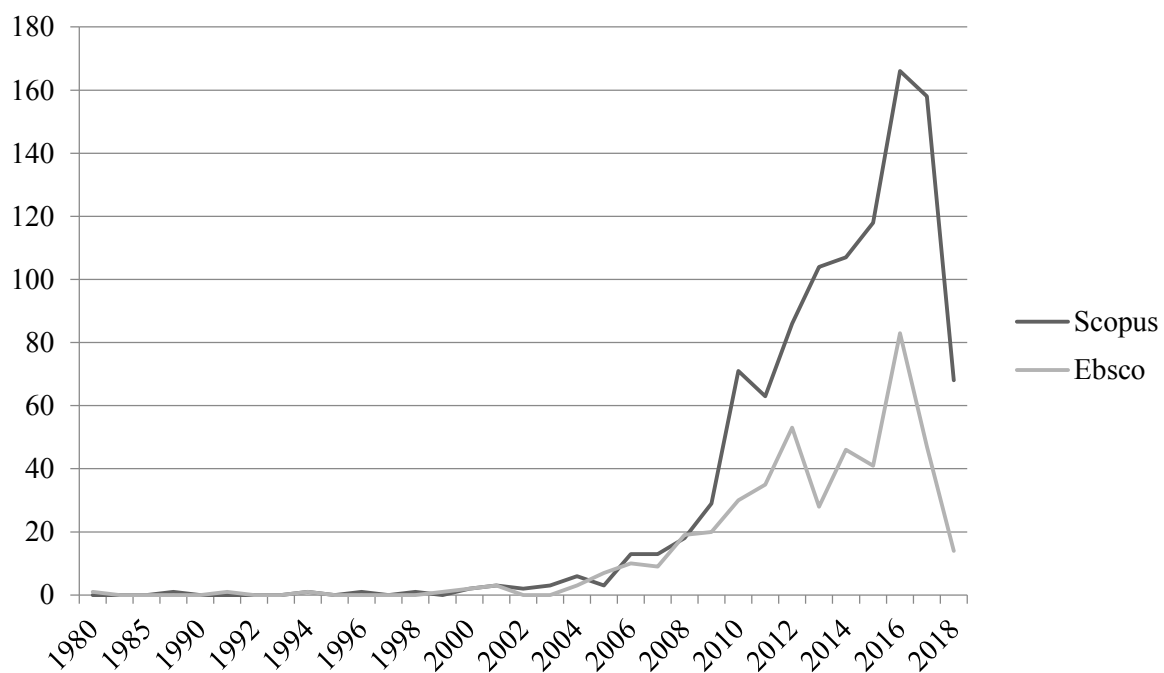


Figure 4-1 Number of articles on social entrepreneurship in academic journals

In the heydays of social entrepreneurship literature, around 2009, Zahra et al. introduced the first conceptual typology of social entrepreneurs. Their paper appears to be one of the most cited in the field. Building on the concept of opportunity recognition to distinguish between traditional and social ventures, they define social entrepreneurship as encompassing “the activities and processes undertaken to discover, define, and exploit opportunities in order to enhance social wealth by creating new ventures or managing existing organizations in an innovative manner” (Zahra et al. 2009: 522).

Opportunity recognition is one of the core concepts in the discussion on how social and traditional ventures differ, and has been widely addressed in the literature (Corner and Ho 2010, Dees 2001, Dorado 2006, Mair and Marti 2006, Weerawardena and Mort 2006). The ability to identify promising opportunities to solve social problems, and implement them in a timely fashion, is described as a core issue of social entrepreneurship (see, for instance, Thompson et al. 2000, Mort et al. 2003). The process of opportunity recognition is believed, *inter alia*, to be shaped by social mission, personal motivation and background. According to Hockerts (2017), prior experience with a social problem is also a predictor of social entrepreneurial intentions. One may therefore expect to find differences among social entrepreneurs in how they identify opportunities according to their motivation and social mission.

In line with this, the types of social entrepreneurs introduced by Zahra et al. differ in how they identify opportunities and assemble resources, how they define their mission and motivation and what social impact they have. The authors introduce three types, namely social bricoleurs, social constructionists and social engineers. Building on the work of Hayak, Zahra et al. (2009) conceptualize social bricoleurs as operating at the local level. Both opportunity recognition and the use of available resources are highly localized. The solutions offered by social bricoleurs are small in scale and scope. According to Zahra et al. (2009) bricoleurs tend to be difficult to identify and observe due to their tendency to become embedded in the location in which they operate. The definition of bricoleurs as a locally operating type of social entrepreneur has resonated widely in the academic literature (see, for instance, Desa 2012, Di Domenico, Haugh and Tracey 2010). Theoretically inspired by Kirzner, social constructionists find their opportunities leveraging market failures. They create enterprises that deal with social issues otherwise ignored by the state, non-governmental organizations and other businesses. Typically, they design enterprises that are scalable. They are motivated

by the creation of equilibriums within larger social systems. They can have any scope, from regional to global, providing solutions replicable in other contexts. Social engineers are conceptualized following Schumpeter's idea of "creative destruction". They recognize social problems and aim to solve them through "revolutionary change". The social issues they tackle are large and often reach global level. Because of their disruptive potential, social engineers struggle as the nature of reforms they suggest is usually a threat to the interests of established institutions. An illustrative example of social engineer is Muhammad Yunus, the founder of the Grameen Bank.

4.2.2 Different types - different social impact?

Given the abundance of social problems worldwide, the question remains: Which types of entrepreneurs create more social impact in the long run? Even if all kinds of social ventures play a vital role in society, we agree with Zahra et al. (2009) that different social entrepreneurs show diverse social impacts. The activities of social enterprises are incredibly diverse and their scale of operations varies greatly.

Partly following pressure from funders and policymakers, an increasing number of methodologies for impact assessment have been developed in recent years, each with their own strengths and weaknesses (Peattie and Morley 2008, Florman, Kingler-Vidra and Facada 2016). Historically, social impact assessment (SIA) emerged from the 1969/1970 US National Environment Policy Act (NEPA) introduced to show the effects of federal actions on the quality of the human environment in a balanced and publicly available way (Vanclay 2002). In the area of social entrepreneurship, social impact assessment is a means of demonstrating the benefits that a social venture brings to society (by e.g. meeting a prior unsatisfied social need, delivering a superior product or social service, offering higher social value to its

beneficiaries or promoting awareness and behavioural change among its targets). To do so, social businesses need to measure their societal contribution (and their competitive advantage over alternative providers) in a systematic, effective and appropriate way (McLoughlin et al. 2009).

Performance measurement is a common indicator used by researchers, entrepreneurs and donors alike to measure impact of a venture. Considering the dual business model of social ventures, we will differentiate between economic and social performance. The measurement of economic performance includes traditional indicators of business success such as revenue, number of staff and number of activities. On the other hand, social performance relates to the beneficiary side and is measured by the number of clients benefitting and how many of the potential target population has been reached. In contrast to the performance measurement variables, social impact refers to effects on the society as a whole (Muir and Bennett 2014) and is indicated by the stated well-being score of the target population. Overall, we agree with other authors that social and economic indicators do not necessarily have a direct interdependence (Morris et al. 2011, Short, Moss and Lumpkin 2009) and that performance measurement (criteria) is far from being 'unitary, stable and objectively real' (Paton 2003: 6). Furthermore, Nguyen et al. (2015) convincingly show that the social impact measurement behavior of social enterprises is strongly related to their relationship with their respective (funding) environment.

Consequently, we argue that success factors may vary according to the scale of society a social venture addresses and are thus unlikely to be universal. Equally, scalability is not the sole criterion for achievement. Instead, this paper suggests that the performance of a social venture can best be measured against its self-defined goals. Why? The landscape of social enterprises is incredibly heterogeneous and their scale of activities varies greatly. Our study shows that there are several types of entrepreneurs which operate at different levels of society.

Their missions range from reducing obesity among local schools kids to fighting alcohol abuse among homeless people at national level. Their solutions include activities to involve kids from low-income families into local gardening practices and nation-wide multi-stakeholder campaigns for treating substance abuse among homeless adolescents involving medical and social facilities. In other words, the problem a social venture sets out to solve strongly impacts its organisational structure (such as number of personnel or scale of activities). This in turn shapes its performance and effects on different levels of society. In this sense, we assume that the performance of a social business can best be measured against its competitors that operate at the same level of society. The common practice of benchmarking success across different types of social enterprises and/or problem areas, though understandable from an investor's point of view, is of limited heuristic value as one runs the risks of comparing apples with oranges.

4.3 Research methodology

4.3.1 Data collection

In order to explore the field of social entrepreneurship and verify what types of social entrepreneurs exist in practice, we chose a quantitative approach based on purposive sampling. Purposive sampling is recognized in social entrepreneurship research and was successfully applied by several scholars (Meyskens, Robb, Stamp and Reynolds 2010, Moss, Short, Payne and Lumpkin 2011, Stevens, Moray and Bruneel 2014). Following Moss et al. (2011) and Meyskens et al. (2010) we used an exploratory approach and collected data available online from various prize competitions, support programs and incubators that explicitly target social innovation (from a total number of 15 sources). While the providing

organizations are mostly located in Europe, their invitation to tender involves social businesses from within the European Union and abroad. Among the various social enterprises, we focused on those awarded with prizes, as a proxy for a successful performance. We therefore consider the detailed catalogue of criteria applied to the awarded projects as an external validity criterion. It is important to note, though, that this is not a representative sample, but an attempt to collect data for a quantitative study. Once the sample was drawn, we conducted an online survey on the collected data sample (N=775) with the response rate of 20% (155 respondents).

4.3.2 Cluster analysis

We carried out a cluster analysis to explore the empirical validity of social venture types. Cluster analysis is an explorative data-analysis technique and intended for generating rather than testing hypotheses (Everitt 1993). Cluster analysis looks to determine groups of observations in data on the basis of distance measures (Hair, Black and Babin 2010, Stata 2016). To find our clusters, we carried out hierarchical cluster analysis using the Ward's method, based on the error-sum-of-squares criteria, as well as k-median cluster-analysis. While the number of clusters in hierarchal analysis is determined through the analysis process, it is the researcher who specifies the number of clusters in the k-median method through several repeated attempts (Pham, Dimov and Nguyen 2004, Stata 2016).

Overall, our cluster model is based on 13 variables, which include characteristics of economic performance, social performance and its measurement (aims, regularity and standardization), tangible impact on people's life and transferability of the business model, number of clients, cross-border reach and diversity of personnel, networking, experience and personal confrontation with the social problem addressed. To enrich the profiles of our clusters, we

used additional information on demographics, number of employees, obstacles for venture creation and financial sources providing further insights into their distinct characteristics. Our final model consists of three clusters.

4.3.3 Verifying the model

To verify the model, hierarchical Ward's method was applied both with and without the standardization of variables. As the cluster sizes and the interpretation of classification variables turned out to be very similar, we decided to choose the unstandardized approach to prevent potential distortions. Taking into account that the k-median cluster-analysis showed the same number of similarly filled clusters, we continued choosing a three cluster model. A cross-check with latent cluster analysis (LCA) did not lead to other significant results in the analysis. Thus, for our analysis we opted for a hierarchical agglomerative method. Our findings are based on unstandardized Ward's method with three clusters.

The results of the hierarchical cluster analysis were visualized using a dendrogram (Appendix 1). The final three cluster model was confirmed using quality tests, criteria of size and interpretability of the clusters. The distribution of the three clusters through Chi-square test showed significant differences in our classification variables. We applied canonical discriminant analysis in order to assess the capacity of our 13 variables to predict membership within our clusters. The eigenvalue of 3,14 indicates the proportion of variance explained and shows differences between groups. Canonical correlation of 0.871 is relatively high and discriminates well. Wilks' Lambda test, which indicates the ratio of within-groups sums of squares to the total sums of squares, is 0.085 (Sig. 0000) and indicates that means appear to differ. The data was processed with STATA 19, SPSS 21 and Latent GOLD software.

The main limitation of our study results from our sampling strategy. An important component and capacity of quantitative research is that of making generalizations. This goal is commonly achieved by using probability sampling techniques. In our case, however, the total of social ventures with a successful performance to the overall population was, and still is, unknown. Hence, the lack of information on the total population and inability to gather that information made the application of probability sampling impossible. Because of our inability to employ probability sampling, our results are far from being generalizable and need to be contextualized. Nevertheless, they yield relevant and highly innovative insights into the real-world characteristics of today's social venture types.

4.4 Bricoleur, mediator or constructionist? Evidence on the different types of social entrepreneurs

In this chapter, we explain the characteristics of the three surveyed clusters created from the 13 variables that formed our online survey. A profile of each of the clusters is provided in Table 4-1, while an overview of the variables building the clusters can be found in Appendix 1.

In general, the social ventures in our dataset are relatively young (7,9 years on average) and small (mean: 26 employees). Their staff tends to be highly educated with over 72% having a university degree. Yet their staff composition yields other interesting results: While women constitute the small majority of the workforce (56%) in our sample, 16% among the staff are foreigners. Seemingly unspectacular at first glance, these figures indicate the importance of social ventures for the labour market integration of vulnerable groups like women and foreigners. In Germany, for instance, the latter represent 46% and 10% respectively of all

workers in 2016, highlighting the attraction of social ventures to these particular groups (Bundesagentur für Arbeit 2017, Leifels and Schwartz, 2017). The landscape of successful social ventures, one might conclude, is slightly more diverse in terms of staff composition than the average German labor market. Interestingly, the potential of diversity for business opportunities appears to be not fully recognized within the social ventures themselves. As our data shows, most social ventures are not (yet) systematically looking for business opportunities in other countries or trying to find their capital abroad. Different cultural contexts and social contacts from abroad are not stated as being a key driver for the performance of the ventures. Nevertheless, the ventures tend to have wide networks in general and cooperate with a broad range of stakeholders such as individual donors, foundations, governmental institutions, banks and business angels.

An important finding of our study is that, generally speaking, the founders of the ventures in our dataset are personally strongly confronted with the issue their venture is trying to solve. We might hypothesize that, because social entrepreneurs and their close environment are personally affected by the social issue they aim to address, their business models privilege the achievement of social goals over economic ones. Most ventures have defined concrete targets for their social performance. They try to assess success and failure factors on a regular basis and compile standardized reports. However, over half of them blame lack of time, money and personnel for the inability to measure social performance on regular and standardized basis. A quarter also reports difficulties in getting feedback from their target group. This means that, although the interviewed ventures reported a tangible positive impact on their clients' lives, the corresponding documentation is often limited or lacking.

In the following sections we will provide detailed insights into the three clusters on which we built our empirical typology of social entrepreneurship. Following our analysis, we identify

three empirical types of social entrepreneurs: social bricoleurs, social constructionists and what we call social mediators. The different types are distributed as follows:

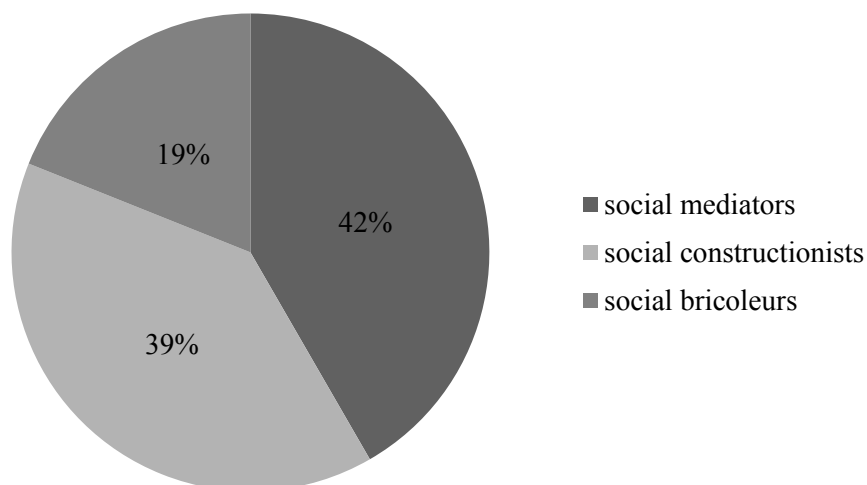


Figure 4-2 Pie chart for proportion size of clusters in the sample, in %

Based on our classifying variables and enriched by additional information from our questionnaire, the cluster profiles are specified as follows.

	social bricoleurs	social mediators	social constructionists
Personal confrontation	3,92	3,145	4,558
Number of clients	1,92	2,2	4,019
Number of potential clients reached	2,24	2,073	2,423
Performance measurement: concrete targets	1,84	1,673	1,788
Performance measurement: assessment on regular basis	1,4	1,545	1,654
Performance measurement: standardized reports	1,16	1,364	1,481
Adoptability of business model	3	2,909	3,462
Tangible impact	2,68	2,636	3,212
Transnationality	3,13	2,773	3,099
Diversity	2,88	2,891	2,346
Economic performance	3,027	3,15	3,314
Networks	2	5,764	5,5

Experience	2,6	3,158	3,203
Total number	25	55	52

Table 4-1 Profiles of three clusters: means

Cluster 1 relates to so-called social bricoleurs confirming their real-world existence. In our study, social bricoleurs represent the smallest cluster. Social ventures in this cluster appear to have a strong local orientation and are well locally embedded. The ventures inside this cluster are generally young, rather small, with modest networks and have a relatively small numbers of clients (40% have under 50 clients, 36% between 50 and 200). They are often founded by a small team of people and around half of them are constituted by solo-entrepreneurs. They tend to recruit younger people and the experience brought into these ventures tends to be less diverse than in the other two clusters.

Though their business models show a high orientation towards social goals, they are slightly more focused on economic performance and tend to opt more often for a for-profit form, still showing similar economic performance than the other two clusters. Bricoleurs tend to not have struggles with strong competitors while becoming operative, which corresponds to their local embeddedness. The main sectors our social bricoleurs operate in are education, civic engagement, environment, food, housing and space sharing.

Their financial sources reflect their local embeddedness and frequent solo-entrepreneurship: funding comes more often from crowdfunding and personal savings as well as individual sponsorship by family and friends. They refer less to corporations and foundations. As they appear to depend less on donor organizations, they are less bothered with meeting the interests of donors. Bricoleurs depend less on resource suppliers and are “especially clever in assembling and deploying resources in pursuit of their chosen causes” (Zahra et al. 2009: 525)

as well as in mobilizing local volunteers. Indeed, the ventures in our cluster experience shortages of funds and resources more rarely than the other two groups.

Corresponding with their financial profile, social bricoleurs tend to neglect the importance of regular standardized performance measurement as well as its role for acquiring third-party funding and attracting new members. Our findings support Zahra's thesis that both the absence of expertise and formal planning by social bricoleurs lead to scarce venture scaling options, small geographic expansion and strong local orientation. However, their strong local focus is not preventing them from having an important role in society. According to our data, the limited scale of bricoleurs appears to be related to the organizational structure of the venture and particularly to the high incidence of solo-entrepreneurs.

Cluster 2 is the largest of the three clusters and an addition to the conceptual typology proposed by Zahra et al (2009). It comprises what we call social mediators and is characterized by social ventures with either larger or a relatively small number of clients (36% have under 50 clients, 29% between 50 and 200). They tend to have extended networks and highly educated employees that bring diverse experience to the venture. In this group we find the highest incidence of founders that are not personally affected by the social issue at hand.

Social mediators rarely rely on funding from crowdsourcing or personal savings. More often, they receive funding from governmental institutions or simply from bank loans. Two of three social mediators tend to prefer a non-profit form over a for-profit one. They mostly operate in the fields of education, health, risk group prevention, labor market integration, housing and space sharing and have a stronger national focus than the other two clusters. Mediators recognize the importance of performance measurement more than bricoleurs, as they often need to report to their external funding agencies. Nonetheless, they report lack of time and

difficulties in finding valid indicators to measure their social performance on a regular and standardized basis.

As our findings suggest, the situation of meso-level entrepreneurs is much more complex than conceptualized by Zahra et al. Aside from locally operating social bricoleurs, there is a group of mediators trying to fill gaps in the welfare system. They are, generally, less personally confronted with the social problem their business addresses, fund ventures in larger teams and are successful in acquiring external funding. However, only further analysis can tell us if social mediators constitute a distinct form of professionalism in social venture building or if they represent a phase in the life cycle of a social venture.

Cluster 3 validates Zahra's social constructionists. It contains social ventures that operate longer on the market and have significantly more clients (36% above 10.000, 33% between 1.000 and 10.000 and the rest below 1.000). Their networks are well spread. Social constructionists tend to have more employees, who are well mixed in terms of age and educational characteristics. Their staff brings more managerial, entrepreneurial and nonprofit experience to the venture than that of social bricoleurs. Cluster 3 shows the highest share of nonprofit ventures of the three groups. The main sectors in which they operate are education, civic engagement and health. Their funding comes more often from corporations.

As Zahra et al. (2009) point out the personal knowledge of the problem a social venture addresses is of pivotal relevance to this type of social entrepreneurs. In their seminal article, they argue that social constructionists are more motivated and committed to what they do than the average. Among our three clusters, social constructionists show the highest level of personal confrontation with the social issue their venture addresses. This is a plausible explanation for the above mentioned characteristics outlined by Zahra et al.

In our study, social constructionists tend to monitor and evaluate their performance on a regular and systematic basis to improve the quality of their product or service, to acquire third-party funding and/or to attract new members. They also use social media as an instrument for performance measurement and customer interaction more than the other two clusters. Like the social constructionists in Zahra et al.'s typology, the ventures in our third cluster apply their business models with higher adaptability than those of other clusters. What matters to social constructionists is their scalability. Consequently, they are concerned with finding funds and resources to become operative and form more complex organizational structures and financial patterns.

In conclusion, we would like to highlight that our data did not allow confirming the existence of what Zahra et al (2009) called social engineers. By nature, this type of “revolutionary changers” that address problems on systemic level is limited in numbers and hence difficult to detect by cluster analysis.

4.5 Final discussion

4.5.1 Conclusions

Setting the standards of social entrepreneurship research, in 2009 Zahra et al. proposed the first-ever conceptual typology of social entrepreneurs consisting of three types: social bricoleurs, social constructionists and social engineers. The aim of this article was to apply this conceptual typology to the wide range of social ventures that exist today. For that purpose, we collected data on social entrepreneurs awarded for innovativeness and conducted a cluster analysis. While our findings prove the empirical foundations of Zahra et al.'s (2009)

typology, showing that social bricoleurs and social constructionists can be found empirically, they also shed a fresh light on this renowned article.

First, we note that the cluster of bricoleurs is numerically the smallest in our study. The reasons for this might be twofold: On the one hand, this finding might indicate that specific local problems still tend to be addressed and covered by traditional local forces (public authorities and/or civil society). On the other hand, one may hypothesize that increasingly fewer social problems are unique to local settings and solutions are easier to scale and transfer to other social contexts, hence addressed by other types of social entrepreneurs.

Second, our analysis indicates that the situation of meso-level entrepreneurs is much more complex than suggested by Zahra et al. (2009). Other than the locally operating and individually involved social bricoleurs, there is an empirical cluster of what we call social mediators who are less personally affected by the social problem their venture addresses, are particularly successful in acquiring public funding, have larger founding teams and show a strong professional attitude. However, it is unclear (as of yet) if social mediators are a distinct type of social entrepreneurs, i.e. a new form of social professionalism today, or if they represent a transitory phase in the life cycle of a social venture.

Third, our analysis shows that social constructionists report having the highest tangible impact on their target population. They claim to possess documented evidence for tangible improvements in their target group's lives. According to our study, the characteristics of social constructionists that appear to be positively related to their success are: the personal confrontation with the social problem they aim to solve, the level of staff experience, the transferability of their business models and their performance measurement activities. Together with social bricoleurs, social constructionists are strongly affected by the issue their venture sets out to tackle, as our data demonstrates (see Table 4-1). Already in 2009 Zahra et

al. noted that “the goals of social ventures are deeply rooted in the values of their founders” (Zahra et al. 2009: 520). Hockerts (2017), based on Mair and Noboa (2006), furthermore claimed that besides empathy, moral judgment, social entrepreneurial self-efficacy and perceived social support, prior experience with social problems and organizations could also predict social entrepreneurial intentions. While these studies have provided a theoretical foundation for analysing social entrepreneurial intentions, further inquiries to test their generalisability or impact on venture success remained to be carried out. Now our results suggest that a founder’s personal confrontation with a social problem greatly shapes a venture’s social mission. The empirical evidence of our social constructionist cluster shows not only high levels of managerial and entrepreneurial experience within their staff, but also high levels of charitable and nonprofit experience. Compared to the other two clusters, social constructionists are marked by a higher degree of business model flexibility and economic performance, and they attribute greater importance to social performance measurement. Social constructionists usually have defined concrete targets and the majority assesses success and failure factors on regular basis. They compile and explain their social performance in standardized reports.

4.5.2 Outlook: Practical and theoretical implications

In our study we demonstrate that social ventures vary according to the way they monitor and evaluate their social performance, the diversity of their networks, the motivation of their founders, the experience level of their staff and its diversity and the impact they produce. These differences translate into unique and distinct characteristics, allowing us to distinguish three empirical types of social ventures that are of practical relevance. Our research provides evidence for governmental institutions and funding organizations aimed at promoting social

entrepreneurship. It shows that there is no one-fits-all solution, but that today's landscape of social ventures is diversified with regard to the impact they are having. While all the social enterprises chosen for this study have been awarded for their innovativeness, our results show that their impact depends on the level of society and target group addressed by their social mission. When investing in social impact, thus, stakeholders need to have very clear ideas about the nature of the problem and the effect on (the scale of) society they like to achieve.

From a conceptual point of view, our study calls for further theorisation of social entrepreneurship and a revision of the predominating framework of reference established by Zahra et al. (2009). While our study empirically proved that social bricoleurs exist in limited numbers, it also showed that the existing social constructionists have the highest tangible impact on the target group, reportedly. Yet the largest cluster of social entrepreneurs today is constituted by a group of new professionals unobserved before. It raises important questions with regard to the changes of welfare regimes in Europe and the (declared) transition from a supporting to an activating welfare state. Are we dealing with a new type of social venture whose founders are less personally confronted with the social problem their venture tackles but use existing gaps in the welfare systems for career objectives? Is this new type peculiar to specific national settings and circumstances or can they be detected throughout Europe and the world? Are we witnessing the emergence of a new profitable charity industry in which surplus working forces released by the transformation of the welfare state find new opportunities in self-employment? At this point we are not in the position to answer these questions entirely. Yet, in our research study we were able to document three empirical types of social entrepreneurs, enriching the understanding of the complex and still emerging phenomena of social entrepreneurship. Our article thus constitutes an important step in showing what types of social entrepreneurs exist in the real world and what their differences and similarities are. It also makes a step forward in understanding what kind of organizational

forms are social entrepreneurs acting in. Proving the real-world relevance of Zahra et al.'s (2009) classification, our study calls for a new conceptualization of impact measurement for understanding social entrepreneurship today. Both the impact and the structural layout of a social venture, our research suggests, are shaped by the scale of society their mission address. Measures designed to optimize a social venture's combination of doing good and making money should bear this in mind. For future research we suggest to concentrate on how the organizational forms and context social entrepreneurs are acting in (like their external environment, cross-border human networks or the digitalization of the social economy) affect their economic and social performance as well as social impact they produce.

From a methodological point of view, our study contributes to more empirical research on social entrepreneurship and gathering of explorative data as called for by various authors (see, for instance, Austin et al. 2006, Corner and Ho 2010, Meyskens et al. 2010). We furthermore aim at encouraging the implementation of larger quantitative studies and the refinement of the data collection process on social entrepreneurship.

4.6 References

- Austin, J., Stevenson, H., Wei-Skillern, J. (2006). Social and commercial entrepreneurship: same, different, or both? *Entrepreneurship: Theory & Practice*, 30 (1): 1-22.
- Bundesagentur für Arbeit (2017). *Die Arbeitsmarktsituation von Frauen und Männern in 2016*. Retrieved from: <https://statistik.arbeitsagentur.de/Statischer-Content/Arbeitsmarktberichte/Personengruppen/generische-Publikationen/Frauen-Maenner-Arbeitsmarkt.pdf>
- Chell, E. (2007). Social enterprise and entrepreneurship – Towards a convergent theory of the entrepreneurial process. *International Small Business Journal*, 25 (1): 5–26.
- Corner, P. D. and Ho, M. (2010). How Opportunities Develop in Social Entrepreneurship. *Entrepreneurship: Theory & Practice*, 34 (4): 635-659.
- Dacin, M.T., Dacin P.A., Tracey P. (2011). Social entrepreneurship: A critique and future directions. *Organization science*, 22 (5): 1203-1213.
- Dees, J.G. (2001). *The meaning of “social entrepreneurship”*. Center for the advancement of Social Entrepreneurship, Fuqua School of Business. Retrieved from: https://centers.fuqua.duke.edu/case/wp-content/uploads/sites/7/2015/03/Article_Deas_MeaningofSocialEntrepreneurship_2001.pdf
- Defourny, J. and Nyssens, M. (2008): Social enterprise in Europe: recent trends and developments. *Social Enterprise Journal*, 4 (3): 202-228.
- Desa, G. (2012). Resource Mobilization in International Social Entrepreneurship: Bricolage as a Mechanism of Institutional Transformation. *Entrepreneurship: Theory & Practice*, 36 (4): 727-751.
- Di Domenico, M., Haugh, H., Tracey, P. (2010). Social Bricolage: Theorizing Social Value Creation in Social Enterprises. *Entrepreneurship: Theory & Practice*, 34 (4): 681-703.
- Dorado, S. (2006). Social entrepreneurial ventures: Different values so different process of creations, no? *Journal of Developmental Entrepreneurship*, 11: 319–343.

- Everitt, B.S. (1993). *Cluster Analysis*. 3rd ed. London: Arnold.
- Hair, J.F., Black, W.C., Babin, B.J. (2010). *Multivariate Data Analysis A Global Perspective*, 7th Edition, Pearson, Prentice Hall.
- Florman, M., Kingler-Vidra, R., Facada, M. (2016). A critical evaluation of social impact assessment methodologies and a call to measure economic and social impact holistically through the External Rate of Return platform. *LSE Enterprise Working Paper 1602*. Retrieved from: <http://www.lse.ac.uk/businessAndConsultancy/LSEConsulting/pdf/Assessing-social-impact-assessment-methods-report.pdf>
- Hockerts, K. (2017). Determinants of Social Entrepreneurial Intentions. *Entrepreneurship: Theory & Practice*, 41 (1): 105-130.
- Kerlin, J.A. (2006): Social Enterprise in the United States and Europe: Understanding and Learning from the Differences. *Voluntas*, 17: 247-263.
- Kistruck, G.M. and Beamish, P.W. (2010). The Interplay of Form, Structure, and Embeddedness in Social Intrapreneurship. *Entrepreneurship: Theory & Practice*, 34 (4): 735-761.
- Lasprogata, G.A. and Cotton, M.N. (2003). Contemplating “enterprise”: The business and legal challenges of social entrepreneurship. *American Business Law Journal*, 41 (1): 67-113.
- Leifels, A. and Schwartz, M. (2017). *Foreign workers in German SMEs: a strong plea for free labour markets*. Kreditanstalt für Wiederaufbau. KfW Research. Focus on Economics. Retrieved from: https://www.kfw.de/PDF/Download-Center/Konzernthemen/Research/PDF-Dokumente-Fokus-Volkswirtschaft/Fokus-englische-Dateien/Fokus-2017-EN/Fokus-Nr.-154-January-2017-foreign-workers_EN.pdf
- Liu, G., Eng, T., Takeda, S. (2013). An Investigation of Marketing Capabilities and Social Enterprise Performance in the UK and Japan. *Entrepreneurship: Theory & Practice*, 39 (2): 267-298.

- Mair, J. and Marti I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41 (1): 36-44.
- Mair, J. and Noboa, E. (2006). Social entrepreneurship: How intentions to create a social venture are formed. In J. Mair, J. Robinson & K. N. Hockerts (Eds.), *Social entrepreneurship* (pp.121-135). Basingstoke, U.K.: Palgrave MacMillan.
- McLoughlin, J., Kaminski, J., Sodagar, B., Khan, S., Harris, R., Arnaudo, G., Mc Brearty, S. (2009). A strategic approach to social impact measurement of social enterprises: the SIMPLE methodology. *Social Enterprise Journal*, 5 (2): 154-178.
- Meyskens, M., Robb, C., Stamp. J.A., Reynolds, P.D. (2010). Social Ventures from a Resource-Based Perspective: An Exploratory Study Assessing Global Ashoka Fellows. *Entrepreneurship: Theory & Practice*, 34 (4): 661-680.
- Miller T. L. and Wesley, C. L. (2010). Assessing Mission and Resources for Social Change: An Organizational Identity Perspective on Social Venture Capitalists' Decision Criteria. *Entrepreneurship: Theory & Practice*, 34 (4): 705-733.
- Mort, G.S., Weerawardena, J., Carnegie, K. (2003). Social entrepreneurship: Towards conceptualization. *International Journal of Nonprofit and Voluntary Sector Marketing*, 8 (1): 76-88.
- Morris, M.H., Webb, J.W., Franklin, R. (2011). Understanding the Manifestation of Entrepreneurial Orientation in the Nonprofit Context. *Entrepreneurship: Theory & Practice*, 35 (5): 945-971.
- Moss, T.W., Short J.C., Pyane, G.T., Lumpkin G.T. (2011). Dual Identities in Social Ventures: An Exploratory Study. *Entrepreneurship: Theory & Practice*, 35 (4): 805-830.
- Muir, K. and Bennett, S. (2014). *The Compass: Your Guide to Social Impact Measurement*. Sydney, Australia: The Centre for Social Impact.
- Nguyen, L., Szkudlarek, B., Seymour, R. (2015). Social impact measurement in social enterprises: An interdependence perspective. *Canadian Journal of Administrative Science/Revue canadienne des sciences de l'administration*, 32: 224-237.

- Paton, R. (2003). *Managing and Measuring Social Enterprises*, London, UK: Sage.
- Peredo, A.M. and McLean, M. (2006). Social entrepreneurship: A critical review of the concept. *Journal of World Business*, 41 (1): 56-65.
- Peattie, K. and Morley, A. S. (2008). *Social Enterprises: Diversity and Dynamics, Contexts and Contributions*. A Research Monograph. London, UK: ESRC.
- Pham, D.T., Dimov, S.S., Nguyen, C.D. (2004). Selection of K in K-Means Clustering. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, 218 (7): 783-795.
- Seelos, C. and Mair, J. (2006). Social entrepreneurship. The contribution of individual entrepreneurs to sustainable development. *The ICFAI Journal for Entrepreneurship Development, March 2006*, 30-46.
- Short, J.C., Moss, R.W., Lumpkin, G.T. (2009). Research In Social Entrepreneurship: Past Contributions And Future Opportunities. *Strategic Entrepreneurship Journal*, 3: 161–194
- STATA (2016). *Introduction to cluster analysis commands*. Retrieved from: <http://www.stata.com/manuals14/mvcluster.pdf#mvclusterRemarksandexamples>
- Stevens, R., Moray, N., Bruneel, J. (2014). The Social and Economic Mission of Social Enterprises: Dimensions, Measurement, Validation, and Relation. *Entrepreneurship: Theory & Practice*, 39 (5): 1051-1082.
- Thompson, J., Alvy, G., Lees, A. (2000). Social entrepreneurship – a new look at the people and the potential. *Management Decision*, 38 (5): 328-338.
- Vanclay, F. (2002). Conceptualising social impacts. *Environmental Impact Assessment Review*, 22: 183-211.
- Weerawandena J. and Mort G.S. (2006). Investigating social entrepreneurship: A multidimensional model. *Journal of World Business*, 41: 21–35.
- Wolverton, B. (2003). Surviving tough times. *Chronicle on Philanthropy*, October 30.

Zahra, S. A., Gedajlovic, E., Neubaum, D.O., Shulman, J.M. (2009). A typology of social entrepreneur: Motives, search process and ethical challenges. *Journal of Business Venturing*, 24: 519-532.

5. ARTICLE III: Increasing Social Entrepreneurship and its Social Value Generation

Abstract

This article contributes to our knowledge on antecedents to social value generation from social venture. It builds on the theory streams social entrepreneurship, hybrid organizations and impact measurement. Structural equation model (SEM) presented in this article supports previous findings that besides traditional success factors, the personal confrontation to the social problem to be solved is an important driver for high social value generation. Results further indicate that high levels of intentionality (prioritizing social value generation over business value generation) may have a negative impact on the business model strength. High business model strength however is positively linked with a high degree of achieved social change. This article suggests that support systems should identify ventures which combine a balance between social and economic goals and a strong business model performance and that ventures should change their performance measurement systems according to the interplay between their business model, output and outcome.

Key words: social entrepreneurship, social value, social impact, impact assessment, intentionality

Joined work with Ingo Michelfelder

5.1 Introduction

The topic of this article is social entrepreneurship and social ventures, which we define as ventures which primarily intend to create social value, rather than having the “traditional” major purpose of generating personal or shareholder wealth (Mair and Marti 2006). Social entrepreneurs have the potential to fight detrimental externalities (societal or environmental costs), which often occur within our existing production and consumption systems (Gladwin, Kennelly and Krause 1995, Pigou 1960). With their embedded social purpose, they provide innovative solutions that target societal problems and are therefore considered as an important force in overcoming today’s societal challenges (Austin, Stevenson and Wei-Skillern 2006, Estrin, Mickiewicz and Stephan 2013, Rao-Nicholson, Vorley and Khan 2017).

The problem is that although social entrepreneurship provides great opportunities, a significantly higher level is needed in order to contribute even stronger to a shift in our production and consumption systems. This means we need to design more effective support systems that improve the quantity and quality of social entrepreneurship activities. In order to design these support systems, it is vital to improve our knowledge about those factors that contribute to the success of social ventures, i.e. to a high social value generation.

Initial research suggests that major success factors for “traditional ventures” cannot directly be applied to design strategies to improve the success of social ventures (Shaw and Carter 2007), as the great difference between traditional and social entrepreneurs is the rationale behind the venture, i.e. the motivation, vision and purpose of the venture (financial success vs. societal impact) (Austin, Stevenson and Wei-Skillern 2006, Dees 2001, Weerawandena and Mort 2006). To illustrate this with two examples, this distinct aspect - the rationale or purpose of the venture - is not a variable in the meta-analysis of success factors for new traditional (technology) ventures (Song et al. 2011). Nor is the “purpose of a venture” part of the success

factors in a meta-analysis of antecedents to organic (internal) growth of established organizations (Bahadir et al. 2009).

Previous research in social entrepreneurship has helped to improve our understanding of those elements that are specific to social entrepreneurship due to their social purpose. In their theoretical, conceptual studies scholars suggested distinct antecedents to social entrepreneurship (Shaw and Carter 2007), discussed the role of individual differences of social entrepreneurs (Mair and Marti 2006) and the differences between “traditional” and “social” entrepreneurs (Mair and Noboa 2003, Austin, Stevenson and Wei-Skillern 2006, Dorado 2006). Grant and Berry (2011) further studied motivations to act as social entrepreneur in an empirical study. However, to provide a strong lever to increase social entrepreneurship activity, to select, finance and support social entrepreneurs, there still is clearly a lack of empirical research to test these new theories and hypotheses from conceptual studies that prevail.

This article addresses this gap and introduces an empirical study which investigates success factors and social value generation in social ventures. As scholars have identified the underlying motivations, and purpose of social entrepreneurs and their ventures as the main difference between “traditional entrepreneurs” and “social entrepreneurs”, the rationale of social entrepreneurs and their motivations and purposes will be a core element in our empirical study. The challenge to combine the social goals with the market realities is often characterized by scholars as double-bottom line of social entrepreneurs (Dorado 2006, Chell 2007, Kistruck and Beamish 2010), which is essential for the venture’s success. Therefore, our paper addresses the conceptualization and operationalization of this bi-dimensional orientation in a variable labelled “intentionality”. Intentionality is defined as a tradeoff between social and financial value creation, with high intentionality meaning that social value generation is dominating financial value generating if tradeoff decisions between these two

occur. The paper further addresses the impact of the intentionality on financial and social value creation.

Furthermore, as scholars claimed that the success factors of traditional entrepreneurs are not exhaustive for social ventures (Austin, Stevenson and Wei-Skillern 2006, Dorado 2006), this article aims to define and measure further factors (in addition to traditional entrepreneurial success factors), which are of significance for social entrepreneurs and the social value they generate. Understanding success factors of social entrepreneurs can be used to design systems that drive more individuals towards social entrepreneurship and make existing social ventures more successful, which in turn may lead to the generation of more social value in the long term.

The purpose of this research is thus to contribute to our understanding on the following three questions. (I) How can we operationalize the bi-dimensionality of social vs. financial value generation for social entrepreneurs? (II) What are success factors of social ventures and how do they differ from those of traditional entrepreneurs? And (III) how do these factors influence financial and social value generation? The underlying research question can be formulated as following:

How can we conceptualize social value generation for social ventures and which are the most important factors leading to high social value generation?

5.2 Theoretical background and hypotheses

5.2.1 Social value generation

Linking the rationale of the venture to social entrepreneurship success has been done in previous research (see for instance Renko 2013). For social entrepreneurs the success of the venture is primarily defined through its contributions to the social value it generates (Zahra et al 2009). As Grico et al. (2014) claim, the interest to social outcome measurement and its recognition as an indicator of success by research scholars continuously grows. In their literature overview on social entrepreneurship Dacin et al (2011) make propositions for future research in social entrepreneurship and conclude that studying the outcomes represents one of the most important ways to understand a still new phenomenon of social entrepreneurship. Taking into account the role of social entrepreneurship in overcoming social challenges (see e.g. Dorado and Ventresca 2013, Zahra et al. 2009), the measurement of its outcomes introduces one of the most relevant, exciting and at the same time complex research challenges.

Scholars often differentiate between short term and long term outcomes. The long-term societal effects are usually defined as social impact (Muir, Bennett 2016, PHINEO 2016). Social impact can refer to peoples' way of life, human systems, such as cultural and political systems (Armour 1990, Gramling and Freudenburg 1992), and may vary from impact on environment and health to psychological impacts such as human fears (Juslen 1995, Vanclay 1999). Scholars, however, often emphasize the impossibility to cover all dimensions of social impact as it depends on many contextual factors (Vanclay 2002). Moreover, as social impact refers to longer term societal change, and not to a change of the target population of the venture, it is difficult to attribute social impact to solely one social venture. Thus it is only possible to measure social outcomes of an individual venture at a particular point of time.

Moreover, due to the heterogeneity of organizational layouts and hybridity of social ventures, it is even difficult to compare these social outcomes, as the scope and the level of societal challenges addressed by ventures vary greatly (see, for instance, the conceptual types of social entrepreneurs introduced by Zahra et al. 2009). This fact leads to the crucial question whether and how the social outcomes and social impact of social entrepreneurs can be quantified and compared.

A number of methodologies on measurement of social outcomes were developed in the past two decades (Florman et al. 2016). Social return on investment (SROI) introduces the first comprehensive attempt to measure both social values and economic gains of the venture and is interesting in the context of social entrepreneurship, which aims to combine both. The goal of introducing social ROI approach was to measure the relation of monetary investment and social outcomes that have been produced (Dacin et al. 2011, Schmitz et al. 2013). However, the conversion of outcomes in one single number suggested in SROI seems to be critical, especially because each venture requires individualized indicators, which makes any general predictions or comparisons very complex (Nicholls et al. 2009). Moreover, it is difficult to detect whether the changes would have occurred if the social venture had not existed and finally, whether and how we can predict a long term change. All these facts emphasize the general challenge of reliable, timely and cost effective social outcomes measurement. Even a well-known example of Yunus' microfinance system, a seminal example of social entrepreneurship, has produced mixed results when applying the SROI methodology (Dees 2006). Therefore, the causal and systematic evaluation of social value turns out to be problematic.

Nevertheless, what seems to be interesting and applicable from the SROI approach is the conceptualization of output and outcome theorem, where both categories define successful creation of social impact in the long term. This theorem was also implemented by other

authors and institutions, with similar definitions of output and outcome (Dembek et al. 2017, Grico et al. 2014, Muir, Bennett 2016, PHINEO 2016). Output is understood as quantitative summary of the activity (for example number of products or services) and outcome as changes that are taking place (for example getting a job after a job training) (Nicholls et al. 2009). In our study we operationalize social output as a share of potential clients reached by the venture, and social outcomes as tangible improvements in people's lives caused by social venture. Thus, for a social entrepreneur, [I] the output replicates the fulfilment of social goals (share of people in target group that were reached, e.g. received product or service) and [II] the outcome represents the changes in the well-being of the beneficiaries.

5.2.2 Business model strength as driver for social value

Even if the primarily motivation of social ventures is to serve social goals, a strong business model is essential to be able to serve these goals effectively and to scale (Morris et al. 2011). For social entrepreneurs, profits are the means to the ends, whereby for commercial entrepreneurs they are the outcomes itself (Dees 2001). In his study based on interviews of social entrepreneurs, Moor (2009) concludes that social entrepreneurs lean on both business and social goals in order to create social outcomes. Thus profits are mostly positively connoted in the field of social entrepreneurship (Dey 2006). It is important to note that due to the hybrid nature of social entrepreneurs, which can appear in various institutional and legal forms, we do not exclude the non-profit sector, while talking about business goals. In this vein, business goals refer to stable revenue streams, which allow generating stable social value, but do not imply being a profitable venture.

We believe that to be able to reach potential clients and to produce social value in the long run, adequate economic performance, i.e. a strong business model is an important

precondition also for the social ventures. Under business model strength we understand the growth of traditional business venture characteristics (profit, budget, number of employees and improvement of quality of the product or service). In this vein, we hypothesize that business model strength is positively related to social value creation of social entrepreneurs.

*H1a: There is a positive relationship between **business model strength** and the **output** achieved (potential clients reached).*

*H1b: There is a positive relationship between **business model strength** and the social **outcome** achieved (measured social change achieved).*

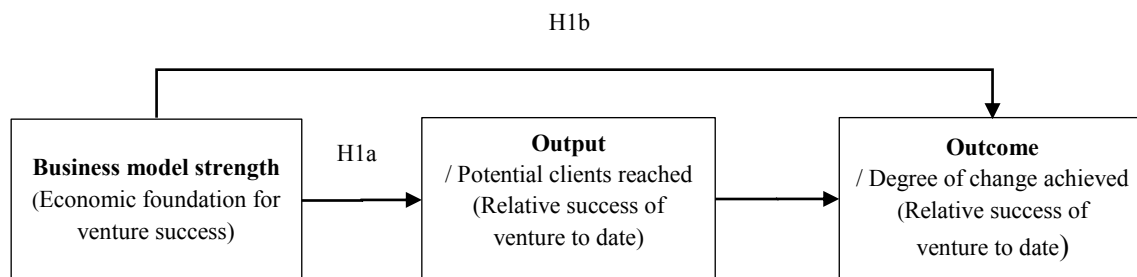


Figure 5-1 Conceptualization of social value generation for social entrepreneurs

5.2.3 Intentionality – the degree of social purpose orientation

A set of closely related research streams has been developed over the past decade that are all linked to social impact and social value creation. They can be clustered in social entrepreneurs' "motivations" and "intentions", and the perspectives of double bottom line and "hybrid business models". Looking at motivation, McMullan and Bergman (2017) suggest

that prosocial motivation may lead to decisions to maximize “social value creation”, as it is rewarded with a socio-emotional return on investment. The motivation behind the venture builds the core of the definitions of social entrepreneurship of many authors (see e.g. Dees 2001, Lasprogata and Cotton 2003, Peredo and McLean 2006, Seelos and Mair 2006). The so called double-bottom line of social entrepreneurs expresses the simultaneous focus on social mission and on reliable economic performance in order to stay operative that confronts social entrepreneurs with the challenge to balance social value creation with market realities (Austin, Stevenson and Wei-Skillern 2006, Dees 2001, Miller, Wesley and Williams 2012, Weerawandena and Sullivan Mort 2006). This tension is also discussed in the literature stream on hybrid organizations, which covers the tension between financial gain and social value (Battilana and Dorado 2010, Jay 2013).

As an underlying commonality, these research streams all describe the willingness to create social value and change. The passion for solving social issues is needed to succeed in the long run. This includes prioritizing social value over pure financial gain and performance orientation, as by traditional entrepreneurs. We summarize this in the term “intentionality”, which is often used by practitioners as a predictor for social impact in the impact investing scene, where many investors use “intentionality” as a key criterion to predict social impact.

Social entrepreneurs address both traditional business goals and social goals and try to balance them successfully. Under traditional business goals we understand the growth of budget, employees and market share. The social goals imply the raise of awareness for social problem and overcoming it, helping others and sharing experience on how to tackle the problem (Shaw and Carter 2007, Renko 2013). We believe that for venture’s success and therefore, generation of social value, a smart combination of orientation on both business and social goals is essential. The question is where exactly this balance should be, as favoring social over financial value (and vice versa) is likely to have an impact on both the degree of

social change that is achieved and on the strength of the business model. With it the focus on economic goals brings more success for economic performance and the focus on social goals is important for generation of social outcomes.

*H2a: There is a negative relationship between a high level of **intentionality** (favouring social over economic value generation) and **business model strength** (i.e. economic performance)*

*H2b: There is a positive relationship between a high level of **intentionality** (favouring social over economic value generation) and the social **outcome** achieved (measured social change achieved).*

5.2.4 Personal confrontation and professional experience

Current social entrepreneurship scholars disagree with authors, who earlier explicitly suggested that social entrepreneurs, operating for social ends, have the same qualities and behavior as a business entrepreneur (Estrin, Mickiewicz and Stephan 2013, Drayton 2002, Thompson 2002). Beyond the skills that are traditionally seen as needed to achieve a commercial organizational goal, a composition with other skills and “virtuous behavior” are important to achieve social mission (Sharir and Lerner 2006, Smith et al 2012, Sullivan Mort et al 2003).

Baum and Locke (2004) demonstrate that there is a relationship between personality and venture growth in such categories as motivation (vision, self-efficacy and goals), passion for work and tenacity. These results seem to be consistent with the previous psychological and socio-psychological studies exploring traits, skills and motivation of entrepreneur as predictors of venture growth (Baum and Locke 2004, Bandura 1997, Baum et al., 1998, Locke and Latham 1990). Empirical evidence was also provided by previous entrepreneurship

researchers, that high social skills and social capital of entrepreneur accelerate success (Markman and Baron 2003). Past research also indicated the importance of personal background as predictor for opportunity recognition process and prior work experience, prior social experience and prior knowledge and experience with social problems addressed as predictors for social entrepreneurial intentions and motivation (Ernst 2011, Hockerts 2015, Kautonen, Luoto and Tornikoski 2010, Shane 2000, Yiu et al. 2014).

Lee and Tsang (2001) explore personal background in form of working experience and education as one of the factors influencing the growth of ventures. They describe three main types of experience for an entrepreneur: [I] entrepreneurial, [II] industrial and [III] managerial experience (Lee, Tsang 2001). For example, previous research showed that managerial experience tends to be a strong indicator of new venture success and survival (Baum & Silverman, 2004, Hall & Hofer, 1993, Shepherd, 1999, Shepherd et al., 2000, Sharir and Lerner 2006). As social entrepreneurs are confronted with the challenge to combine revenue goals and to serve social needs and create social value, it seems logically that the experience in both for-profit and non-profit sectors are of advantage for the success of social entrepreneurs. Thus, the so called “experience corridor”, replicating the breadth of experience of the team involved in a social venture seems to be even more crucial for social entrepreneurs than for business entrepreneurs (Corner and Ho 2010, Estrin, Mickiewicz and Stephan 2013). Previous research additionally suggested that for social venture capitalists, experience breadth is seen as an important factor in the evaluation of the effectiveness and for the decision to invest in the venture (Miller et al 2010).

As personal experience appears to be a predictor of social entrepreneurial intentions and is important for a venture’s success, we follow in our reasoning scholars who highlight the importance of prior experience both in form of experience with the social problem a social

entrepreneur addresses, which we call “personal confrontation” and the general experience corridor in team for the venture’s success and thus for social outcomes it generates.

*H3a: There is a positive relationship between **personal confrontation** to a social issue and the **output** (potential clients reached) achieved.*

*H3b: There is a positive relationship between **personal confrontation** to a social issue and the social **outcome** achieved (measured social change achieved).*

*H4a: There is a positive relationship between **experience** breadth of a social ventures team and the **output** achieved (potential clients reached).*

*H4b: There is a positive relationship between **experience** breadth of a social ventures team and the social **outcome** achieved (measured social change achieved).*

5.2.5 Networks

Markman and Baron (2003) complement the individual experience of entrepreneurs with a social capital perspective, which primarily refers to contacts and networking. The theoretical foundation for these findings can be found in social network theory, which studies the effects of relations between actors on outcomes and behavior as well as of network’ structures on outcomes. Networking facilitates the flow of ideas and creative thinking and may contribute to success.

Lee and Tsang (2001) reveal network size and activities as factors influencing the growth of ventures. The authors conclude: “It is important that an entrepreneur does not just work on his

or her own, but tries to bring in a variety of skills, connections and other resources through business partners that may help generate new ideas, solve problems and develop new business. The existence of partners therefore provides the firm with a larger pool of resources to tap, and facilitates its development and growth” (Lee, Tsang 2001: 587). These seem to be of great importance for social entrepreneurs, not at last as they often receive support from governments and other institutions and are often supported by volunteers (Murdock and Bradburn 2005, Renko 2013).

The importance of understanding the role of the networks in solving social problems and creating social value was emphasized by Mair and Marti (2006). Several scholars also provided first studies on networks in the social venture context and claimed that they are of special importance for social entrepreneurs as the large part of their resources often comes from the outside of the organization and therefore their networks should be well managed and cultivated (Austin, Stevenson & Wei-Skillern 2006). Sharir and Lerner (2006) demonstrate that entrepreneur’s social network (received support from various sectors) contributes to the success of the social ventures. Weber and Kratzer (2013) study relations between network quantity, network widespread, network diversity and social replicability, financial value and social impact. In our study we hypothesize that network intensity is positively related with the social value generation.

*H5a: There is a positive relationship between the **network intensity** and the **output** (potential clients reached)*

*H5b: There is a positive relationship between the **network intensity** and the social **outcome** achieved (measured social change achieved).*

5.3 Research Design

5.3.1 Empirical setting and data collection

To test our hypotheses, we applied a purposive sampling method, which has been recognized and successfully applied by several previous researchers in the field (Meyskens et al. 2010, Moss et al. 2011). We collected data on innovative social ventures, awarded in fifteen prize competitions, support programs and incubators in Europe, available online. Our focus on awarded ventures served us as an external validity criterion for the definition of “social ventures”, the focus of this research project. As the ventures in our sample are coming from different countries, they consequently have different institutional environments and obstacles they are confronted with, which can be seen as a limitation of our sample. Thus, although this is not a representative sample, purposive sampling remains one of the main possibilities to collect data for a quantitative study in a new heterogeneous field.

In the next step we conducted an online survey on our sample, containing 775 cases. Participants were invited by e-mail, with a short description of the research project. After sending out a maximum of 3 reminder e-mails, the response rate was at 20%, resulting in 155 responses. These responses were further analyzed for completeness. For the variables included in this study, 124 respondents had responded to all variables, a further 16 had one unanswered question, a further 6 respondents had 2 missing responses. Those with more than 2 missing responses (9 respondents) were excluded from the study due to incompleteness. This resulted in a final sample size of 146 respondents. Missing values in the variables were replaced by the respective variable mean.

5.3.2 Choice of Method

Both qualitative and quantitative research methods could be used to study our hypothesized relationships. Given the existence of qualitative articles and conceptual research streams we can build on (e.g. Shaw and Carter, 2007) we have chosen a quantitative research design to test our hypotheses. A Structural Equation Model (SEM) was chosen as a main method of the study to determine the factors contributing to social impact. SEM is a statistical technique to fit a proposed model against the data. It represents a method for testing complicated causal models and is useful for new research areas (Cheung 2009), and therefore suits well for our research topic. Compared to multiple regression SEM allows to also integrate the conceptualization of more than one dependent variable and dependencies between these dependent variables. For the analysis we used SEM package in Amos, building the paths with hypothesized relationships among the observed variables. We have also included the paths leading to the variable business model strength from the independent variables that were not discussed in hypotheses, as those are often linked with successful economic performance in conceptual studies and we have no evidence to exclude them. An overview of the model underlying our hypotheses is presented below in the Figure 4-2¹.

¹ We are aware of possible criticism on the absence of alternative model which seem to be widespread, but is unreasonable myths, as the tested model is strongly grounded in the theory and alternative models would not be conceptually equivalent (Vandenberg 2006).

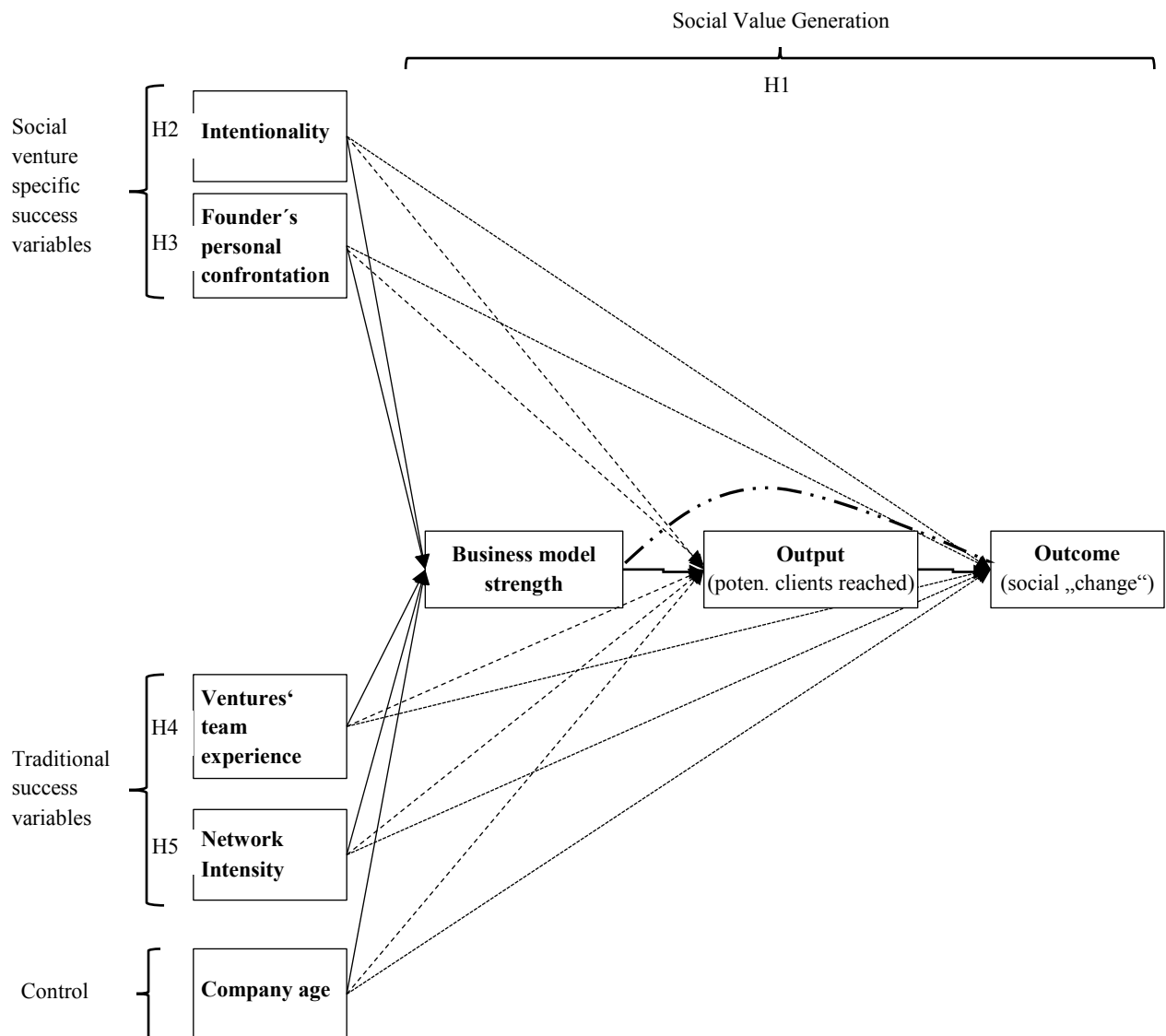


Figure 5-2 Operationalization the model in AMOS

The question of sample size in SEM is widely discussed by scholars without consensus, which often leads to the missing arguments for sample size in papers applying the SEM (MacCallum and Austin 2000, Weston and Gore 2006). The optimal sample size may depend on the complexity of the model, the desired power and the formulated hypotheses, whereas some authors disagree that sample size depends on the model alignment (Weston and Gore

2006). A widespread guideline is that the number of cases per estimated parameter should lie between 10 and 20. Following this logic, the value for our model is 18.5.

5.3.3 Operationalization of variables

For the operationalization of the variables, we relied as far as possible on existing scales that have been used and validated in previous research. Only where necessary, they were slightly adapted to better describe the context of this research. New scales, such as intentionality, were built as far as possible around existing scales, theories and concepts. Appendix 2 shows a complete overview about the variables, Cronbach's alpha per variable and factor loadings of the items used for this study. The central variables are introduced briefly below.

5.3.3.1. Social entrepreneurship specific variables. *Founders' personal confrontation:* The founders' personal confrontation with the social issue was measured with one item, asking the respondents "how strongly was/were the founder(s) of the venture or their close families and friends confronted with the social issue the venture addresses?", using a 5- point Likert scale from 1 (not at all) to 5 (to a very high degree). *Intentionality:* Following the tension of hybrid organizations, a four item scale was designed to capture the degree to which individuals rated their own venture as following primarily social or primarily business oriented goals. See figure 4-3 for the operationalization and Appendix 2 for the existing scales that our newly developed variable "intentionality" is based on.

Question: Please decide for each of the following pairs of statements, how important they are for your venture. The closer the slider to a statement is, the more important it is:

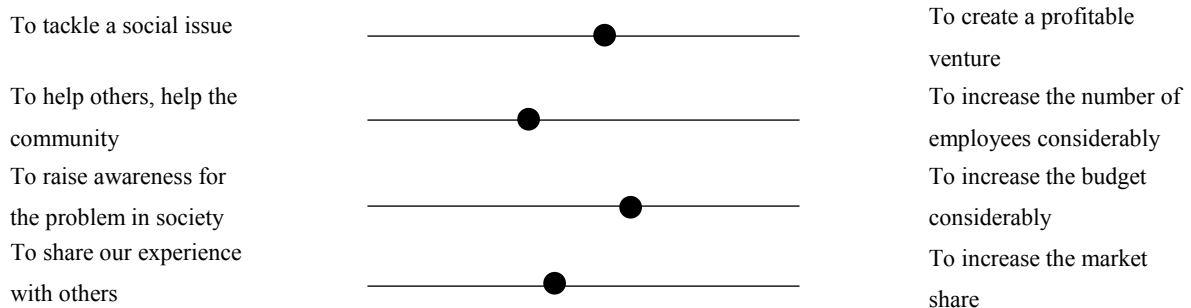


Figure 5-3 Operationalization of intentionality

5.3.3.2 “Traditional success variables”. The venture’s *team experience breadth* is measured on a 5-point Likert scale (“one, not at all” – “five, to a very high degree”) with the six items [I] entrepreneurial experience, [II] experience in the same economic sector, [III] managerial experience, [VI] marketing experience, [V] non-profit experience, [VI] charitable or humanitarian experience. Participants were asked, “prior to starting working in your venture, what kind of experience did your team members/staff bring to the venture?” A mean was calculated across all 6 items. *Network intensity* is measured as a set of 6 types of networks: [I] private individual donors, [II] funds and foundations, [III] non-profit organizations, [IV] governmental institutions, banks, consultancies, [V] business angels and [VI] academic institutions. Measurement is done on a 6-point Likert scale consisting of 0 (not at all), 1 (weak network) to 5 (strong network). All numbers are being added to achieve a total score. Finally, *company age* was included as a control variable.

3.3.4 Social outcomes. Due to the fact that the social problems that social entrepreneurs address have different societal scope and thus shape the internal structure and organizational characteristics of the venture, we argue that social outcomes can be best measured against its self-defined goals. Therefore, we measured social outcomes on a self-report basis in our online survey. Building on previous scales (see Appendix 2), we have chosen the measure which considers the level of documentation of social outcomes – from none to substantial (quantitative and qualitative) documentation (see Appendix 2), to make sure the respondents provide reliable evidence. Moreover, we have proved the reliability of the answers by checking the interpretation of “social outcomes” by asking respondents a similar question in an open question form.

5.4 Data analysis and Results

5.4.1 Verifying the model

Before starting with the structural equation modeling descriptive statistics were produced and analyzed (see Table 5-1 below). In terms of number of significant correlations our dependent variable “outcome” (measured change achieved) showed the highest number of significant correlations, all in the direction of our hypotheses (team experience breadth; business model strength; output - potential clients reached; as well as our control variable company age). Second, we found positive correlations of output (potential clients reached) with personal confrontation of founders with the social problem the venture addresses and company age. Additionally, intentionality has a significant negative correlation with business model strength, which supports as well one of our hypotheses.

Variables		Mean	St. dev.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Traditional Success Variables	(1) Company age	7.91	6.16	1.00							
	(2) Team experience breadth	3.06	0.84	.075	1.00						
	(3) Network intensity	16.51	6.99	.174*	.158	1.00					
Social Venture Specific	(4) Founder personally confronted with problem	3.81	1.27	.107	.086	-.053	1.00				
	(5) Intentionality [1=business only to 100=social only]	70.00	19.12	.129	.102	.154	.092	1.00			
Success Measures	(6) Business model strength (economic performance)	3.21	0.85	.090	-.014	.112	-.011	-.111	1.00		
	(7) Output (potential clients reached)	2.27	1.07	.328**	.070	-.094	.251**	.130	-.010	1.00	
	(8) Outcome (measured change achieved)	2.81	1.02	.238**	.218**	.005	.145	-.029	.206*	.187*	1.00

Notes: N = 146 * p< 0.05 ** p<0.01. Two-tailed test.

Table 5-1 Correlations of the variables in the model

The Chi-square test of our SEM model was calculated and resulted in the value of 0.103. It indicates a good model fit, as a non-significant result of chi-square test means that we have moderate discrepancy between a model and a sample. Our good model fit is also supported by the levels of root mean square approximation (RMSEA). The lower and upper bounds of this goodness-of-fit statistic lie by 0,000 and 0,124 respectively, which gives 95% confidence in the result. As the entire hypotheses presented above are unidirectional, the one-tailed test was applied. The double check using the two-tailed test confirmed that all relationships, with only one exception, remained statistically significant.

5.4.2 Results and discussion

The SEM model with the significant paths and standardized coefficients is presented in Figure 4-4. Additionally, all hypotheses are listed in Table 5-2.

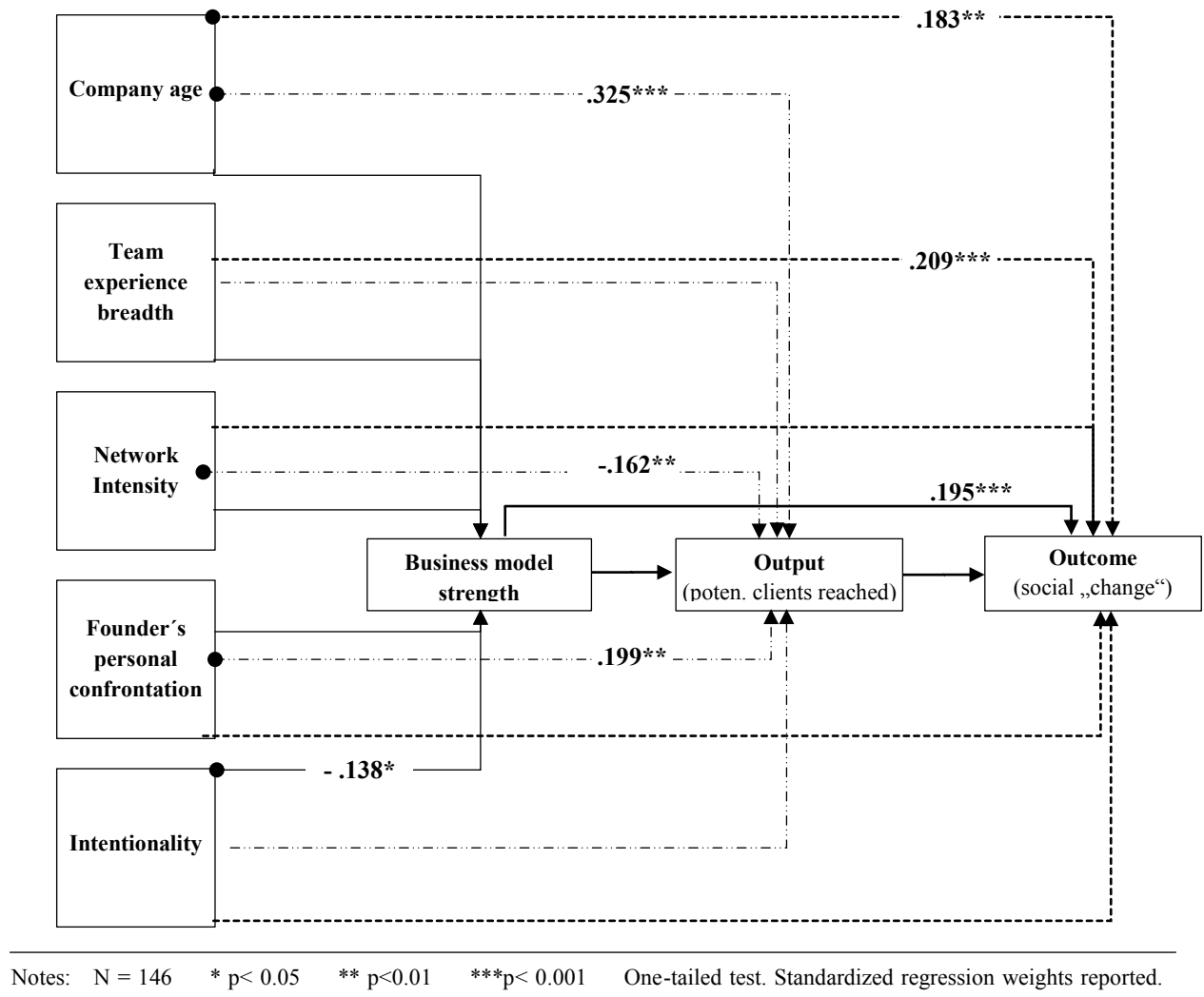


Figure 5-4 Results of structural equation model

Looking at the dependent variables representing different aspects of venture success, we find support for our hypothesis 1b. The SEM suggests that a higher business model strength (measured as growth in [I] profit, [II] budget, [III] employees and [IV] improvement in quality of products) is linked with a higher degree of outcome (measured social change), with

a standardized regression weight of .195 ($p < 0.001$). It seems that a strong business model is indeed an important precondition for higher social outcomes and therefore is an important success factor not only for traditional but also for social entrepreneurs, though the notion of success of traditional and social ventures differs (financial success vs. societal outcomes). This finding additionally supports previous claims of scholars, who argue that social entrepreneurs should not consider economic and social value creation separately (Grico et al. 2014).

Things become more complex, when we add the variable intentionality and its impact on financial and social value generation. As suggested in hypothesis 2a, there is a negative relationship between a high level of intentionality (favouring social over economic value generation) and business model strength ($-.138$; $p < 0.05$). This finding confirms the underlying statement of previous research that the art to balance social and business goals (characterized as double-bottom line or the intentionality of social entrepreneurs) is a contributor to the social venture's success and social value generation. Surprisingly, our hypothesis 2b stating that higher levels of intentionality lead to higher social outcomes achieved (measured social change) could not be confirmed. The reason for this could be that without sufficient financial support (balancing social and financial goals), even though an entrepreneur has extremely high intentionality, he or she will not be able to generate sufficient resources to really achieve this social change.

We also find support for our Hypothesis 3a, claiming that there is a positive relationship between the founders' personal confrontation with a social issue and output (the potential customers reached) (0.199 , $p < 0.01$). Simply speaking this would mean that members of a founder's team who had exposure to a certain problem are better in reaching the relevant clients and or customers. Reasons for this relationship cannot directly be extracted from our data, but it seems to make sense to study this relationship in more detail in future studies (i.e.

do a stronger motivation to solve a social problem, a higher empathy, a better understanding of the problem and an easier access to the beneficiary group that drive for higher output?).

Besides the personal confrontation with the social problem, the teams' experience breadth is suggested to play an important role as well. We find support for our Hypothesis 4b, that there is a positive relationship between experience breadth of a social ventures team and the social outcome achieved (measured change achieved) (.183, $p < 0.01$). These findings support scholars, who claim that a combination of traditional skills with a broad experience corridor is important for venture's success and social value generation.

Interestingly, contrary to our hypothesis, network intensity seems to have negative influence on the output (-.162, $p < 0.01$). We expected this relationship to be positive, not negative. One of the possible explanations could be that resources needed to support intensive relationships with the partners in the long run are too important, so that it leads to a different prioritization of the rare resources over time. An alternative explanation could be that Shaw and Carter (2007) showed in their study by interviewing social entrepreneurs that networks are used by social entrepreneurs to build local credibility and gain support primarily in the beginning. Our sample however consists of a mean age of our ventures of approx. 8 years (see descriptive statistics in Table 5-1).

Finally, our control variable company age showed positive effect on both output (potential clients reached) and outcome (measured change achieved). It seems logical that more experienced ventures have managed to reach out to a higher share of their potential customers and tend to be better in generating a higher social change.

ID	Hypotheses	Confirmed?
H1a	There is a positive relationship between business model strength and the output achieved (potential clients reached).	N.S.
H1b	There is a positive relationship between business model strength and the social outcome achieved (measured social change achieved).	Yes
H2a	There is a negative relationship between a high level of intentionality (favouring social over economic value generation) and business model strength (i.e. economic performance)	Yes
H2b	There is a positive relationship between a high level of intentionality (favoring social over economic value generation) and social outcome achieved (measured social change achieved).	N.S.
H3a	There is a positive relationship between personal confrontation to a social issue and the output achieved (potential clients reached).	Yes
H3b	There is a positive relationship between personal confrontation to a social issue and the social outcome achieved (measured social change achieved).	N.S.
H4a	There is a positive relationship between experience breadth of a social ventures team and the output achieved (potential clients reached).	N.S.
H4b	There is a positive relationship between experience breadth of a social ventures team and the social outcome achieved (measured social change achieved).	Yes
H5a	There is a positive relationship between the network intensity and the output achieved (potential clients reached).	Opposite
H5b	There is a positive relationship between the network intensity and the social outcome achieved (measured social change achieved).	N.S.
Contr. 1	Company Age -> Business model strength.	N.S.
Contr. 2	Company Age -> Output (potential clients reached).	Yes
Contr. 3	Company Age -> Outcome (measured change achieved).	Yes

Table 5-2 Summary of hypotheses and research findings

5.5 Conclusions and future research

5.5.1 Summary

Probably one of the most challenging aspects in current social entrepreneurship research is the conceptualization and measurement of social value generation, due to the multi-dimensionality and subjectivity of how different social outcomes of different social ventures are valued by different individuals. The objective of this study was to improve our understanding of success factors explicitly relevant for social value generation. Another important aspect was the conceptualization and operationalization of intentionality (defined as the trade-off in decision making between social vs. financial value creation). The hypothesized relationships were tested using a structural equation model (SEM). First, our analysis shows that an adequate economic performance is still important, not only for traditional ventures in general, but also for social ventures to act successfully for the social mission. Second, our analyses suggest that extreme levels of social value orientation (intentionality) do not necessary translate in higher outcomes (social change achieved). Even more, too much orientation on social value generation leads to lower business model strength. Third, prior experience to the social problem seems to be an important antecedent in the social value creation process. Fourth, the team's experience breadth showed a positive relationship with social value generation. Finally, the intensity of the networks has negative relation to the number of clients the venture reaches, which can be related to different managerial priorities of social entrepreneurs and should be addressed in further studies.

5.5.2 Theoretical and practical implications

Our paper makes following theoretical contributions. First of all, it contributes to the emerging stream of research, which focuses on social value generation and impact measurement in social ventures, and empirically tests the “output and outcome” theorem. Next, our paper provides interesting insights in the discussion on differences of traditional and social entrepreneurship as our findings support the notion of the scholars that success factors for social entrepreneurs vary from those of business entrepreneurs. In particular, it also supports the propositions that prior experience with the social problem and the variety of experiences from different sectors (experience breadth) are important for building successful business model, which in the end generates social value. Moreover, our variable “intentionality” provides an operationalization of bi-dimensional orientation of social entrepreneurs and represents an answer to a call for more studies on prosocial motivation of entrepreneurs and on joint measurement of economic and social value creation (Grice et al. 2014, Shepherd 2015).

Finally, as Dacin et al. (2011) state in their seminar article, the quantitative methods in social entrepreneurship research are still relatively rare and should be applied more. Similarly, several other authors called for more empirical contributions in this research area as well (Corner and Ho 2010, Meyskens et al. 2010). Thus, our paper makes a step towards further development of the quantitative empirical analysis in the field.

For social venture practitioners it may be important to pay attention on human capital the employees bring in the venture, as the findings showed, that the experience corridor influences positively social value generation. Similarly, it can be useful to have a member in a founder team, who already was personally confronted with the social problem the venture addresses. It is also important to find a balance between social and revenue goals and develop

a strong business model, in order to be able to “deliver” the social mission successfully. For the parties interested in the future development and support of social entrepreneurial activity it may be worth to consider the ventures, which combine a balanced orientation on social and economic goals with strong business model to stimulate higher social value generation in the long-term.

5.5.3 Outlook

The essential question is how we can increase the current level of social entrepreneurship in order to support the challenge of solving our societal problems and contributing to the shift in our production and consumption systems. Taking into account the heterogeneity and hybridity of social entrepreneurs, social outcomes should be compared between the ventures addressing the same target population. Moreover, the long term change that emerges for the target population is hardly possible to attribute to the one single venture. However, several social entrepreneurs tackling the same social issue can possibly play a role of catalyzing factors for social impact. To create social impact through social entrepreneurship in the long term, it thus may be meaningful to design support instruments aimed on specific targets and scales of society, as for example local embedded problems. This allows to address a specific type of social entrepreneurs, depending on focus of interest. The measurement of social impact in the long term should be thus further studied and conceptualized by the future research.

Though our study brings first insights on success factors of social entrepreneurs and represents a first step to understanding success factors and social value creation of social entrepreneurs, more empirical research is needed to test and improve the model and refine social outcome measurement. The further research is moreover essential to estimate innovative capacity of social entrepreneurs, improve quality and quantity of social

entrepreneurial activity and design systems that drive more individuals towards social entrepreneurship.

5.6 References

- Armour, A. (1990). Integrating impact assessment into the planning process. *Impact Assess Bull*, 8(1/2): 3–14.
- Austin, J., Stevenson, H., Wei-Skillern, J. (2006). Social and commercial entrepreneurship: same, different, or both? *Entrepreneurship: Theory & Practice*, 30 (1): 1-22.
- Bahadir, C., Bharadwaj, S. Parzen, M. (2009). A Meta-Analysis of the Determinants of Organic Sales Growth. *International Journal of Research in Marketing*, 26: 263-275.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Battilana, J., and Dorado, S. (2010). Building Sustainable Hybrid Organizations: The Case of Commercial Microfinance Organizations. *Academy of Management Journal*, 53(6): 1419–1440.
- Baum, J. R., Locke, E. A., Kirkpatrick, S. (1998). A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms. *Journal of Applied Psychology*, 83: 43–54.
- Baum, J.A.C. and Silverman, B.S. (2004). Picking Winners or Building Them? Alliance, Intellectual, and Human Capital as Selection Criteria in Venture Financing and Performance of Biotechnology Startups. *Journal of Business Venturing* 19 (3): 411–436.
- Baum, R. and Locke, E. (2004). The Relationship of Entrepreneurial Traits, Skill, and Motivation to Subsequent Venture Growth. *Journal of Applied Psychology*, 89 (4): 587-598.
- Chell, E. (2007). Social enterprise and entrepreneurship – Towards a convergent theory of the entrepreneurial process. *International Small Business Journal*, 25 (1): 5–26.
- Cheung, M. (2009). Workshop in Structural Equation Modeling (SEM). Retrieved from: <https://courses.nus.edu.sg/course/psycwlm/internet/>
- Coase, R. H. (2013). The problem of social cost. *The journal of Law and Economics*, 56 (4): 837–877.

- Corner, P. D., and Ho, M. (2010). How Opportunities Develop in Social Entrepreneurship. *Entrepreneurship: Theory & Practice*, 34 (4): 635-659.
- Dacin, M.T., Dacin P.A., Tracey P. (2011). Social entrepreneurship: A critique and future directions. *Organization science*, 22 (5): 1203-1213.
- Dees, J.G. and Anderson, B.B. (2006). *Framing a theory of social entrepreneurship: building on two schools of practice and thought. Research on social entrepreneurship*. In R. M. Williams (ed.), ARNOVA occasional paper series, 1 (3): 39–66.
- Dees, J.G. (2001). *The meaning of “social entrepreneurship”*. Center for the advancement of Social Entrepreneurship, Fuqua School of Business. Retrieved from: https://centers.fuqua.duke.edu/case/wp-content/uploads/sites/7/2015/03/Article_Deess_MeaningofSocialEntrepreneurship_2001.pdf
- Dembek, K., York, J. Dodd, R., Rodriguez, L., Sheth, U. (2017). *Actionable impact management volume one: Groundwork*. SOPACT.
- Dey, P. (2006). The rhetoric of social entrepreneurship: Paralogy and new language games in academic discourse. In *Entrepreneurship as Social Change*, eds. C. Steyaert and D. Hjorth. Cheltenham: Edward Elgar: 121-142.
- Dorado, S. (2006). Social entrepreneurial ventures: Different values so different process of creations, no? *Journal of Developmental Entrepreneurship*, 11: 319–343.
- Dorado, S. and Ventresca, M. (2013). Crescive entrepreneurship in complex social problems: Institutional conditions for entrepreneurial engagement. *Journal of Business Venturing*, 28: 69–82.
- Drayton, W. (2002). The Citizen Sector: Becoming as Entrepreneurial and Competitive as Business. *California Management Review*, 44(3): 120-132.
- Ernst, K. (2011). *Heart over mind—An empirical analysis of social entrepreneurial intention formation on the basis of the theory of planned behavior*. Inaugural dissertation. University Wuppertal. Retrieved from: <http://elpub.bib.uni-wuppertal.de/servlets/DerivateServlet/Derivate-2825/db1103.pdf>

- Estrin, S., Mickiewicz, T., and Stephan, U. (2013). Entrepreneurship, Social Capital, and Institutions: Social and Commercial Entrepreneurship Across Nations. *Entrepreneurship: Theory & Practice* 37 (3): 479-504.
- Florman, M., Kingler-Vidra, R., Facada, M. (2016). A critical evaluation of social impact assessment methodologies and a call to measure economic and social impact holistically through the External Rate of Return platform. *LSE Enterprise Working Paper 1602*. Retrieved from: <http://www.lse.ac.uk/businessAndConsultancy/LSEConsulting/pdf/Assessing-social-impact-assessment-methods-report.pdf>
- Gramling, R. and Freudenburg W.R. (1998). Opportunity-threat, development, and adaption: toward a comprehensive framework for social impact assessment. *Rural Sociology*, 57(2): 216– 34.
- Grant, A. M. and Berry, J. W. (2011). The Necessity of Others is the Mother of Invention: Intrinsic and Prosocial Motivations, Perspective Taking, and Creativity. *Academy of Management Journal*, 54(1): 73–96. doi:10.5465/AMJ.2011.59215085
- Gladwin, T. N., Kennelly, J. J., Krause, T.-S. (1995). Shifting paradigms for sustainable development: Implications for management theory and research. *The Academy of Management Review*, 20(4): 874–907.
- Grico, C., Michelini, I., Ivasevoli, G. (2014). Measuring Value Creation in Social Enterprises: A Cluster Analysis of Social Impact Assessment Models, *Nonprofit and Voluntary Sector Quarterly*: 1-21.
- Hall, J. and Hofer, C.W. (1993). Venture capitalists decision criteria in new venture evaluation. *Journal of Business Venturing*, 8: 25–42.
- Jay, J. (2013). Navigating Paradox as A Mechanism of Change And Innovation in Hybrid Organizations. *Academy of Management Journal*, 56(1): 137–159.
- Juslen, J. 1995. Social impact assessment: a look at Finnish experiences. *Proj Appraisal*, 10(3): 163– 70.

- Kautonen, T., Luoto S., Tornikoski, T. (2010) Influence of work history on entrepreneurial intentions in 'prime age' and 'third age': A preliminary study. *International Small Business Journal*, 28 (6): 583-601.
- Kistruck, G.M. and Beamish, P.W. (2010). The Interplay of Form, Structure, and Embeddedness in Social Intrapreneurship. *Entrepreneurship: Theory & Practice*, 34 (4): 735-761.
- Lasprogata, G.A. and Cotton, M.N. (2003). Contemplating "enterprise": The business and legal challenges of social entrepreneurship. *American Business Law Journal*, 41 (1): 67-113.
- Lee, D. and Tsang, E. (2001). The Effects Of Entrepreneurial Personality, Background And Network Activities On Venture Growth. *Journal of Management Studies*, 34 (4): 583-602.
- Locke, E. A. and Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice Hall.
- MacCallum R.C. and Austin, J.T. (2000). Applications of Structural Equation Modeling in Psychological Research. *Annual Review Psychology*, 51: 201-226.
- Mair, J. and Marti I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41 (1): 36-44.
- Mair, J. and Noboa E. (2003). *Social entrepreneurship: How intentions to create social enterprise get formed*. IESE Business School, Working Paper 521.
- Markman, G.D. and Baron, R.A. (2003). Person-entrepreneurship fit: why some people are more successful as entrepreneurs than others. *Human Resource Management Review*, 13: 281-301.
- McMullen, J. S. and Bergman, B. J. (2017). Social Entrepreneurship and the Development Paradox of Prosocial Motivation: A Cautionary Tale. *Strategic Entrepreneurship Journal*, 11 (3): 243-270.

- Meyskens, M., Robb, C., Stamp, J.A., Reynolds, P.D. (2010). Social Ventures from a Resource-Based Perspective: An Exploratory Study Assessing Global Ashoka Fellows. *Entrepreneurship: Theory & Practice*, 34 (4): 661-680.
- Miller T. L. and Wesley, C. L. (2010). Assessing Mission and Resources for Social Change: An Organizational Identity Perspective on Social Venture Capitalists' Decision Criteria. *Entrepreneurship: Theory & Practice*, 34 (4): 705-733.
- Miller, T., Wesley, C., Williams, D. (2012). Educating the Minds of Caring Hearts: Comparing the Views of Practitioners and Educators on the Importance of Social Entrepreneurship Competencies. *Academy of Management Learning and Education*, 11(3): 349-370.
- Moor, C. (2012). *Exploring the Social Entrepreneur: Individual and Organizational Identity Construction*. Master's Theses (2009). Paper 148. http://epublications.marquette.edu/theses_open/148
- Morris, M.H., Webb, J.W., Franklin, R. (2011). Understanding the Manifestation of Entrepreneurial Orientation in the Nonprofit Context. *Entrepreneurship: Theory & Practice*, 35 (5): 945-971.
- Sullivan Mort, G., Weerawardena, J., Carnegie, K. (2003). Social entrepreneurship: Towards conceptualization. *International Journal of Nonprofit and Voluntary Sector Marketing*, 8(1): 76–88.
- Moss, T.W., Short J.C., Pyane, G.T., Lumpkin G.T. (2011). Dual Identities in Social Ventures: An Exploratory Study. *Entrepreneurship: Theory & Practice*, 35 (4): 805-830.
- Muir, K. and Bennett, S. (2014). *The Compass: Your Guide to Social Impact Measurement*. Sydney, Australia: The Centre for Social Impact.
- Murdock, A. and Bradburn, A. (2005). Social entrepreneurial ventures and the value of social networks. *International Social Entrepreneurship Conference, Barcelona, Spain, 22-24 April*

- Nicholls, A. (2009). We do good things, don't we? Blended value accounting in social entrepreneurship. *Accounting, Organizations and Society*, 34: 755-769.
- Peredo, A.M. and McLean, M. (2006). Social entrepreneurship: A critical review of the concept. *Journal of World Business*, 41 (1): 56-65.
- PHINEO (2016): Social impact navigator. The practical guide for organizations targeting better results. www.social-impact-navigator.org
- Pigou, A. C. (1932) *The Economics of Welfare*. Library of Economics and Liberty. Retrieved from: <http://www.econlib.org/library/NPDBooks/Pigou/pgEW.html>
- Rao-Nicholson, R. Vorley, T., Khan. Z. (2017). Social innovation in emerging economies: A National Systems of Innovation based approach, *Technological Forecasting and Social Change*, <http://dx.doi.org/10.1016/j.techfore.2017.03.013>.
- Renko, M. (2013). Early Challenges of Nascent Social Entrepreneurs. *Entrepreneurship: Theory & Practice*, 37(5): 1045-1049.
- Seelos, C. and Mair, J. (2006). Social entrepreneurship. The contribution of individual entrepreneurs to sustainable development. *The ICFAI Journal for Entrepreneurship Development*, March 2006: 30-46.
- Schmitz, B., Krlev, G., Mildemberger, G., Bund, E.; Hubrich, D. (2013). *Paving the Way to Measurement – a Blueprint for Social Innovation Metrics. A short guide to the research for policy makers*. TEPSIE. Retrieved at: www.tepsie.eu/index.php/publications.
- Shane, S., (2000). Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science* 11 (4): 448–469.
- Sharir, M. and Lerner, M. (2006). Gauging the success of social ventures initiated by individual social entrepreneurs. *Journal of World Business*, 41: 6-20.
- Shaw, E. and Carter, S. (2007). Social entrepreneurship. Theoretical antecedents and empirical analysis of entrepreneurial processes and Outcomes. *Journal of Small Business and Enterprise Development*, 14 (3): 418-434.

- Shepherd, D.A. (1999). Venture capitalists' assessments of new venture survival. *Management Science*, 45: 621–632.
- Shepherd, D.A., Ettenson, R., Crouch, A. (2000). New venture strategy and profitability: A venture capitalist's assessment. *Journal of Business Venturing*, 15: 449–467.
- Smith, B.R., Cronley, M.L., Barr, T.F. (2012). Funding implications of social enterprise: the role of mission consistency, entrepreneurial competence, and attitude toward social enterprise on donor behavior. *Journal of Public Policy & Marketing*, 31 (1): 142–157.
- Song, M., Podoynitsyna, K., van der Bij, H., Halmann, J. (2008). Success Factors in New Ventures: A Meta-analysis. *Journal of Product and Innovation Management*, 25: 7-27.
- Thompson, J. (2002). The world of the social entrepreneur. *International Journal of Public Sector Management*, 15 (5): 412-431.
- Vanclay, F. (2002). Conceptualising social impacts. *Environmental Impact Assessment Review*, 22: 183-211.
- Vandenberg, R. (2006). Statistical and Methodological Myths and Urban Legends. Where, Pray Tell, Did They Get This Idea? *Organizational Research Methods*, 9 (2): 194-201.
- Weber, C. and Kratzer, J. (2013). Social entrepreneurship, social networks and social value creation: a quantitative analysis among social Entrepreneurs. *International Journal of Entrepreneurial Venturing*, 5 (3): 217-239.
- Weerawandena J. and Sullivan Mort G. (2006). Investigating social entrepreneurship: A multidimensional model. *Journal of World Business*, 41: 21–35.
- Weston, R., Gore, P.A. Jr. (2006). A Brief Guide to Structural Equation Modeling. *The Counseling Psychologist*, 34 (5): 719-751.
- Yiu, D.W., Wan, W.P., Ng, F.W., Chen, X., Su, J. (2014). Sentimental drivers of social entrepreneurship: A study of China's Guangcai (Glorious) Program. *Management and Organization Review*, 10(1): 55–80.

Zahra, S. A., Gedajlovic, E., Neubaum, D.O., Shulman, J.M. (2009). A typology of social entrepreneur: Motives, search process and ethical challenges. *Journal of Business Venturing*, 24: 519-532.

6. ARTICLE IV: On the Economics of Social Innovation: A Conceptual Framework and First Empirical Study

Abstract

Social innovations addressing social, economic and environmental challenges are increasingly recognised as crucial drivers of social changes and today represent an important target for innovation policy on national and international levels. However, the concept of social innovation remains vague and has different meanings and theoretical backgrounds among the scholars and policy experts studying it, increasing the gap between theory and policy practices. This paper is an attempt to contribute towards filling this gap by building a conceptual framework from an economic perspective: The main criterion for identifying a social innovation concerns the way the benefits generated by an innovation are distributed between the (private or public) innovator and society. Moreover, we empirically study the assumptions of the conceptual framework and map social innovations across Europe, based on an exploratory analysis of online data from social innovation prizes. The mapping describes organizational layouts and institutional arrangements of social innovation projects and improves our understanding of the underlying sources and incidences of market failures.

Key words: social innovation, social surplus, severe market failures, social innovation prizes, innovation policy, social entrepreneurship

Joined work with Alexander Cuntz and Dominique Foray

6.1 Introduction

The growing popularity of “social innovation” in diverse circles as well as the fact that the initial formulation left considerable latitude for scholars and policymakers to interpret the specific content and policy implications of the concept have generated a plethora of ideas as to what social innovation means for economic and social development, major societal needs and capability formation. Since the qualification of “social” can lead to very different interpretations across disciplines (economics, sociology, political science, management science), some scholars tend to reduce social innovation to innovation in the domain of social services and social technologies; others deny any technological content of a social innovation and finally others include everything related to changes in lifestyles, working practices and forms of organisation that can result in highly profitable innovation for the private innovator (such as Uber and other iconic cases of the sharing economy). The concept of social innovation is not yet tight – it lacks transparency, verifiability and broad consensus¹ - and this is unfortunate because political and policy commitment towards social innovation has risen to a very high level and this gap between the political interest for social innovation and the current state of academic research is not yet favourable for fruitful interactions between academic research, policy research and policy practices. With this paper we attempt to contribute towards filling this gap.

For this purpose we develop an economic concept of social innovation in the first part of the paper. Our starting point is a narrow concept of social innovation – grounded in the microeconomics of innovation and knowledge - which implies that the main criterion for identifying a social innovation concerns the way the benefits generated by an innovation are distributed between the (private or public) innovator and society. Such a conception draws

upon the general microeconomic framework but also the specific works of the so-called Stanford Social Innovation School (in particular Phills et al., 2008).

In the second part of the paper we present and discuss our empirical approach to an exploratory mapping social innovation that lends support to our theoretical framework and its main assumptions. We present our findings that have resulted from the online collection and analysis of data on social innovation projects available from various social innovation prize competitions and introduce the main categories of institutional arrangements/actors and projects that are involved in the generation and diffusion of such social innovations.

We argue that the current level of social innovation activities is probably insufficient to cause a long-term shift towards the societal transformations that are at stake. Therefore supportive instruments for the social innovation ecosystem should be developed with the help of governmental and political structures. The intention of the paper is thus to establish an understanding of social innovation from an economics point of view that allows to specify parameters of and better design social innovation policies.

6.2 Related literature

6.2.1 Historical development

The first reference to the importance of innovation in the social sphere probably originates from Schumpeter's theory of economic development in 1912, where he links innovation with economic growth and gives a first definition and typology of innovation (Caulier-Grice et al. 2012, Howaldt and Schwarz 2010, Neumeier 2012). The first comprehensive research that explicitly concentrated on the phenomenon of social innovation appeared in the eighties.

Analysing the state of discussion on social innovation, Chambon et al. (1982) provided input on this subject and a basis for its further academic development. Dimensions such as societal change, collective initiative, social needs and the role of the state were examined by various French scholars and further developed in the nineties (Moulaert 2012). The intensified interest in social innovation was connected with the transition from an industrial society to the knowledge and service economy, which Bullinger termed an "innovation system paradigm shift" (Bullinger 2006). Moreover, such interest took into account the ambivalence regarding innovation outcomes perceived in society. This required a better understanding and evaluation of the risks and benefits that new technologies and technological progress would produce for society (for example, in nanotechnology, Kearnes and Wynne 2007).

The shift to social innovation perspective can be explained not only by the emergence of the new economic sectors and forms of production, but also by a new "innovation culture", whose key point was openness to citizens and customers as well as their involvement and participation in a more "inclusive" innovation process (Howaldt and Schwarz 2010, Rosted et al. 2009). Consequently the concept of social innovation was transformed from one of a linear process into a dynamic interconnected and complex system with a number of different actors and institutions, which is intended not only for the wellbeing of the citizens but also involves their participation (Caulier-Grice et al. 2012, European Commission 2013). The change of paradigms revealed the necessity for the intensive development of a theoretical concept of social innovation (Howaldt and Schwarz 2010).

The recognition of social innovation as an important research subject and its theoretical conceptualisation in academic research occurred in the first decade of a new century. Most of the literature on social innovation emerged after 2000 and has grown dramatically over the last decade (Korsemir et al. 2013, Short et al. 2009, Weber et al. 2012). It attracted the most interest in the following fields: management science and organisational research, business

administration and corporate social responsibility, sociology, research on creativity as well as local and regional development (Moulaert et al. 2012).² For example, in the rural development context social innovation is often understood as a new form of civic participation for the empowerment of social groups and better quality of life. Some scholars go further and conceptualize “transformative social innovation”, concentrating on its force for societal change and empowerment (Avelino et al. 2017).

Social innovation as an important research and discourse subject was recognised not only in academic institutions but also in politics. A number of research programmes, think tanks and foundations, initiated and supported by government, address social innovation, primarily concentrating on its expansion and scaling (European Commission 2012, TEPSIE). Indeed, in the last decades the political strategies of the western world could hardly bypass the role of global social problems (e.g. UN millennium goals, UN Sustainable Development Goals 2016). Policies often adopted a more normative stance as regards the general direction and outcomes of research and innovation as well as attempting to increase accountability concerning public funding efforts. In response to growing social challenges and dissatisfaction with the priority of technological innovations, economic and social issues were no longer separated as they were in the last century, and social innovation appeared to be one of the links between them. This concept facilitated the recognition of the importance of these issues for society as a whole. It gained momentum as a response to global and societal challenges such as demographic change, migration, chronic diseases or climate change and the prospective burden these challenges would place on public healthcare, education and social services budgets (Cagnin et al. 2012, Murray et al. 2010). It also provided a framework for the “discursive restructuring” between welfare and innovation policies observed in some countries, for example policies targeting healthcare sectors, leading to new types of policies being developed that would not only focus on productivity and competitiveness concerns but

also take individual and community wellbeing into account (Niinikoski and Kuhlmann 2015). Moreover, social innovation was heavily embraced by policymakers for the impact it may have on employment generation and labour market integration in developed countries. In the context of the European financial and economic crisis, this further facilitated the dissemination of the concept (European Commission 2013). Thus, for example, the European Commission recognised social innovation as a means to meet these global challenges and its role in creating competitive advantage for the European economy and society in the future (Caulier-Grice et al. 2012, Turker and Altuntas Vural 2017).

6.2.2 Conceptualisation attempts

Existing concepts of social innovation have been criticised because they do not provide a profound scientific base for empirical research and evidence-based policymaking, which could help meet societal challenges more effectively (Kesselring and Leitner 2008, Phillips et al. 2015). Conceptual ambiguity divides scholarly communities; while some advocates consider social innovation as a critical type of innovation, others consider it being a mere fad or just a buzz word (Pol and Ville 2009). Several reasons for the existing conceptual vagueness can be identified: trans-disciplinarity of social innovation, its relationship to technological and business innovation, the qualification of “social” and its role in systemic social change. Moreover, the institutional context that shapes social innovation is complex (Rao-Nicholson, Vorley and Khan 2017, Turker and Altuntas Vural 2017).

Social innovation is trans-disciplinary by nature and may occur across sectors (private, public, non-profit, informal sector, e.g. social movement), and on individual or group levels (Caulier-Grice et al. 2012, Edwards-Schachteret and Wallance 2015, Schmitz et al. 2013). In sociology, innovation research is often devoted to the interaction of social and technological

innovations and their relation to social change (Kesselring and Leitner 2008, Howaldt and Schwarz 2010). In economics, social innovation research in particular often focuses on the wellbeing of the recipient (Dawson and Daniel 2010, Pol and Ville 2009). In organisational and management fields, social innovations are often seen as changes in social capital, e.g. new patterns of communication and interaction for effective organisational change (Loogma et al. 2013).

Some authors have reviewed and categorised the existing definitions of social innovation in different disciplines, also pointing out that some definitions are very broadly formulated, and some are very specific, partly because the field is mostly practice-led. For example, Caulier-Grice et al. (2012) define five different areas of use of the term: use as social change; use as social entrepreneurship; use as an aspect of business strategy for effective growth; use as a new implementation for meeting social needs and as a model of governance, empowerment and capacity building. Basso (2011) divides the most frequently recurring definitions into three categories: systematic, pragmatic and managerial. The first category refers to broader sociological definitions of social system change and collective aspects of the innovation process. The second category reflects an economic approach to social innovation and examines it in the context of an enterprise with primarily social purposes that finds new ways to meet a social need. The last category is a hybrid of the two previous ones and concentrates on the collective social changes and, at the same time, focuses on the effectiveness and efficiency of innovations. The European Commission lists three approaches to social innovations: social demand innovations (needs of vulnerable social groups, which are not covered by the market); societal challenge perspective, which combines innovations in the social, economic and environmental spheres; and a perspective of systemic change through organisational development (European Commission 2013). Cajasanta (2014) distinguishes two dominating perspectives, which, he argues, divide current research on the

subject: individualistic perspective, which gives the importance to an individual “heroic” agent; and structural perspective, where social structures, social context and their influence on the process of social innovation play predominant role. Nicholls et al. (2015) identifies two leading conceptual streams which either focus on social processes (e.g. changes in social relations) or on social outcomes (e.g. social market failures). Furthermore, processes and outcomes occur on incremental, institutional or disruptive “levels” and vary by “impact and level of action”, e.g. individual, organizational, network or systemic (Nicholls et al. 2015).

The distinction of social innovation as a separate type of innovation often lies in its contrast to technological and business innovation and contraposition of its aims. For some authors the reference to these distinctions plays a central role for their concepts. Howaldt and Schwarz (2010), for example, compare social innovations with technological ones as those occurring on the level of social practices rather than being a technological artefact, as well as focusing on the social relations and stronger context-dependency of social innovations. Mulgan (2007) explains differences between social and business innovations via their goals – social purpose versus profit maximisation. Similarly, Phills et al. (2008) emphasise that, in the case of social innovation, created value occurs for society rather than for private individuals. We consider the ideas developed by Mulgan and Phills et al. as being very close to our definition and concept of social innovation (Section 3 below).³

However, even though the aims of social, technological or business innovations are different, the outcomes may overlap, as regards their effect on economic performance (Hochgerner 2010). Organisational innovations improving labour productivity often seem to be economic as well as social in their ends. Similarly, practically every technological innovation may have (“social”) effects on the living standards of specific social groups or society at large. On the other hand, some innovations with social purposes and effects are unthinkable without innovative technologies (for example, internet technologies).

Social innovations are fundamentally about addressing social problems and social change they bring about. However, not all innovations can be seen as a social innovation, even if they serve social needs or have a social impact. Indeed, many different types of innovation give rise to social changes, perhaps very significant social changes in the case of major (disruptive) business innovations. Our challenge is to qualify the “social” in the expression “social innovation”, considering the fact that significant social changes can be identified as the consequence of any kind of innovation – including those which are not strictly social.

6.3 A concept of social innovation – an economist’s view

In this section, we introduce a conceptual framework from an economist’s perspective, suggesting that whether innovation is social depends on the way the social surplus is distributed between the private innovator and the rest of the society. Thus, our concept of social innovation is grounded in the micro-economics of innovation and has two building blocks. The first one builds on the notion of innovation surplus and how this surplus is distributed between private innovators and society. As a first step, it allows us to propose a general definition of social innovation.

The second block builds on the notion of market failure to identify cases of social innovation in which the appropriation of surplus by the private innovator is simply impossible. In this case of *severe* market failures, the innovation is social “by necessity”. In other cases, market failures are *moderate*. In these cases, the private appropriation of surplus by the innovator is possible but does not occur, and therefore the innovation is social “by choice”.

6.3.1 The main criterion – how is the social surplus distributed?

We argue that the qualification of social does not refer to any particular content of innovation. In other words, the category of social innovation does not include only innovations in the social domain or only innovations which are not technological. Rather, we propose that the qualification of social refers to a problem of distribution of the benefits between the private innovator and the society. As Phills et al. (2008: 39) write: “An innovation is truly social only if the balance is tilted toward social value rather than private value”. Therefore the main dichotomy is not between social and technological innovation but between social innovation and business innovation. In the latter case, a large fraction of the benefits is (expected to be) captured by the private innovator, while, in the former, most of the value will go to society.

Of course this is less a matter of sharp discontinuity than of degree on the axis of innovation bounded by cases of innovations that generate social value only and cases of innovations that generate private value only, and the boundaries between the two categories are somewhat blurred.

The advantage of such a framework is its flexibility: it allows us to capture any case of social innovation. The framework can include extreme cases where there is simply no private innovator and the innovation is made for instance by municipalities, the State or any other public institution and in such case the totality of the innovation value goes to society. And, the framework can also account for those cases where there is a private innovator but he or she decides to maximise the distribution of benefits to society and minimize his/her own surplus. This can be a choice which is made by managers of for-profit companies for certain reasons. This can be an obligation when the private innovator is a not-for-profit organization.

6.3.2 Two types of market failures and social innovation cases – Necessity or social choice-based change?

We argue that with regard to social innovation, most of the value created goes to society. This is our general definition and, again, it covers two main cases. In the first case, social innovation is the only way to provide the innovation, because there is no way for a potential private innovator to appropriate value. “Severe” market failures explain this situation. In the second case, social innovation is one option, with business innovation being another. This means that a private innovator could appropriate a significant fraction of the value, but decides not to. The expression “could appropriate a significant fraction of the value” means that market failures in this case are “moderate” and can be fixed at low cost, for instance through modest public subsidies or the operation of the existing patent system.

For the purpose of this paper, we interpret market failure pragmatically. At a theoretical level, the concept of market failure is linked to the formal theory of general competitive equilibrium; it comprises the framework of optimising actors, competition, general equilibrium and its counterpart, the theory of market failure. Our point here is not theoretical; rather, it follows an argument recently made by Winter (2017) which recognises that the language and theory of market failure is a valuable resource for understanding appropriability concerns and building a strong case for innovation policy. The goal is then to impart a balanced perspective of market failure and to use it for cases that can satisfy three criteria (Winter 2017):

- 1) The mechanism generating the core market failure problem is relatively simple and transparent;
- 2) The nature of the harm is fairly clear;

- 3) There is relevant experience using non-market organisational arrangements to address the problem.

Case 1: Business innovation is not an option or the case of “severe market failures”. Some socially desirable innovations are just impossible to generate through decentralised market processes because of “severe” market failures. Business innovation is not an option because there is no hope for any potential private innovator to be able to capture a significant fraction of the social value and therefore it is unlikely that a for-profit organisation will choose to commit to such a project. In such a case, if the innovation happens, its value is, by definition, largely captured by the society.

Because private innovators seeking for economic rents are missing, complex institutional arrangements or social entrepreneurs are required to substitute markets. For example, a public-private partnership for product development, which has been created to innovate in the field of neglected diseases, involves university laboratories, public research organizations, small biotech companies and large pharmaceutical firms (Munoz et al., 2015).

Here a social innovation is therefore about developing an innovative solution that is needed to trigger social changes and where the market (and its minimal institutions such as property rights) fails to deliver. The statement where the market fails to deliver is fundamental here. Without this qualification, all the greatest innovations - from electricity to the car and the computer - would be classified as social innovation because they all give rise to significant social changes. “It is only when markets fail that social innovation becomes important as a way to meet needs that would not otherwise be met and to create value that would not otherwise be created” (Phills et al. 2008: 39).

This definition of social innovation needs to be based on an appreciation of what we mean by severe market failures – i.e. failure that cannot be corrected via standard technology policy (including IPR, tax credit, R&D subsidies) so that business innovation is not an option. Such severe market failures imply that the value that will be generated through such innovation will mainly go to society rather than any private entity. Consequently, a private innovator anticipates very poor returns and would not bear the cost of innovation that would not be recovered under these conditions.

To understand the origins of such severe market failures we introduce a preliminary typology of the sources of “severe market failures”:

- 1) Market too small (orphan diseases),
- 2) Market too poor (neglected diseases) and/or willingness to pay too low even if the innovation is socially valuable (because of demand externalities e.g. in the case of vaccines),
- 3) Market not present yet (natural resources, biodiversity, environment),
- 4) Severe problem of information on quality (healthcare),⁴
- 5) Severe problem of appropriation (healthcare),⁵
- 6) (Secondary) market for decentralised production, allocation and collective use of slack resources and goods fails to establish (peer production, sharing, reuse/recycling etc.).⁶

Our empirical work as outlined in later sections provides clear evidence on many of these sources of severe market failures and corroborates our preliminary typology, for example, relatively high incidences of social innovation activity in healthcare and environmental areas (cf. Figure 6-1) and target groups commonly involving lower-income and smaller minority groups.

However, market failures are not universal, free-floating and endless. They are determined by and embedded in the level of economic development, level of capability formation, institutions, values and technologies. This means that situations where only social innovations were possible at some point in time can change rapidly because of radical economic, social, institutional or technological transformations.

A very spectacular case in point is precisely the shift of car sharing from social to business innovation. What was not possible in the early 2000s – using market mechanisms to structure the rewards for the private innovator – became possible later. This is essentially due to technologies: internet platforms and digitisation have lowered the market transaction costs associated with sharing excess capacities to a point where market mechanisms have become a feasible option for mid-grained goods owners and putative users. For example, Uber – if compared with the initial social sharing forms of carpools – is based on the same economics of mid-grained indivisible goods (Benkler 2004), but with a platform that allows a company to leverage low transaction costs to harness distributed capacity - both human and material through market mechanisms - harnessing loosely fitting components into reliable services. The fundamental logic of innovation has thus changed – shifting from new social models to new business models. However, the social organisations of the initial stage of the sharing economy have survived and we might think in terms of a continuum of solutions (between “pure” business models as one extreme case and “pure” social models at the other extreme) – with each intermediary form between the two extremes meriting specific analysis.

Case 2: Social innovation is an option or the case of “moderate market failures”. Business innovation is an option (market failures are moderate and can be corrected by standard policies), but the usual pricing strategy (to price far above marginal cost in order to maximise the private innovator surplus) is rejected by the innovator because this would dramatically reduce the distributive benefits of the innovation to consumers. In such circumstances, the

private innovator can opt to sacrifice their own benefits so as to maximise the distribution of benefits to others. Here, the innovation could have been a business innovation but is in fact a social innovation. Our empirical work provides evidence for the fact that many social innovation projects target business activities, price new products and services (rather than offering on a pro bono basis etc.) and also do operate under for-profit legal status. This implies that this second case of social innovation is important (cf. section 4.2).⁷

As with any other type of innovation, however, social innovation entails uncertainty as regards outcomes and returns from new products and services. This likely creates a countervailing effect in social choice cases that makes social innovators ultimately price above competitive prices based on their expectations, but still below monopoly ones they deduct from. Again, our empirical work confirms this basic intuition as many social innovators opt for legal liability regimes that limit their personal financial risk upon default and innovative failure on markets (cf. section 4.2).

Since social choice of an innovator threatens potential business positions (for example, innovators offering a new product at or close to a competitive market price) creative destruction changes these markets. This contrasts with the first case outlined above, where there is no creative destruction by definition as there is no business position threatened by the innovation. For example, according to Berger and Stevenson, it is common in education that foundations and charities give away the very things that entrepreneurs are trying to turn into business (Foray and Raffo 2014; Berger and Stevenson 2007). This unintended consequence of a strategy of building a commons is a phenomenon that is also discussed in development economics as potentially “killing entrepreneurial spirit.”

6.3.3 Definitional clarifications

Several definitional clarifications follow from our economic framework:

- 1) The main dichotomy is not between social and technological innovation but between social and business innovation (i.e. many social innovations have a technological dimension, e.g. an orphan drug or a low-cost medical technology designed to be diffused in the poorest regions);
- 2) It automatically follows that a wide range of innovations concerning organisational practices and models or new ways of structuring human works are NOT social innovations because they are very profitable for the private innovator and will generate high rents for them;
- 3) It is also clear that what starts as social innovation can then become the object of commercial strategies (an example is microcredit): while severe market failures impede private investments in R&D and innovation, once the social innovation has been generated through complex institutional arrangements or the commitment of a social entrepreneur the R&D fixed costs are borne by these institutions, and the resulting product and service can become a privately profitable activity.
- 4) Low-cost innovation should not be confused with social innovation. A lot of low-cost innovations are true business innovations; e.g. low-cost airlines or even low-cost surgeries in India. Of course in the latter case, the distribution of social surplus between the private innovator and consumers will be less extreme than in the case of a pharmaceutical product priced at the highest level.
- 5) A business innovation which at some point is made freely available (for humanitarian reasons) is not a social innovation because it was originally a profitable business and the mechanism by which it is made free involves a high profit for the private innovator (e.g. patent buyout, see Kremer 1998).

- 6) The same innovation – say a vaccine for a poor market – can be social or business, depending on the institutions that are used to correct the market failures. In the institutional context of an “advanced market commitment” (Kremer 2001), the new vaccine would be a business innovation (because this institutional arrangement involves the creation of an artificial market in order to secure high returns to the private innovator). In the institutional context of a public-private partnership (Munoz et al. 2014), it would be a social innovation (because the institutional arrangement aims at mobilising potential innovators towards a zero-profit activity).
- 7) Social entrepreneurs exist in social innovation systems and social innovation thus often forms an integral part of social entrepreneurship concepts.⁸ Social entrepreneurship is then seen as an organizational frame for social innovation ideas (Nicholls et al. 2015). The concept of social innovation is thus wider than that of social entrepreneurship, as only a smaller part of social entrepreneurs create new scalable models to produce long lasting impact, and on that stage larger state or business organizations are often involved.⁹ Social entrepreneurs share with social innovation the aim of social value creation and pressure to innovate (Maclean et al. 2012). Social entrepreneurs as defined in Martin and Osberg (2007) can be involved in both cases discussed above:¹⁰ either as architects of complex institutional arrangements to provide innovative solutions to a social need in a context of severe market failures (i.e. public-private partnerships as social entrepreneur), or as entrepreneurs making an explicit choice to deliver an innovative solution based on a social logic while such a solution could constitute a profitable business activity.

6.3.4 A tentative list of policy issues

The following policy issues should be identified:

- 1) First, fixing what is identified as severe market failures, in order to stimulate business innovation in fields where innovations rely mostly on social organisations and by definition are rare or difficult (Cutler 2010, Foray and Raffo 2014). One way to do this is through structural changes. One example is provided by the recent policy regarding the US healthcare system. This policy involves the development of information infrastructure and legislation to improve information quality on certain healthcare markets (e.g. Patient Protection and Affordable Care Act 2010, USA; see Cutler 2010). Alternatively, deployment of innovative policy instruments such as prizes or advanced market commitments or package of advantages (Orphan Drug Act) can increase the potential private profitability of some socially desirable innovations.¹¹ While the former provides a long-term solution, i.e. the market for innovative healthcare services is now more transparent and consumers can recognize quality differences, the latter requires regulators to specify and design new prizes and market commitments over and over again.
- 2) Second, supporting the formation of partnerships and alliances as well as individual entities addressing social innovation problems in areas where innovations are urgently needed and market failures are too costly to fix. An example of such policy involves tax credit or exemption in favour of companies engaged in public-private partnerships aiming at developing social innovations.

In the next section, we gather and discuss online data from various social innovation prize competitions across Europe and thus provide an evidence base supporting our conceptual framework and its key assumptions.

6.4 Observation, measure and application

Information on social innovation for specific sectors and target populations has been collected in previous studies, but most research has done so on a relatively small scale (e.g. TEPSIE, CASI, INNOSERVE). One notable exception is the SI-DRIVE research project, gathering data on approximately 1,000 social innovations and mapping out social innovations by policy fields and world regions with a focus on success factors and barriers for social innovations. Identification of social innovations in latter research was based on judgement of a group of experts, and, arguably, this biases results as experts might differ in their understanding of social innovation. In contrast, our quantitative approach builds on mapping innovators and their projects self-identifying as social innovations when reaching out for targeted policy support across Europe, with a slightly different thematic focus on sectoral patterns, organizational layouts and institutional arrangements of social innovation. This yields less biased results, at least for the sample of innovators reaching out for support. In addition, our general research approach is based on purposive sampling. Purposive sampling is a recognised explorative method and was applied, for example, in social entrepreneurship research by several scholars (Mair et al. 2012, Meyskens et al. 2010, Moss et al. 2011, Stevens et al. 2014).

6.4.1 Data

Innovative policy instruments such as prizes create incentives for social and business innovation activities, helping to fix severe market failures as we have argued above. Accordingly, we collect data on social innovation projects available online from various prize competitions, support programmes and incubators explicitly targeting social innovation (in the

following we refer to “competitions” or “prize competitions” unless stated differently).¹² The data accessed online includes the project title, a short description of each project, the project’s country of origin (residence) as well as information on the characteristics of each competition.¹³ Again, our empirical approach relies on the fact that applicants (and respective projects) entering competitions run on national and international levels self-identify their projects as social innovations. Moreover, we exclusively focus on projects launched by finalists, winners and successful grantees among all applicants as official websites did not provide any information on projects eliminated from competitions during the selection process, or those that did not meet eligibility criteria in the first place.¹⁴ Therefore it is important to note that this is not a fully representative sample of social innovations. Projects in our sample that have been selected after a competitive selection process therefore likely represent only the more advanced and/or successful projects self-identifying as social innovations. Arguably, the sample may also depend on the overall thematic focus of competitions as well as the preferences of stakeholders in competitions when selecting projects.

As a first step of the exploratory analysis, we qualitatively study the main features of prize competitions, support programmes and incubators (N=18, see Appendix 3) in order to check whether they are run in accordance with a similar conception of social innovation, and whether or not we can expect similar and comparable sets of projects to be included in competitions. More specifically, we first review all candidate competitions in terms of: i) eligibility and selection criteria on project and applicant levels, ii) main characteristics of the competition (mission statement, thematic focus, target sector/s, target phase and geographical scope of selected projects), iii) governance structures and main stakeholders of the competition as financing, selection processes or other types of support (e.g. pro bono coaching).

In terms of (formal) eligibility and selection criteria we observe little variation between competitions, in particular for criteria set on project level. Most eligibility and selection rules similarly stress the importance of, for example, innovativeness, (potential) social impact, financial and organisational sustainability, scalability as well as the cost efficiency of projects.

Most competitions have no specific thematic focus (one exception is the Aspirin Social Prize) or, if they do, cover a wide range of potential fields. Moreover, prizes seem to be designed in a very similar way, as they mainly target projects in their start-up and/or early growth phases (one exception is the German Civic Engagement Prize), reward innovative projects and ventures under similar prize conditions and/or provide opportunities for networking, training and mentoring (exceptions are Benisi as a network of incubators and SILQUA-FH as a public R&D funding programme). Those competitions operated on national levels (as regards e.g. applicant residence or project impact), are mainly hosted in Germany or German-speaking countries. Roughly one third of all projects are resident in Germany. All other competitions operate on European or global levels. Projects from European countries account for approximately half of all projects.

In terms of governance, we find that many owners and stakeholders engage in more than one competition, for example, Impact Hub, Ashoka, SAP, McKinsey & Company or Social Entrepreneurship Academy. This, in turn, can explain some of the similarities observed concerning competitions as owners and main stakeholders are actively involved in the initial design of support instruments, financing, the selection and review of projects in committees and advisory boards.

Notably, this first part of the analysis also corroborates the idea that complex institutional arrangements may be required to develop social innovations. Social innovation (applicant) activities - eligible in a single competition - can emerge in different target sectors or span

across multiple sectors. The criteria and design of many competitions explicitly take this into account. In addition, the complex governance structures of competitions and the heterogeneity of stakeholders we observed in our sample of competitions seem to mirror these complex institutional arrangements. Owners and stakeholders need to be capable of assessing, mentoring/training and selecting social innovation projects at conceptual stages and from a variety of fields, sectors and backgrounds.¹⁵

Lastly, we eliminate three competitions from the overall sample (N=1,028): First, we exclude the Aspirin Social Prize because of its narrow thematic focus on healthcare, which could potentially bias any descriptive analysis of thematic fields targeted by social innovation projects. Second, we do not include project data from the German Civic Engagement Prize because eligibility criteria do not require projects to be innovative or based on new ideas and concepts. Third, projects from the SILQUA-FH funding programme are not taken into account because project grants have a strong research focus and do not target implementation of ideas. We include all other data on projects, including those selected by the Benisi Incubator Network.¹⁶ Accordingly, the final sample of competitions consists of N=957 social innovation projects.

6.4.2 Coding exercise

As a second step of the analysis, we focus on texts and short descriptions of social innovation projects provided online. We deploy an inductive open coding procedure, i.e. we develop codes directly from the texts by selectively reducing them to meaning units, which are then abstracted and labelled accordingly (Corbin and Strauss 2008; Locke 2001). Coding was carried out by a single coder/one of the co-authors during a two-month period and we employ Atlas-ti software to code, organise and index data (Margolis and Molinsky 2008).

Formal applications to prizes require participants' engagement in an explicit process of conceptualising their projects, i.e. making explicit declarations about the approach and model chosen (Rindova et al. 2009). Texts and short descriptions therefore represent an important lever in the process of institutionalising new ideas for organising (Phillips, Lawrence and Hardy 2004), or, from a sociological perspective, a "window into human experience" (Bernard and Ryan 1998: 595). More specifically, project descriptions or profiles typically summarise the social problem, i.e. target field and target group they (want to) address, the idea or innovation and activities performed as part of the project, as well as background information on the project, for example, on the people/partners involved or early evidence of impact (if applicable). On average, texts contain approximately 60 words (stand. dev. ~50).

Using content analysis, we generate several classifications (and respective categories) emerging from our analysis of texts across all competitions (rather than relying on existing and diverging classifications from specific competitions). The coding exercise leads to the following classifications for social innovation projects:

- a) target fields,
- b) target populations,
- c) main activities of the project,
- d) underlying technologies (if applicable).

Whenever information provided in texts and profiles seems incomplete or of low quality, and in an attempt to fully assess case by case and, at best, identify all relevant categories, we manually inspected individual project websites (or other online sources, e.g. Facebook profiles etc.), thereby validating the information or filling in missing categories.¹⁷

6.4.3 Descriptive Results

Policy instruments such as prizes create incentives for social innovation activities, and - depending on the type of market failure social innovation – such activities are either a means to overcome failure or a matter of individuals’ social choices. Again, self-identification of projects in prizes serves as a remit in order to distinguish social from business innovations, and enables the systematic study of social innovations across target fields, target groups, main activities and legal status. Admittedly, we cannot directly observe innovators’ pricing behaviours and, ultimately, the distribution of benefits between innovators and society that our conceptual framework introduces. However, the data allows to inspect validity of the underlying assumptions of the framework and to infer some information on sectoral incidences of social innovation and dominant types of market failures.

First, frequently coded target fields¹⁸ in Figure 6-1 coincide with precisely those markets commonly experiencing “severe failures” and that we identify as relevant in above preliminary typology of severe failures. These private, public and semi-public markets or sectoral fields may often “fail to deliver”, do not meet demand, markets do not yet exist (externalities) or markets do not operate fully efficient or under severe imperfections (information asymmetries). For example, for healthcare, energy, environment, labour markets, food, development aid, housing/space, educational or financial markets/fields one or more reasons of market failure may well apply.

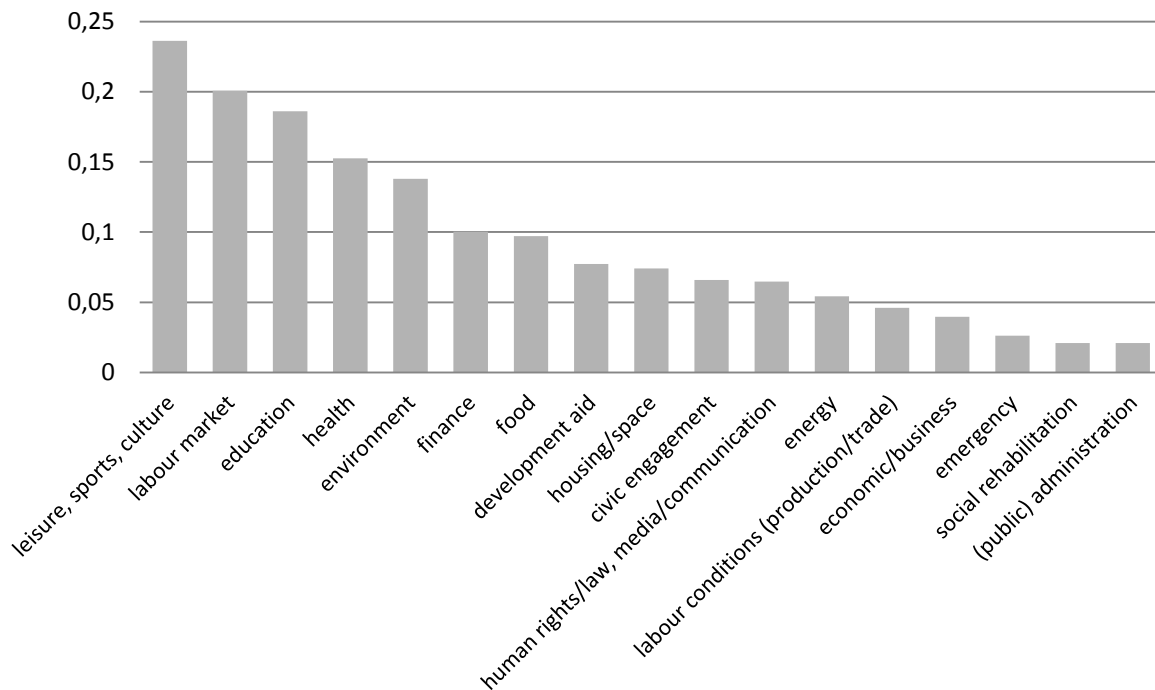


Figure 6-1 Target fields of social innovation projects in Europe (N=957), shares¹⁹

Second, main target groups as illustrated in Figure 6-2 include various marginalised groups, minorities or high-risk groups for being marginalised in the future, for example, disabled persons or people with diseases, children, youth, migrants, elderly or homeless. Marginalisation itself points, again, in the direction of underserved, small and/or poor markets at the very origins of severe market failure, i.e. where willingness to pay is too low even if the innovation is socially valuable.

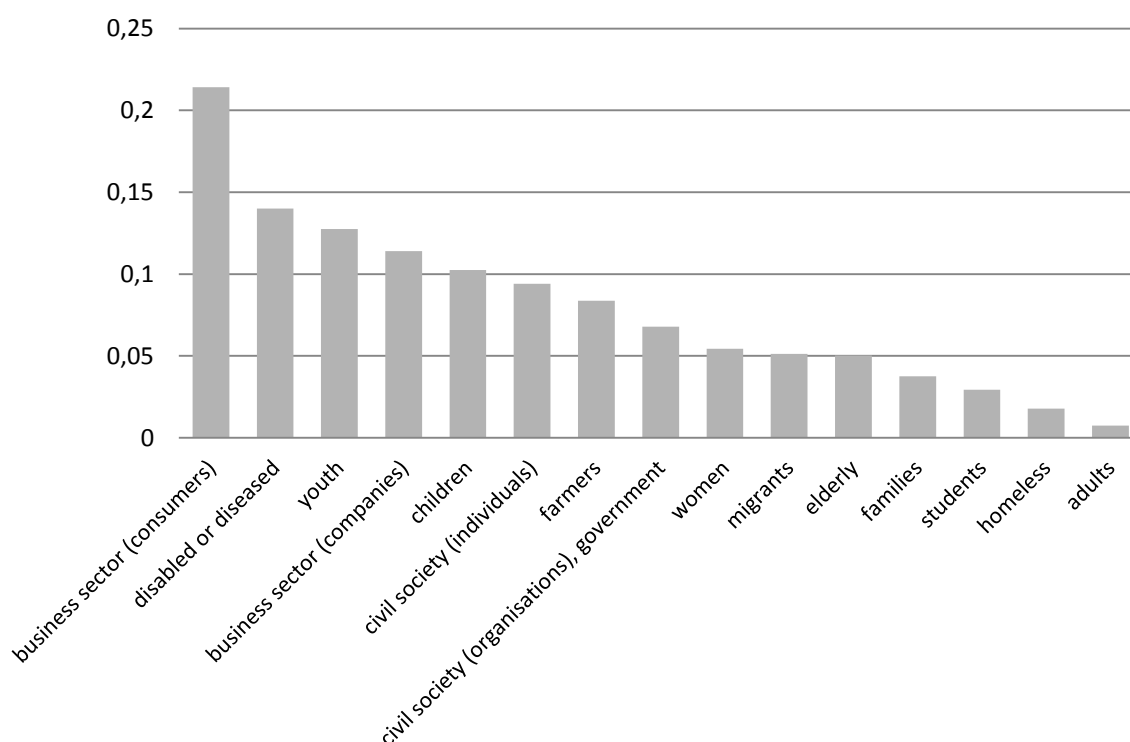


Figure 6-2 Target groups of social innovation projects in Europe (N=957), shares²⁰

Moreover, many social innovation projects explicitly target the private sector, e.g. provisioning new products and services to companies in incumbent markets, or serving (previously unserved) consumer segments. This supports the view that social innovators operate in existing markets where business and social innovations are both valid options for new ventures (i.e. the social choice cases in our conceptual framework). In addition, as many projects and organizations in our sample – independent of their legal status - also target or liaise with civic society organisations and government institutions, not only collaborate with private businesses, this further corroborate the idea of social innovations as complex institutional arrangements that succeed in mobilising a heterogeneous set of agents when overcoming market failure.

Third, as regards the main activities and as outlined in Figure 6-3, counselling, education and training as well as information provisioning are important. These might improve, among other

things, access to labour markets for marginalized groups and overcome severe informational barriers that hinder these markets to operate efficiently for these groups. For example, *arbeiterkind.de* as an iconic social innovation is an informational website and alumni network that supports tertiary education aspirations of young and disadvantaged people from blue collar worker backgrounds. Other tasks performed in social innovation projects similarly aim to eliminate informational asymmetries and challenge the very origins of severe market failure, for example, as is the case with networking or matchmaking services.

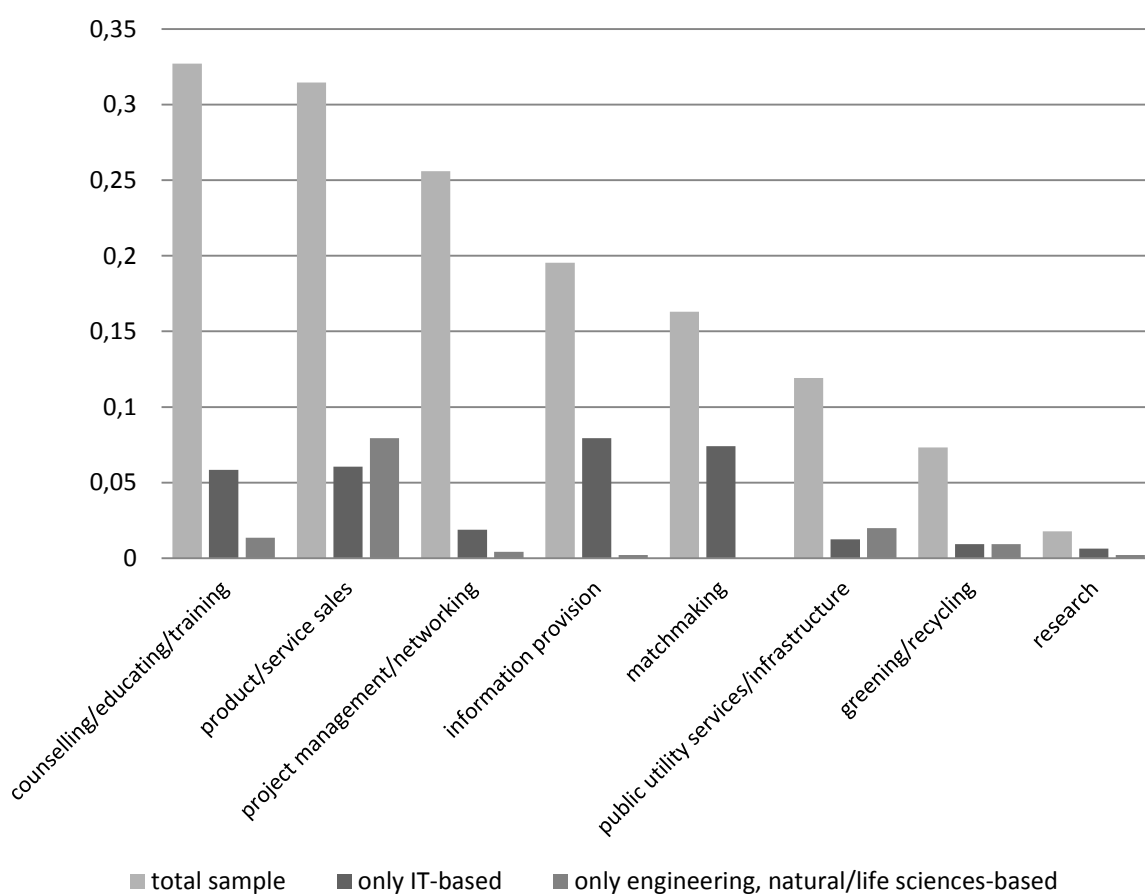


Figure 6-3 Main tasks performed and underlying technologies in social innovation projects in Europe (N=957), shares21

Interestingly, we also find that roughly one third of all social innovation projects included in the sample are based on technology, either IT and/or engineering, natural, life sciences. This

corroborates our definitional argument that the distinction for social innovations is not between social and technological innovation.

Fourth, for a subsample of social innovation projects (all resident in Germany, N=202) we are able to identify the legal status of ventures or organisations. We compared distributions in our subsample with legal status distributions of a) innovating firms in the German private business sector (N=12,900, source: Mannheim Innovation Panel, company survey), and b) organisations in German civil society (N=3,926, source: ZIVIZ, third sector survey).²² The main results of this exercise are highlighted in Figure 6-4.

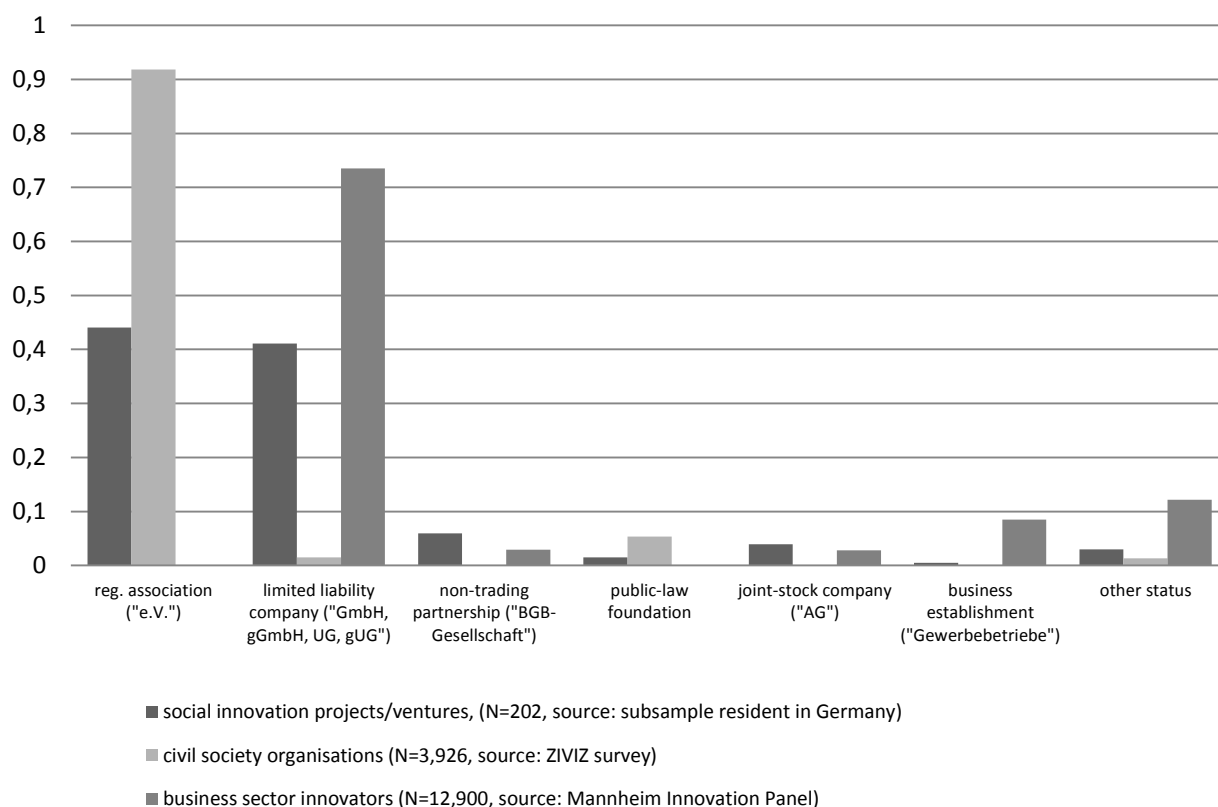


Figure 6-4 Legal status of social innovation projects in Germany (subsample), business sector innovations and civil society organisations in Germany, shares

Here, we find that social innovation projects (and respective actors and organisations) operate on the basis of a much broader set of legal status types compared to results from civil society or business sector surveys. These types often are of “dual-purpose” nature that account for both commercial and social orientations of social innovations. For example, legal setups of limited liability companies with non-profit status (“gGmbH, gUG”) or registered associations with non-profit status (“e.V.”) seem to be well aligned with the social choices of social innovators: Preferential tax treatment and regulatory obligations for non-profit status entities to redistribute (relatively higher, net-off tax) income helps fulfil their purpose-driven project goals based on social choices and safeguards a distribution of the economic benefits in favour of society; at the same time, limited liability regimes help balance social innovators’ personal risk-taking in innovative projects and pricing of new products and services based on uncertain returns and social choices.

In contrast, “traditional” risk-taking innovating firms and entrepreneurs in the private sector – other than the socially innovating ones – typically favour limited liability companies (“GmbH, gGmbH, UG, gUG”), business establishments (“Gewerbebetriebe”) or non-trading partnerships (“BGB-Gesellschaft”), while the vast majority of established or newly founded²³ actors or organisations from the third sector are mainly registered associations (“e.V.”), most of them with non-profit status. Furthermore, our comparative results also corroborate theoretical implications from recent research studying organisational choices between “profit with purpose” social enterprises, for-profit and non-profit entities as well as entities’ mission integrity and agency problems (Besley and Gathak 2017, Katz and Page 2010). Here, social enterprises by definition also cover a middle ground, their managers being responsible for deciding the balance of (social-value) mission and profit.

6.5 Conclusion and directions for future research

Our intention was to establish an understanding of social innovation from an economics point of view that offers a tight conceptual approach and bridges some of the existing gaps between academic research and policy practices. The main contribution to the economic literature is that we provide a first conceptual framework for social innovation based on the standard economics concepts of market failures and the distribution of producer and consumer surplus. Moreover, for policy makers and any other parties promoting social innovation, this paper provides insights on the relevance of some of the design parameters for social innovation policies.

Our empirical section proposes an exploratory data approach to social innovation that sheds light on organizational layouts of social innovations and gives an overview on a set of existing support schemes. It explores the possibility of deploying online data from prize and funding competitions targeting social innovation projects based on a case-by-case coding exercise. We provide evidence on the overall composition of social innovations in terms of target fields, target groups, activities, underlying technologies and legal status of projects. Results for target fields, target groups and main activities of social innovation projects are very similar, for example, to those identified in Mair et al. (2012), but here they are based on a much larger sample.

Although it is hard to directly observe and quantify incidences of market failure or the distribution of benefits between innovators and society as discussed in our conceptual framework, we do find compelling evidence of complex institutional arrangements that involve a very heterogeneous set of actors - in terms of fields, partners/target groups, legal status or sectors of operations - based on the descriptive analysis of social innovation projects. These complex institutional arrangements also seem to be reflected in ex ante provisions,

given the variety of stakeholders involved in the governance and implementation of current policies and support schemes targeting social innovations (cf. section 4.1). Financing and fundraising, support and mentoring as well as the review and selection of social innovation projects requires a broad set of skills, background and experiences provided by a wide range of stakeholders.

From a policy perspective, our exploratory data approach thus yields several implications, notably, regarding the design of eligibility criteria when implementing and targeting policies for social innovation. For the period of observation and the sample of prizes we have covered, most prizes had no specific thematic focus and mainly targeted projects in their start-up or early-growth phases. Carefully selected eligibility criteria should, however, take into account the heterogeneity observed among social innovation organisations, for example, as regards legal status choices of projects, or the current emphasis of overall policy support on certain target fields. Furthermore, prizes - or any other support mechanisms - targeting social innovation should not discriminate against any underlying “enabling” technologies, in particular IT, but leave selection choices on the use of (new) technologies to innovators themselves. This will assure that *ex ante* schemes do not preclude a large fraction of potentially relevant applicant projects, in particular early-stage ones. Notably, some of these insights on design parameters will also inform corporate social responsibility (CSR) initiatives that aim to support pro-social ends when maximising profitability (for example, Baron 2001, Bagnoli and Watts 2003).

Arguably, the mapping approach chosen here to validate the conceptual framework is not without limits. Future research on social innovation could more closely investigate individual-level social choices and (entrepreneurial) aspirations, or pricing behaviours observed on markets where social and business innovations can co-exist (i.e. cases where social innovation is an option). More specifically, a better understanding of individual motivations and social

choices based, for example, not only on the pecuniary, but also on the social recognition, altruism, fairness or reciprocity concerns of social innovation actors would be very useful (for example, Fehr and Schmidt 2006, Besley and Ghatak 2005, Benabou and Tirole 2006). This could help to select the most effective policy instruments, adjusting incentive schemes provided by standard technology policies such as prizes, IPR, taxes etc. and accounting for intrinsic and extrinsic motivation in this area. Moreover, from an innovation research perspective, it could also be valuable to study the ability of social innovations to establish and sustain specific previously non-existent markets, in the case of severe market failures (i.e. cases where social innovation is the only option/a necessity).

Although there are of course other conceptual frameworks and corresponding policy priorities that should merit consideration, we remain convinced that the interpretation of social innovation – developed in this paper – can emerge as a fruitful source of empirical and theoretically grounded economic policy insights.

6.6 References

- Avelino, F. et al. (2017). Transformative social innovation and (dis)empowerment, *Technological Forecasting and Social Change*. Retrieved from: <http://dx.doi.org/10.1016/j.techfore.2017.05.002>
- Bacq, S. and Janseen, F. (2011). The multiple faces of social entrepreneurship: A review of definitional issues based on geographical and thematic criteria. *Entrepreneurship & Regional Development*, 23 (5/6): 373-403.
- Bagnoli, M. and Watts, S. (2003). Selling to Socially Responsible Consumers: Competition and the Private Provision of Public Goods, *Journal of Economics and Management Strategy*, 12/3: 419–45
- Baron, D. (2001). Private Politics, Corporate Social Responsibility, and Integrated Strategy, *Journal of Economics and Management Strategy*, 10/1: 7–45.
- Bassi, A. (2011). *Social Innovation: Some Definitions*. ESSE, Social Entrepreneurship in a Global Context.
- Bénabou, R. and Tirole, J. (2006). Incentives and Prosocial Behavior, *American Economic Review*, 96/5: 1652–78.
- Benkler, Y. (2004). *Sharing nicely: on shareable goods and the emergence of sharing as a modality of economic production*. Yale Law School
- Berger, L. and Stevenson, D. (2007). *K-12 entrepreneurship: slow entry, distant exit*, American Enterprise Institute Conference on the Future of Educational Entrepreneurship, Washington D.C.
- Bernard, H.R. and Ryan, G.W. (1998). Text analysis: Qualitative and quantitative methods. In H. R. Bernard (ed.) *Handbook of methods in cultural anthropology*, Walnut Creek, CA: Altamira Press, 595-645.
- Besley, T. and Ghatak, M. (2005). Competition and Incentives with Motivated Agents, *American Economic Review*, 95/3: 616–36.

- Besley, T. and Ghatak, M. (2017). Profit with purpose? A theory of social enterprise, *American Economic Journal: Economic Policy*, 9/3: 19-58.
- Bullinger, H-J. (2006) Verdammt zur Innovation, *RKW-Magazin*, 57/1: 12-14.
- Cagnin, C., Amanatidou, E., Keena, M. (2012). Orienting European innovation systems towards grand challenges and the roles that FTA can play, *Science and Public Policy*, 39: 140–152.
- Cajaiba-Santa, G. (2014). Social innovation: Moving the field forward. A conceptual framework, *Technological Forecasting & Social Change*, 82: 42–51.
- Caulier-Grice, J., Davies, A, Patrick, R., Norman, W. (2012) ‘Defining Social Innovation’. TEPSIE.
- Choi, N. and Majumdar, S. (2014). Social entrepreneurship as an essentially contested concept: Opening a new avenue for systematic future research. *Journal of Business Venturing* 29: 363–376
- Corbin, J. M. and Strauss A. (2008). Basics of qualitative research: Techniques and procedures for developing grounded theory. Thousand Oaks, CA: SAGE.
- Cuhna, J., Benneworth, P., Oliveira, P. (2015). Social Entrepreneurship and Social Innovation: A Conceptual Distinction. In: Carmo Farinha (ed.) *Handbook of Research on Global Competitive Advantage through Innovation and Entrepreneurship*, IGI Global: 616-639.
- Cutler, D. (2010). *Where are the health care entrepreneurs? The failure of organizational innovation in healthcare*. NBER working paper, n 16030.
- Dawson, P. and Daniel, L. (2010). Understanding social innovation: a provisional framework, *International Journal of Technology Management*, 51/1: 9-21.
- Edwards-Schachter, M. and Wallace, M. L. (2015). *Shaken, but not stirred: six decades defining social innovation*, INGENIO (CSIC-UPV) Working Paper Series 04.
- European Commission (2012). *Strengthening social innovation in Europe. Journey to effective assessment and metrics*. Enterprise and Industry, European Union.

- European Commission (2013). *The Guide to Social Innovation. Regional and urban Policy*, European Commission.
- Fehr, E. and Schmidt, K. (2006). The Economics of Fairness, Reciprocity and Altruism – Experimental Evidence and New Theories. In: Kolm and Ythier (ed.) *Handbook of the Economics of Giving, Altruism and Reciprocity*, Foundations, 1: 615-91.
- Foray, D. and Raffo, J. (2014). The emergence of an educational tool industry: opportunities and challenges of innovation in education, *Research Policy*, 43: 1707 –15.
- Hochgerner, J. (2010). Considering the social relevance of innovations. In: Howaldt, Schwarz (ed.) *Social Innovation: Concepts, research fields and international trends*, Sozialforschungsstelle Dortmund, ZWE TU Dortmund: 4-7.
- Howaldt, J. and Schwarz, M. (2010). *Social Innovation: Concepts, research fields and international trends*. Sozialforschungsstelle Dortmund, ZWE TU Dortmund.
- Katz, R. and Page, A. (2010). The Role of Social Enterprise, *Vermont Law Review* 35/1: 59–103.
- Kearnes, M. and Wynne, B. (2007). On Nanotechnology and Ambivalence: The Politics of Enthusiasm, *Journal of NanoEthics*, 1/2: 131-142.
- Kesselring, A. and Leitner, M. (2008). Soziale Innovation in Unternehmen. Wien: ZSI. Zentrum für soziale Innovation.
- Kotsemir, M., Abroskin, A., Meissner, D. (2013). *Innovation Concepts and Typology – An Evolutionary Discussion*. Working Paper BRP 05/STI/2013, Higher School of Economics.
- Kremer, M. (1998). Patent buy out, *Quarterly Journal of Economics*, 113/4: 1137-67.
- Kremer, M. (2001). Creating markets for new vaccines – Part 1: Rationale. In: Jaffe A. B., Lerner J. and Stern S. (ed.) *Innovation Policy and the Economy*, MIT Press: 35-72.
- Locke, K. (2001). Grounded theory in management research. Thousand Oaks: SAGE.
- Krista Loogma, K., Tafel-Viia, K., Ümarik, M. (2011). *Social Innovation: Three Approaches*. Discussion Paper N.24, ZSI.

- Maclean, M., Harvey, C., Shaw, E., Cordon, J. (2012). *Social Entrepreneurship and Community Renewal*. Paper Presented at BAM Conference, Cardiff University.
- Mair, J., Battilana, J., Cárdenas, J. (2012). Organizing for society: a typology of social entrepreneuring models, *Journal of Business Ethics*, 111: 353-73.
- Margolis, J.D. and Molinsky, A. (2008). Navigating the bind of necessary evils: Psychological engagement and the production of interpersonally sensitive behaviour, *Academy of Management Journal*, 51/5: 847–872.
- Martin, R. and Osberg, S. (2007). Social entrepreneurship: the case for definition. *Stanford Social Innovation Review*, Spring.
- Meyskens et al. (2010). Social Ventures from a Resource-Based Perspective: An Exploratory Study Assessing Global Ashoka Fellows, *Entrepreneurship: Theory & Practice*, 34/4: 661-80.
- Mokyr, J. (2004). *The Gift of Athena: the historical origins of the knowledge economy*. Princeton University Press.
- Moulaert, F. (2012). Social Innovation: Institutionally Embedded, Territorially (Re)produced. In: MacCallum, Moulaert, Hiller and Haddock (ed.) *Social Innovation and Territorial Development*. Surrey: Ashgate Publishing Limited: 11-24.
- Moss et al. (2011). Dual Identities in Social Ventures: An Exploratory Study, *Entrepreneurship: Theory & Practice*, 35/4: 805-30.
- Mulgan, G. (2007). *Social innovation: what it is, why it matters, how it can be accelerated*. Oxford: Said Business School.
- Munoz, V., Gaulé, P., Visentin, F. and Foray, D. (2015). Can medical products be developed on a non-profit basis? *Science and Public Policy*, 42/3: 315-338.
- Murray, R.; Caulier-Grice, J.; Mulgan, G. (2010). *The Open Book of Social Innovation*. The Young Foundation and NESTA.
- Neumeier, S. (2012). Why do Social Innovations in Rural Development Matter and Should They be Considered More Seriously in Rural Development Research? - Proposal for a

- Stronger Focus on Social Innovations in Rural Development Research, *Sociologica Ruralis*, 52/1: 48-69.
- Nicholls, A., Simon, J., Gabriel, M. (2015). Introduction: Dimensions of Social Innovation. In: Nicholls et al. (ed.) *New frontiers in social innovation research*. Palgrave macmillan: 1-26.
- Niinikoski, M. and Kuhlmann, S. (2015). In discursive negotiation: Knowledge and the formation of Finnish innovation policy, *Science and Public Policy*, 42: 86–106.
- Phillips, N., Lawrence, T.B., Hardy, C. (2004). Discourse and institutions, *Academy of Management Review*, 29/4: 635–652.
- Phillips, W., Lee, H., James, P., Ghobadian, A., O'Regan, N. (2015). Social innovation and social entrepreneurship: A systematic review. *Group & Organization Management*. 40/3: 428-461.
- Phills, J., Deiglmeier, K., Miller, D. (2008). Rediscovering Social Innovation, *Stanford Social Innovation Review*, Fall.
- Pol, E. and Ville, S. (2009). Social innovation: buzz word or enduring term? *The Journal of Socio-Economics*, 38/6: 878-885.
- Rao-Nicholson, R., Vorley, T., Khan, Z. (2017). Social innovation in emerging economies: A National Systems of Innovation based approach, *Technological Forecasting & Social Change*, <http://dx.doi.org/10.1016/j.techfore.2017.03.013>.
- Rindova, V., Barry, D. Ketchen, J.D. (2009). Entrepreneurship as emancipation, *Academy of Management Review*, 34/3: 477–491.
- Rosted, J. et al. (2009). *The new nature of innovations*. Study report to the OECD Committee for Industry, Innovation and Entrepreneurship (CIIE). Copenhagen: FORA.
- Schmitz, B., Krlev, G., Mildenerberger, G., Bund, E.; Hubrich, D. (2013). *Paving the Way to Measurement – a Blueprint for Social Innovation Metrics. A short guide to the research for policy makers*. TEPSIE. Retrieved at: www.tepsie.eu/index.php/publications.

- Short, J. C., Moss T.W., Lumpkin G.T. (2009). Research In Social Entrepreneurship: Past Contributions And Future Opportunities, *Strategic Entrepreneurship Journal*, 3: 161–194.
- Strauch, M., Schröder A., Schmitz N. (2011). Social Entrepreneurship – Forschungsperspektiven. In: Anheier, Schröder and Then (ed.) *Soziale Investitionen. Interdisziplinäre Perspektiven*, Springer SV: 205-224.
- Swann, P. (2015) *Common Innovation*. Edward Elgar.
- Turker, D., Altuntas Vural, C. (2017). Embedding social innovation process into the institutional context: Voids or supports, *Technological Forecasting & Social Change*, <http://dx.doi.org/10.1016/j.techfore.2017.03.019>
- Weber, C., Kröger, A., Lambrich, K. (2012). Scaling Social Enterprises – A Theoretically Grounded Framework. *Frontiers of Entrepreneurship Research*, 32 /19, Article 3.
- Winter, S. (2017) Comment on 'Market and management failures' by Pankaj Ghemawat, *Capitalism and Society*, 12 (1): article 2.
- Zahra, S., Gedajlovic, E., Neubaum, D., Shulman, J. (2009). A typology of social entrepreneurs: motives, search and ethical challenges, *Journal of Business Venturing*, 24: 519-32.

6.7 Endnotes

¹ We borrow the notion of “tightness” from Mokyr (2004).

² Section 3.4 discusses the field of social entrepreneurship research in the light of the conceptual approach developed in our paper.

³ In their systematic review of the literature, Phillips et al. (2015) conclude that there is a clear lack of knowledge in the literature regarding how social innovations differ from business innovations. Our article attempts to fill this gap.

⁴ Within a market, lack of good quality data means that consumers have a difficult time determining which providers are better and worse. In such cases incentives for private innovators to improve quality are rather weak. In healthcare such barriers to business innovations are very frequent (Cutler 2010).

⁵ A good example is innovation originating from Health Maintenance Organisations in the US (HMOs work both as healthcare provider and insurance plan). HMOs have an incentive to improve healthcare (organisational innovation) in order to ensure that patients are in better health. However, i) such innovation has high costs, ii) the benefits and savings occur only over time, and iii) 20% of people change plans annually. This means that because of plan turnover, the other plans will benefit from patients in better health without incurring the cost of innovation, while the insurer undertaking the original innovation will not realise the savings. Innovations in this field, if they occur, are social because of a severe appropriation problem of the sort that cannot be solved by patents or other mechanisms (see Cutler 2010).

⁶ The typical case is the innovation of car sharing in the early 2000s, as very well documented in Benkler (2004). According to him, a special case of social innovation flourished within a certain part of the “product space”, characterised by a peculiar class of indivisible goods that he qualified as “mid-grained”. This qualification means that there will be relatively widespread private ownership of these goods and that these privately owned goods will systematically exhibit slack capacity relative to the demand of their owners. A car or a PC are good examples. The sharing economy was fundamentally built on this class of goods. These goods created a feasibility space for *social* sharing rather than requiring a particular model of second-best pricing. The basic idea was that social relations produced a more efficient transactional framework to provide and exchange these goods as opposed to the price system.

⁷ Moreover, many social innovation ventures (i.e. organisations) are run under legal forms commonly associated with private markets and a (at least partial) for-profit orientation, and frequently ventures use prices (rather than pro bono etc.) when selling goods and services and recovering costs of operations (cf. Figures 6-3 and 6-4).

⁸ For example, Phillips et al. 2015, Bacq and Janssen 2011, Choi and Majumdar 2014, Maclean et al. 2012, Strauch et al. 2011.

⁹ For example, Cunha, Benneworth, Oliveira 2015, Mulgan 2007.

¹⁰ “The social entrepreneur should be understood as someone who targets an unfortunate but stable equilibrium that causes the neglect, marginalisation, or suffering of a segment of humanity; who brings to bear on this situation their inspiration, direct action, creativity, courage, and fortitude; and who aims for and ultimately effects the establishment of a new stable equilibrium that secures permanent benefits for the targeted group and society at large” (Martin and Osberg, 2007: 39). It can be observed that the emphasis is placed on the outcomes – a new stable equilibrium which includes the society at large. This allows the authors to identify clear boundaries between social entrepreneurs and what Swann (2015) calls common innovators and user innovators who deal with local problems and local solutions for their own benefits. See also Zahra et al. (2009) for a definition of social entrepreneur as including small outcomes (social bricoleur).

¹¹ However, such help needs to be associated with binding commitments by potential innovators regarding the pricing of the innovation (keeping it at market competitive prices).

¹² Websites and data were accessed in August 2015.

¹³ For different subsamples, the data also includes the project's year of entry to competition and data on the organisational form/registration of the project/venture (if applicable). Mean (median) year of entry in the subsample is 2011 (2013, respectively).

¹⁴ Only a relatively small group of projects appear in more than one competition, i.e. 2.6 per cent of all projects in the total sample.

¹⁵ In some cases, the social innovation projects selected have *not* been *yet* affiliated or formally registered in a specific sector/s.

¹⁶ Even though Benisi's network does not operate on the basis of an (inducement) prize instrument, it collaborates with the main stakeholders in the competition landscape, e.g. Impact Hub, and lays down similar eligibility criteria for selected social innovation projects.

¹⁷ For at least one quarter of all social innovation projects included in our sample, we sought complementary information on projects in order to be able to code and categorise, i.e. project-level websites were inspected manually.

¹⁸ Note that we have allowed for multiple codes per project: The average/mean number of target field (target group and main activity, respectively) codings per case studied was 1.6 (1.2 and 1.5, respectively).

¹⁹ Allows for multiple codes per project. Please refer to endnote 15 for further details.

²⁰ Allows for multiple codes per project. Please refer to endnote 15 for further details.

²¹ Allows for multiple codes per project. Please refer to endnote 15 for further details.

²² The authors gratefully acknowledge data contributions/sharing by the Centre for European Economic Research (ZEW) and Stifterverband/ZiviZ.

²³ Most actors/organisations are registered associations in the third/non-profit sector. The distribution of young actors/organisations founded in the last five years (subsample) does not significantly differ from the total distribution in this sector (source: ZiviZ survey).

7. Overall Conclusions

7.1 Key results

This doctoral dissertation suggests that the differentiated approach on studying social innovation and social entrepreneurship is crucial. Occurring in heterogeneous organizational forms on different scales of society and having different scope they also produce different social outcomes. For further leveraging both phenomena and strengthening its role in overcoming social challenges, the consolidation of our knowledge and closure of the gap between the commitment of supportive institutions, practitioners and academic research is important. This dissertation addresses the main research challenges, yields relevant results and makes important contributions to reduce this gap.

Breaking it into initially introduced research questions (Chapter 1), following results and implications can be summarized. The results show that scholars in various fields do refer to different concepts of social innovation and social entrepreneurship. The concepts of F. Moulaert, G. Mulgan and J. Phillips et al. are recognized the most by the research community in the field of social innovation. It is also noteworthy that the papers of supportive institutions are highly recognized in this field. Research areas contributing mostly to social innovation research are environmental and urban studies, business and economics and public administration. The journals contributing the most are: *European Urban & Regional Studies*, *Urban Studies (Routledge)* and *International Journal of Technology Management*. The heterogeneity of the disciplines involved in social innovation research is much higher than those on social entrepreneurship. The influential discussion on social entrepreneurship overwhelmingly takes place in business and economics with two journals contributing the most, namely *Entrepreneurship: Theory & Practice* and *Journal of Business Ethics*. The concepts from J. Mair and I. Marti, J. Dees, J. Austin et al and Zahra et al. are to name as the

most influential ones on the time point of research. All in all, the conceptual heterogeneity still provides creative space for scholars interested in understanding the phenomena.

The results also show that even though we are dealing with conceptual heterogeneity and heterogeneity of organizational layouts, distinct empirical types of social entrepreneurs can be found. Applying the conceptual typology introduced by Zahra et al. in 2009 on the wide range of social ventures that exist today, we show that Zahra's social bricoleurs and social constructionists can be found empirically. Social bricoleurs, which operate in local settings, introduce the smallest cluster in our study. Social constructionists tend to build transferable business models and have strong involvement in performance measurement activities. They also claim to produce the highest social outcomes. Besides, the situation on the meso-level is more complex as suggested by Zahra et al. and does not limit on constructionist. Our research reveals a separable type of social mediators, which show strong professional attitudes. However, this type reports to be less successful in terms of the social outcome it generates.

Further research introduces the model, which describes the antecedents to social value generation from social ventures. Here, the intentionality of a social entrepreneur, representing the trade-off between social and financial value creation, as well as a reliable economic performance play a crucial role. The analysis shows that a strong business performance is important not only for traditional ventures, but also for social ones. Furthermore, diversity of experience in a team shows a positive relation to the social outcomes. Moreover, personal confrontation of the founders with the social issue the venture addresses positively relates to the number of potential clients the venture manages to reach. The results reveal that the way a social entrepreneur balances its dual-orientation with their business performance is decisive for the success of the venture and for social outcomes it generates.

Further this doctoral dissertation introduces two cases of social innovation based on the concepts of social surplus and moderate and severe market failures. While suggesting a

concept of social innovation it also discusses social entrepreneurship as one of the forms in which social innovation can be operated. Furthermore, it also demonstrates the results of a case-by-case coding exercise, which supports the conceptual framework and provides evidence on target groups and fields, activities, legal status as well as applies a governmental analysis of stakeholders involved. This part thus demonstrates the complexity of institutional arrangements with a heterogeneous set of actors, which should be considered by both researchers and governmental or private actors interested in further support of social innovation and social entrepreneurship.

7.2 Theoretical and practical implications

The first article introduced in this dissertation reveals where influential discussions on social innovation and social entrepreneurship are published, which authors contribute the most to those discussions, and to which concepts the scholars refer depending on the research area. Therefore it is first and foremost helpful for researchers which are new in the field and those who want to resume and to make a valuable contribution to the field. As it studies conceptual interceptions of social innovation and social entrepreneurship and compares its roles in the academic community, it is also useful for scholars willing to bring together academic research and political interest.

The second article makes its theoretical contribution by examining the real-world relevance of the seminal conceptual classification introduced by Zahra et al. and calls for its revision. It moreover reveals that distinguishing characteristics of the three empirical types and discusses the different social outcomes they produce. It is therefore interesting for stakeholders aiming at promoting social entrepreneurship, as it suggests concentrating on the scope of social

ventures that addresses the scale of society interesting for stakeholders in terms of social impact generation.

The third article contributes to the emerging stream of research, which addresses social impact measurement in the field of social entrepreneurship and the question on the differences between commercial and social entrepreneurs. It moreover suggests an operationalization of the bi-dimensional orientation of social entrepreneurs for empiric research. For practitioners it is interesting to pay attention to success factors revealed in the model as for example personal confrontation with the social issue addressed by the venture, team's experience and a balance between social mission and a strong business model. For the funding organizations it could be useful to consider those ventures, which show the orientation on success factors named above if they want to stimulate higher social outcomes creation. They moreover should take into account the heterogeneity of the social entrepreneurial landscape and produced outcomes as well as the complexity of its comparison in the long-term.

The fourth article makes its theoretical contribution by establishing a framework of social innovation, based on microeconomic concepts, which allows a clear definition of social innovation in a still conceptual vague field. It also gives an overview of the institutional complexity, targets and scales of social innovation projects. For the governmental actors and funding institutions it provides an analysis of existing supportive landscape and its stakeholders. This dissertation furthermore aims at encouraging the implementation of larger quantitative studies in the field and the refinement of the explorative data collection process on social entrepreneurship and social innovation.

7.3 Limitations and propositions for future research

The first article applies a number of limiting criteria in the process of literature review. For example citation rates are on the one hand a quality criterion and on the other hand exclude several studies from research. Thus the article presents influencing papers and authors on the time point of research, whereby the papers that will gain influence in the future are not yet included. Therefore, future research should retrace new emerging concepts along with the modifications of the existing concepts with the growth of empirical research. It is also interesting to observe whether any communities emerge in both research fields, and how they relate to the influential discussion. Moreover, as the subject terms “social entrepreneurship” and “social innovation” are often used interchangeably with the concepts such as hybrid organizations, social economy, third sector, non-profit, sustainable innovation and are context sensitive, further research should take these research streams under consideration.

For the empirical part of research, the purposive sampling technique was applied. To give definitional frames for social entrepreneurship cases and validate them for empiric research, we focused on those awarded with prizes, which at the same time appeared as a proxy for a successful performance. This method is already recognized by researchers in the field and yields relevant insights into the real-world characteristics of today’s social ventures. However, it still has its considerable limitation. Purposive sampling is not representative and hinders the generalization of results. Nevertheless, the overall population of social entrepreneurs is still unknown and therefore we are dependent from explorative methods. Future research should therefore refine the sampling approaches with the development of the field, having a superior aim of precise application of probability techniques.

The cluster analysis as well as the structural equation model presented in this dissertation should both be tested on larger samples. The cluster model should also address further characteristics of the three types of entrepreneurs and especially explore the type of social

mediators, which has not yet been revealed in previous research more deeply. Future research should also track the life-cycle of the ventures to inter alia analyse the possible type changes with the time. The structural equation model should be refined by applying on three larger samples for each type of venture revealed. By doing that, the question of comparativeness of social outcomes of ventures acting on different scales of society should be explored further. The measurement of social impact in the long term should be conceptualized inter alia addressing the question whether a critical number of ventures addressing the same social issue on the same social scale can serve as catalyzer for social change in the long term. All of these are important to be able to give more precise recommendations for politics and support systems.

Furthermore, the institutional environments and obstacles social entrepreneurs are confronted with in their external environment should be investigated further (Mair, Marti 2006, Barq and Janssen 2011). Today the regional factors influencing the emergence and the development of social innovation and social entrepreneurship and the relation of these factors to the spectrum of target issues addressed are merely researched. Next, as this dissertation explores the characteristics of social entrepreneurship on venture's level, individual-level social choices and entrepreneurial aspirations should be investigated more carefully in future research. It includes individual motivations and social choices of social entrepreneurs and innovators.

Finally, both social innovation and social entrepreneurship are mostly consistently seen as positive phenomena without unintended effects or consequences. However, such factors as destructive social objectives, mission drift, creating social value for one group while taking it from another or some general failures can surely occur not without its consequences. These factors therefore should be understood and studied by future research.

8. Total References

- Armour, A. (1990). Integrating impact assessment into the planning process. *Impact Assess Bull*, 8(1/2): 3–14.
- Austin, J., Stevenson, H., Wei-Skillern, J. (2006). Social and commercial entrepreneurship: same, different, or both? *Entrepreneurship: Theory & Practice*, 30 (1): 1-22.
- Avelino, F. et al. (2017). Transformative social innovation and (dis)empowerment, *Technological Forecasting and Social Change*. Retrieved from: <http://dx.doi.org/10.1016/j.techfore.2017.05.002>
- Bacq, S. and Janseen, F. (2011). The multiple faces of social entrepreneurship: A review of definitional issues based on geographical and thematic criteria. *Entrepreneurship & Regional Development*, 23 (5/6): 373-403.
- Bagnoli, M. and Watts, S. (2003). Selling to Socially Responsible Consumers: Competition and the Private Provision of Public Goods, *Journal of Economics and Management Strategy*, 12/3: 419–45
- Bahadir, C., Bharadwaj, S. Parzen, M. (2009). A Meta-Analysis of the Determinants of Organic Sales Growth. *International Journal of Research in Marketing*, 26: 263-275.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Baron, D. (2001). Private Politics, Corporate Social Responsibility, and Integrated Strategy, *Journal of Economics and Management Strategy*, 10/1: 7–45.
- Bassi, A. (2011). *Social Innovation: Some Definitions*. ESSE, Social Entrepreneurship in a Global Context. Retrieved from: <http://www.esse.unibo.it/paper.pdf>.
- Battilana, J., and Dorado, S. (2010). Building Sustainable Hybrid Organizations: The Case of Commercial Microfinance Organizations. *Academy of Management Journal*, 53(6): 1419–1440.
- Baum, J.A.C. and Silverman, B.S. (2004). Picking Winners or Building Them? Alliance, Intellectual, and Human Capital as Selection Criteria in Venture Financing and

- Performance of Biotechnology Startups. *Journal of Business Venturing* 19 (3): 411–436.
- Baum, J.R. and Locke, E.A. (2004). The Relationship of Entrepreneurial Traits, Skill, and Motivation to Subsequent Venture Growth. *Journal of Applied Psychology*, 89 (4): 587–598.
- Baum, J.R., Locke, E.A., Kirkpatrick, S. A. (1998). A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms. *Journal of Applied Psychology*, 83: 43–54.
- Bénabou, R. and Tirole, J. (2006). Incentives and Prosocial Behavior, *American Economic Review*, 96/5: 1652–78.
- Benkler, Y. (2004). *Sharing nicely: on shareable goods and the emergence of sharing as a modality of economic production*. Yale Law School
- Berger, L. and Stevenson, D. (2007). *K-12 entrepreneurship: slow entry, distant exit*, American Enterprise Institute Conference on the Future of Educational Entrepreneurship, Washington D.C.
- Bernard, H.R. and Ryan, G.W. (1998). Text analysis: Qualitative and quantitative methods. In H. R. Bernard (ed.) *Handbook of methods in cultural anthropology*, Walnut Creek, CA: Altamira Press, 595-645.
- Besley, T. and Ghatak, M. (2005). Competition and Incentives with Motivated Agents, *American Economic Review*, 95/3: 616–36.
- Besley, T. and Ghatak, M. (2017). Profit with purpose? A theory of social enterprise, *American Economic Journal: Economic Policy*, 9/3: 19-58.
- Bullinger, H-J. (2006) Verdammt zur Innovation, *RKW-Magazin*, 57/1: 12-14.
- Bundesagentur für Arbeit (2017). *Die Arbeitsmarktsituation von Frauen und Männern in 2016*. Retrieved from: <https://statistik.arbeitsagentur.de/Statischer-Content/Arbeitsmarktberichte/Personengruppen/generische-Publikationen/Frauen-Maenner-Arbeitsmarkt.pdf>

- Cagnin, C., Amanatidou, E., Keena, M. (2012). Orienting European innovation systems towards grand challenges and the roles that FTA can play, *Science and Public Policy*, 39: 140–152.
- Cajaiba-Santa, G. (2014). Social innovation: Moving the field forward. A conceptual framework, *Technological Forecasting & Social Change*, 82: 42–51.
- Caulier-Grice, J., Davies, A, Patrick, R., Norman, W. (2012). *Defining Social Innovation*. TEPSIE. Retrieved from: www.tepsie.eu/index.php/publications.
- Chadegani, A. A. et al. (2013). A comparison between two main academic literature collections: Web of Science and Scopus databases. *Asian Social Science*. Retrieved from: <http://www.ccsenet.org/journal/index.php/ass/article/view/26960>.
- Chell, E. (2007). Social enterprise and entrepreneurship – Towards a convergent theory of the entrepreneurial process. *International Small Business Journal*, 25 (1): 5–26.
- Chell, E., Nicolopoulou, K., Karata-Özkan, M. (2010). Social entrepreneurship and enterprise: International and innovation perspectives. *Entrepreneurship & Regional Development*, (6): 485-493.
- Cheung, M. (2009). Workshop in Structural Equation Modeling (SEM). Retrieved from: <https://courses.nus.edu.sg/course/psycwlm/internet/>
- Choi, N. and Majumdar, S. (2014). Social entrepreneurship as an essentially contested concept: Opening a new avenue for systematic future research. *Journal of Business Venturing*, 29: 363–376.
- Christie, M.J. and Honig, B. (2006). Social entrepreneurship: New research findings. *Journal of World Business*, 41: 1–5.
- Coase, R. H. (2013). The problem of social cost. *The journal of Law and Economics*, 56 (4): 837–877.
- Corbin, J. M. and Strauss A. (2008). Basics of qualitative research: Techniques and procedures for developing grounded theory. Thousand Oaks, CA: SAGE.
- Corner, P. D., and Ho, M. (2010). How Opportunities Develop in Social Entrepreneurship. *Entrepreneurship: Theory & Practice*, 34 (4): 635-659.

- Cuhna, J., Benneworth, P., Oliveira, P. (2015). Social Entrepreneurship and Social Innovation: A Conceptual Distinction. In: Carmo Farinha (ed.) *Handbook of Research on Global Competitive Advantage through Innovation and Entrepreneurship*, IGI Global: 616-639.
- Cutler, D. (2010). *Where are the health care entrepreneurs? The failure of organizational innovation in healthcare*. NBER working paper, n 16030.
- Dacin, M.T., Dacin P.A, Tracey P. (2011). Social entrepreneurship: A critique and future directions. *Organization science*, 22 (5): 1203-1213.
- Dacin, P.A., Dacin, M.T., Matear, M. (2010). Social entrepreneurship: Why We Don't Need a New Theory and How We Move Forward From Here. *Academy of Management Perspectives*, 24 (3): 37-57.
- Davies, A., Caulier-Grice, J., Norman, W. (2012). *An Introduction to Innovation Studies for Social Innovators. A literature review of the methods and enabling conditions for innovation*. TEPSIE. Retrieved from: www.tepsie.eu/index.php/publications.
- Dawson, P. and Daniel, L. (2010). Understanding social innovation: a provisional framework, *International Journal of Technology Management*, 51/1: 9-21.
- Dees, J.G. (1998). *The meaning of social entrepreneurship*. Duke Fuqua School of Business. Retrieved from: <http://community-wealth.org/sites/clone.community-wealth.org/files/downloads/paper-dees.pdf>.
- Dees, J.G. (2001). *The meaning of "social entrepreneurship"*. Center for the advancement of Social Entrepreneurship, Fuqua School of Business. Retrieved from: https://centers.fuqua.duke.edu/case/wp-content/uploads/sites/7/2015/03/Article_Deas_MeaningofSocialEntrepreneurship_2001.pdf
- Dees, J.G. and Anderson, B.B. (2006). *Framing a theory of social entrepreneurship: building on two schools of practice and thought. Research on social entrepreneurship*. In R. M. Williams (ed.), ARNOVA occasional paper series, 1 (3): 39–66.
- Defourny, J. and Nyssens, M. (2008): Social enterprise in Europe: recent trends and developments. *Social Enterprise Journal*, 4 (3): 202-228.

- Desa, G. (2012). Resource Mobilization in International Social Entrepreneurship: Bricolage as a Mechanism of Institutional Transformation. *Entrepreneurship: Theory & Practice*, 36 (4): 727-751.
- Dey, P. (2006). The rhetoric of social entrepreneurship: Paralogy and new language games in academic discourse. In *Entrepreneurship as Social Change*, eds. C. Steyaert and D. Hjorth. Cheltenham: Edward Elgar: 121-142.
- Di Domenico, M., Haugh, H., Tracey, P. (2010). Social Bricolage: Theorizing Social Value Creation in Social Enterprises. *Entrepreneurship: Theory & Practice*, 34 (4): 681-703.
- Dorado, S. (2006). Social entrepreneurial ventures: Different values so different process of creations, no? *Journal of Developmental Entrepreneurship*, 11: 319–343.
- Dorado, S. and Ventresca, M. (2013). Crescive entrepreneurship in complex social problems: Institutional conditions for entrepreneurial engagement. *Journal of Business Venturing*, 28: 69–82.
- Drayton, W. (2002). The Citizen Sector: Becoming as Entrepreneurial and Competitive as Business. *California Management Review*, 44(3): 120-132.
- Edwards-Schachter, M. and Wallace, M. L. (2015). *Shaken, but not stirred: six decades defining social innovation*, INGENIO (CSIC-UPV) Working Paper Series 04.
- Ernst, K. (2011). *Heart over mind—An empirical analysis of social entrepreneurial intention formation on the basis of the theory of planned behavior*. Inaugural dissertation. University Wuppertal. Retrieved from: <http://elpub.bib.uni-wuppertal.de/servlets/DerivateServlet/Derivate-2825/db1103.pdf>
- Estrin, S., Mickiewicz, T., and Stephan, U. (2013). Entrepreneurship, Social Capital, and Institutions: Social and Commercial Entrepreneurship Across Nations. *Entrepreneurship: Theory & Practice* 37 (3): 479-504.
- European Commission (2012). *Strengthening social innovation in Europe. Journey to effective assessment and metrics*. Enterprise and Industry, European Union.
- European Commission (2013). *The Guide to Social Innovation. Regional and urban Policy*, European Commission. Retrieved from:

<http://s3platform.jrc.ec.europa.eu/documents/10157/47822/Guide%20to%20Social%20Innovation.pdf>.

Everitt, B.S. (1993). *Cluster Analysis*. 3rd ed. London: Arnold.

Expertenkommission Forschung und Innovation (EFI) (2016). *Gutachten zu Forschung, Innovation und technologischer Leistungsfähigkeit Deutschlands*. EFI, Berlin.

Fehr, E. and Schmidt, K. (2006). The Economics of Fairness, Reciprocity and Altruism – Experimental Evidence and New Theories. In: Kolm and Ythier (ed.) *Handbook of the Economics of Giving, Altruism and Reciprocity, Foundations*, 1: 615-91.

Florman, M., Kingler-Vidra, R., Facada, M. (2016). A critical evaluation of social impact assessment methodologies and a call to measure economic and social impact holistically through the External Rate of Return platform. *LSE Enterprise Working Paper 1602*. Retrieved from: <http://www.lse.ac.uk/businessAndConsultancy/LSEConsulting/pdf/Assessing-social-impact-assessment-methods-report.pdf>

Foray, D. and Raffo, J. (2014). The emergence of an educational tool industry: opportunities and challenges of innovation in education, *Research Policy*, 43: 1707 –15.

Gillwald K. (2000). *Konzepte sozialer innovation*. Working paper. Wissenschaftszentrum Berlin für Sozialforschung, Berlin.

Gladwin, T. N., Kennelly, J. J., Krause, T.-S. (1995). Shifting paradigms for sustainable development: Implications for management theory and research. *The Academy of Management Review*, 20(4): 874–907.

Gramling, R. and Freudenburg W.R. (1998). Opportunity-threat, development, and adaption: toward a comprehensive framework for social impact assessment. *Rural Sociology*, 57(2): 216– 34.

Grant, A. M. and Berry, J. W. (2011). The Necessity of Others is the Mother of Invention: Intrinsic and Prosocial Motivations, Perspective Taking, and Creativity. *Academy of Management Journal*, 54(1): 73–96. doi:10.5465/AMJ.2011.59215085

- Grico, C., Michelini, I., Ivasevoli, G. (2014). Measuring Value Creation in Social Enterprises: A Cluster Analysis of Social Impact Assessment Models, *Nonprofit and Voluntary Sector Quarterly*, 1-21.
- Hair, J.F., Black, W.C., Babin, B.J. (2010). *Multivariate Data Analysis A Global Perspective*, 7th Edition, Pearson, Prentice Hall.
- Hall, J. and Hofer, C.W. (1993). Venture capitalists decision criteria in new venture evaluation. *Journal of Business Venturing*, 8: 25–42.
- Hemingway, C. (2005). Personal Values as A Catalyst for Corporate Social Entrepreneurship. *Journal of Business Ethics*, 60: 233–249.
- Hochgerner, J. (2010). Considering the social relevance of innovations. In: Howaldt, Schwarz (ed.) *Social Innovation: Concepts, research fields and international trends*, Sozialforschungsstelle Dortmund, ZWE TU Dortmund: 4-7.
- Hockerts, K. (2017). Determinants of Social Entrepreneurial Intentions. *Entrepreneurship: Theory & Practice*, 41 (1): 105-130.
- Howaldt, J. and Schwarz, M. (2010). *Social Innovation: Concepts, research fields and international trends*. Sozialforschungsstelle Dortmund, ZWE TU Dortmund.
- Jay, J. (2013). Navigating Paradox as A Mechanism of Change And Innovation in Hybrid Organizations. *Academy of Management Journal*, 56(1): 137–159.
- Juslen, J. 1995. Social impact assessment: a look at Finnish experiences. *Proj Appraisal*, 10(3): 163– 70.
- Katz, R. and Page, A. (2010). The Role of Social Enterprise, *Vermont Law Review* 35/1: 59–103.
- Kautonen, T., Luoto S., Tornikoski, T. (2010) Influence of work history on entrepreneurial intentions in ‘prime age’ and ‘third age’: A preliminary study. *International Small Business Journal*, 28 (6): 583-601.
- Kearnes, M. and Wynne, B. (2007). On Nanotechnology and Ambivalence: The Politics of Enthusiasm, *Journal of NanoEthics*, 1/2: 131-142.

- Kehl K., Then V., Münscher R. (2012). Social Return on Investment: auf dem Weg zu einem integrativen Ansatz der Wirkungsforschung. In: *Soziale Investitionen*, ed. H. Anheier, A. Schröer, V. Then. VS Verlag für Sozialwissenschaften.
- Kerlin, J.A. (2006): Social Enterprise in the United States and Europe: Understanding and Learning from the Differences. *Voluntas*, 17: 247-263.
- Kesselring, A. (2015). *Social innovation in private companies: an exploratory empirical study*. Retrieved from: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2531771.
- Kesselring, A. and Leitner, M. (2008). *Soziale Innovation in Unternehmen*. ZSI. Retrieved from: https://www.zsi.at/attach/Soziale_Innovation_in_Unternehmen_ENDBERICHT.pdf.
- Kistruck, G.M. and Beamish, P.W. (2010). The Interplay of Form, Structure, and Embeddedness in Social Intrapreneurship. *Entrepreneurship: Theory & Practice*, 34 (4): 735-761.
- Kopf, H. et al. (2013). Vorwort. In: *Soziale Innovationen in Deutschland*, ed. H. Kopf et al., 9-11. Springer VS.
- Kotsemir, M., Abroskin, A., Meissner, D. (2013). *Innovation Concepts and Typology – An Evolutionary Discussion*. Working Paper BRP 05/STI/2013, Higher School of Economics.
- Kremer, M. (1998). Patent buy out, *Quarterly Journal of Economics*, 113/4: 1137-67.
- Kremer, M. (2001). Creating markets for new vaccines – Part 1: Rationale. In: Jaffe A. B., Lerner J. and Stern S. (ed.) *Innovation Policy and the Economy*, MIT Press: 35-72.
- Krista Loogma, K., Tafel-Viia, K., Ümarik, M. (2011). *Social Innovation: Three Approaches*. Discussion Paper N.24, ZSI.
- Lasprogata, G.A. and Cotton, M.N. (2003). Contemplating “enterprise”: The business and legal challenges of social entrepreneurship. *American Business Law Journal*, 41 (1): 67-113.

- Lee, D. and Tsang, E. (2001). The Effects Of Entrepreneurial Personality, Background And Network Activities On Venture Growth. *Journal of Management Studies*, 34 (4): 583-602.
- Leifels, A. and Schwartz, M. (2017). *Foreign workers in German SMEs: a strong plea for free labour markets*. Kreditanstalt für Wiederaufbau. KfW Research. Focus on Economics. Retrieved from: https://www.kfw.de/PDF/Download-Center/Konzernthemen/Research/PDF-Dokumente-Fokus-Volkswirtschaft/Fokus-englische-Dateien/Fokus-2017-EN/Fokus-Nr.-154-January-2017-foreign-workers_EN.pdf
- Liu, G., Eng, T., Takeda, S. (2013). An Investigation of Marketing Capabilities and Social Enterprise Performance in the UK and Japan. *Entrepreneurship: Theory & Practice*, 39 (2): 267-298.
- Locke, E. A. and Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice Hall.
- Locke, K. (2001). *Grounded theory in management research*. Thousand Oaks: SAGE.
- Lockett, A. and McWilliams, A. (2005). The balance of trade between disciplines: do we effectively manage knowledge? *Journal of Management Inquiry*, 14 (2): 139–150.
- MacCallum R.C. and Austin, J.T. (2000). Applications of Structural Equation Modeling in Psychological Research. *Annual Review Psychology*, 51: 201-226.
- Maclean, M., Harvey, C., Shaw, E., Cordon, J. (2012). *Social Entrepreneurship and Community Renewal*. Paper Presented at BAM Conference, Cardiff University.
- Mair, J. and Marti I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41 (1): 36-44.
- Mair, J. and Noboa E. (2003). *Social entrepreneurship: How intentions to create social enterprise get formed*. IESE Business School, Working Paper 521.
- Mair, J. and Noboa, E. (2006). Social entrepreneurship: How intentions to create a social venture are formed. In J. Mair, J. Robinson & K. N. Hockerts (Eds.), *Social entrepreneurship* (pp.121-135). Basingstoke, U.K.: Palgrave MacMillan.

- Mair, J., Battilana, J., Cárdenas, J. (2012). Organizing for society: a typology of social entrepreneuring models, *Journal of Business Ethics*, 111: 353-73.
- Margolis, J.D. and Molinsky, A. (2008). Navigating the bind of necessary evils: Psychological engagement and the production of interpersonally sensitive behaviour, *Academy of Management Journal*, 51/5: 847–872.
- Markman, G.D. and Baron, R.A. (2003). Person–entrepreneurship fit: why some people are more successful as entrepreneurs than others. *Human Resource Management Review*, 13: 281-301.
- Marshall, R.S. (2011). Conceptualizing the International For-Profit Social Entrepreneur. *Journal of Business Ethics*, 98 (2): 183-198.
- Martin, R. and Osberg, S. (2007). Social entrepreneurship: the case for definition. *Stanford Social Innovation Review*, Spring.
- McLoughlin, J., Kaminski, J., Sodagar, B., Khan, S., Harris, R., Arnaudo, G., Mc Brearty, S. (2009). A strategic approach to social impact measurement of social enterprises: the SIMPLE methodology. *Social Enterprise Journal*, 5 (2): 154-178.
- McMullen, J. S. and Bergman, B. J. (2017). Social Entrepreneurship and the Development Paradox of Prosocial Motivation: A Cautionary Tale. *Strategic Entrepreneurship Journal*, 11 (3): 243-270.
- Meyskens, M., Robb, C., Stamp. J.A., Reynolds, P.D. (2010). Social Ventures from a Resource-Based Perspective: An Exploratory Study Assessing Global Ashoka Fellows. *Entrepreneurship: Theory & Practice*, 34 (4): 661-680.
- Miller T. L. and Wesley, C. L. (2010). Assessing Mission and Resources for Social Change: An Organizational Identity Perspective on Social Venture Capitalists' Decision Criteria. *Entrepreneurship: Theory & Practice*, 34 (4): 705-733.
- Miller, T., Wesley, C., Williams, D. (2012). Educating the Minds of Caring Hearts: Comparing the Views of Practitioners and Educators on the Importance of Social Entrepreneurship Competencies. *Academy of Management Learning and Education*, 11(3): 349-370.

- Mokyr, J. (2004). *The Gift of Athena: the historical origins of the knowledge economy*. Princeton University Press.
- Moor, C. (2012). *Exploring the Social Entrepreneur: Individual and Organizational Identity Construction*. Master's Theses (2009). Paper 148. http://epublications.marquette.edu/theses_open/148
- Morris, M.H., Webb, J.W., Franklin, R. (2011). Understanding the Manifestation of Entrepreneurial Orientation in the Nonprofit Context. *Entrepreneurship: Theory & Practice*, 35 (5): 945-971.
- Mort, G.S., Weerawardena, J., Carnegie, K. (2003). Social entrepreneurship: Towards conceptualization. *International Journal of Nonprofit and Voluntary Sector Marketing*, 8 (1): 76-88.
- Moss, T.W., Short J.C., Pyane, G.T., Lumpkin G.T. (2011). Dual Identities in Social Ventures: An Exploratory Study. *Entrepreneurship: Theory & Practice*, 35 (4): 805-830.
- Moulaert, F. (2012). Social Innovation: Institutionally Embedded, Territorially (Re)produced. In: MacCallum, Moulaert, Hiller and Haddock (ed.) *Social Innovation and Territorial Development*. Surrey: Ashgate Publishing Limited: 11-24.
- Muir, K. and Bennett, S. (2014). *The Compass: Your Guide to Social Impact Measurement*. Sydney, Australia: The Centre for Social Impact.
- Mulgan, G. (2007). *Social innovation: what it is, why it matters, how it can be accelerated*. Oxford: Said Business School.
- Munoz, V., Gaulé, P., Visentin, F. and Foray, D. (2015). Can medical products be developed on a non-profit basis? *Science and Public Policy*, 42/3: 315-338.
- Murdock, A. and Bradburn, A. (2005). Social entrepreneurial ventures and the value of social networks. *International Social Entrepreneurship Conference, Barcelona, Spain, 22-24 April*
- Murray, R.; Caulier-Grice, J.; Mulgan, G. (2010). *The Open Book of Social Innovation*. The Young Foundation and NESTA.

- Neuhaus, C. and Daniel, H.-D. (2008). Data sources for performing citation analysis: An overview. *Journal of Documentation* 64 (2): 193-210. doi:10.1108/00220410810858010.
- Neumeier, S. (2012). Why do Social Innovations in Rural Development Matter and Should They be Considered More Seriously in Rural Development Research? - Proposal for a Stronger Focus on Social Innovations in Rural Development Research. *Sociologica Ruralis*, 52 (1): 48-69.
- Nguyen, L., Szkudlarek, B., Seymour, R. (2015). Social impact measurement in social enterprises: An interdependence perspective. *Canadian Journal of Administrative Science/Revue canadienne des sciences de l'administration*, 32: 224-237.
- Nicholls, A. (2008). *Social entrepreneurship: New models of sustainable social change*. Oxford: Oxford University Press.
- Nicholls, A. (2009). We do good things, don't we? Blended value accounting in social entrepreneurship. *Accounting, Organizations and Society*, 34: 755-769.
- Nicholls, A. (2010). The Legitimacy of Social Entrepreneurship: Reflexive Isomorphism in a Pre-Paradigmatic Field. *Entrepreneurship: Theory & Practice*, 34 (4): 611-633.
- Nicholls, A., Simon, J., Gabriel, M. (2015). Introduction: Dimensions of Social Innovation. In: Nicholls et al. (ed.) *New frontiers in social innovation research*. Palgrave macmillan: 1-26.
- Niinikoski, M. and Kuhlmann, S. (2015). In discursive negotiation: Knowledge and the formation of Finnish innovation policy, *Science and Public Policy*, 42: 86-106.
- Parkinson, C. and Howorth, C. (2008). The language of social entrepreneurs. *Entrepreneurship & Regional Development*, 20 (3): 285-309.
- Paton, R. (2003). *Managing and Measuring Social Enterprises*, London, UK: Sage.
- Peattie, K. and Morley, A. S. (2008). *Social Enterprises: Diversity and Dynamics, Contexts and Contributions*. A Research Monograph. London, UK: ESRC.
- Peredo, A.M. and McLean, M. (2006). Social entrepreneurship: A critical review of the concept. *Journal of World Business*, 41 (1): 56-65.

- Pham, D.T., Dimov, S.S., Nguyen, C.D. (2004). Selection of K in K-Means Clustering. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, 218 (7): 783-795.
- Phillips, N., Lawrence, T.B., Hardy, C. (2004). Discourse and institutions, *Academy of Management Review*, 29/4: 635–652.
- Phillips, W., Lee, H, James, P., Ghobadian, A., O'Regan, N. (2015). Social innovation and social entrepreneurship: A systematic review. *Group & Organization Management*, 40 (3): 428-461.
- Phills, J., Deiglmeier, K., Miller, D. (2008). Rediscovering Social Innovation, *Stanford Social Innovation Review*, Fall.
- PHINEO (2016): Social impact navigator. The practical guide for organizations targeting better results. www.social-impact-navigator.org
- Pigou, A. C. (1932) *The Economics of Welfare*. Library of Economics and Liberty. Retrieved from: <http://www.econlib.org/library/NPDBooks/Pigou/pgEW.html>
- Pol, E. and Ville, S. (2009). Social innovation: buzz word or enduring term? *The Journal of Socio-Economics*, 38 (6): 878-885.
- Rao-Nicholson, R. Vorley, T., Khan. Z. (2017). Social innovation in emerging economies: A National Systems of Innovation based approach, *Technological Forecasting and Social Change*, <http://dx.doi.org/10.1016/j.techfore.2017.03.013>.
- Renko, M. (2013). Early Challenges of Nascent Social Entrepreneurs. *Entrepreneurship: Theory & Practice*, 37(5): 1045-1049.
- Rindova, V., Barry, D. Ketchen, J.D. (2009). Entrepreneurship as emancipation, *Academy of Management Review*, 34/3: 477–491.
- Rosted, J. et al. (2009). *The new nature of innovations*. Study report to the OECD Committee for Industry, Innovation and Entrepreneurship (CIIE). Copenhagen: FORA.
- Schmitz, B., Krlev, G., Mildemberger, G., Bund, E.; Hubrich, D. (2013). *Paving the Way to Measurement – a Blueprint for Social Innovation Metrics. A short guide to the research for policy makers*. TEPSIE. Retrieved at: www.tepsie.eu/index.php/publications.

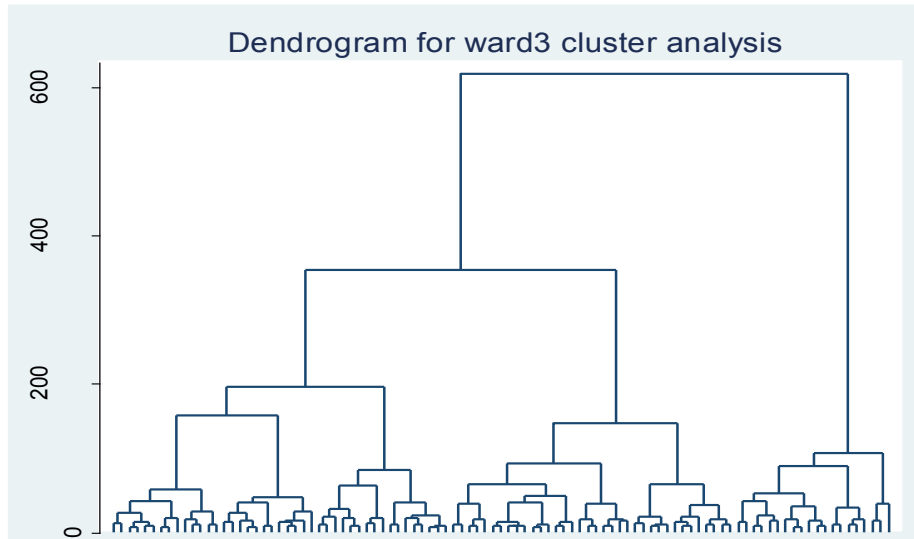
- Seelos, C. and Mair, J. (2006). Social entrepreneurship. The contribution of individual entrepreneurs to sustainable development. *The ICFAI Journal for Entrepreneurship Development*, March 2006, 30-46.
- Shane, S., (2000). Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science* 11 (4): 448–469.
- Sharir, M. and Lerner, M. (2006). Gauging the success of social ventures initiated by individual social entrepreneurs. *Journal of World Business*, 41: 6-20.
- Shaw, E. and Carter, S. (2007). Social entrepreneurship. Theoretical antecedents and empirical analysis of entrepreneurial processes and Outcomes. *Journal of Small Business and Enterprise Development*, 14 (3): 418-434.
- Shepherd, D.A. (1999). Venture capitalists' assessments of new venture survival. *Management Science*, 45: 621–632.
- Shepherd, D.A., Ettenson, R., Crouch, A. (2000). New venture strategy and profitability: A venture capitalist's assessment. *Journal of Business Venturing*, 15: 449–467.
- Short J. C., Moss T.W., Lumpkin G.T. (2009). Research in Social Entrepreneurship: Past Contributions And Future Opportunities. *Strategic Entrepreneurship Journal*, 3: 161–194.
- Smith, B.R., Cronley, M.L., Barr, T.F. (2012). Funding implications of social enterprise: the role of mission consistency, entrepreneurial competence, and attitude toward social enterprise on donor behavior. *Journal of Public Policy & Marketing*, 31 (1): 142–157.
- Song, M., Podoyntsyna, K., van der Bij, H., Halmann, J. (2008). Success Factors in New Ventures: A Meta-analysis. *Journal of Product and Innovation Management*, 25: 7-27.
- STATA (2016). *Introduction to cluster analysis commands*. Retrieved from: <http://www.stata.com/manuals14/mvcluster.pdf#mvclusterRemarksandexamples>
- Stevens, R., Moray, N., Bruneel, J. (2014). The Social and Economic Mission of Social Enterprises: Dimensions, Measurement, Validation, and Relation. *Entrepreneurship: Theory & Practice*, 39 (5): 1051-1082.

- Strauch M., Schröder A., Schmitz N. (2011). Social Entrepreneurship – Forschungsperspektiven. In: *Soziale Investitionen. Interdisziplinäre Perspektiven*, ed. J. Anheier, A. Schröder, V. Then, 205-224. Springer SV.
- Sud, M., VanSandt, C. C., Baugous, A. (2009). Social Entrepreneurship: The Role of Institutions. *Journal of Business Ethics*, Supplement 1, 85: 201-216.
- Sullivan Mort, G., Weerawardena, J., Carnegie, K. (2003). Social entrepreneurship: Towards conceptualization. *International Journal of Nonprofit and Voluntary Sector Marketing*, 8(1): 76–88.
- Swann, P. (2015) *Common Innovation*. Edward Elgar.
- Tan W., Williams, J., Tan T. (2005). Defining the ‘Social’ in ‘Social Entrepreneurship’: Altruism and Entrepreneurship. *International Entrepreneurship and Management Journal*, 1: 353–365.
- Tapsell P. and Woods C. (2010). Social entrepreneurship and innovation: Self-organization in an indigenous context. *Entrepreneurship & Regional Development*, 22 (6): 535-556.
- Thompson, J. (2002). The world of the social entrepreneur. *International Journal of Public Sector Management*, 15 (5): 412-431.
- Thompson, J., Alvy, G., Lees, A. (2000). Social entrepreneurship – a new look at the people and the potential. *Management Decision*, 38 (5): 328-338.
- Tracey P. and Phillips N. (2007). The Distinctive Challenge of Educating Social Entrepreneurs: A Postscript and Rejoinder to the Special Issue on Entrepreneurship Education. *Academy of Management Learning & Education*, 6 (2): 264-271.
- Turker, D., Altuntas Vural, C. (2017). Embedding social innovation process into the institutional context: Voids or supports, *Technological Forecasting & Social Change*, <http://dx.doi.org/10.1016/j.techfore.2017.03.019>
- Vanclay, F. (2002). Conceptualising social impacts. *Environmental Impact Assessment Review*, 22: 183-211.
- Vandenberg, R. (2006). Statistical and Methodological Myths and Urban Legends. Where, Pray Tell, Did They Get This Idea? *Organizational Research Methods*, 9 (2): 194-201.

- Weber, C. and Kratzer, J. (2013). Social entrepreneurship, social networks and social value creation: a quantitative analysis among social Entrepreneurs. *International Journal of Entrepreneurial Venturing*, 5 (3): 217-239.
- Weber, C., Kröger, A., Lambrich, K. (2012). Scaling Social Enterprises – A Theoretically Grounded Framework. *Frontiers of Entrepreneurship Research*, 32 (19), Article 3.
- Webster, J. and Watson, R.T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. *MIS Quarterly* 26 (2): xiii–xxiii.
- Weerawandena J. and Mort G.S. (2006). Investigating social entrepreneurship: A multidimensional model. *Journal of World Business*, 41: 21–35.
- Weston, R., Gore, P.A. Jr. (2006). A Brief Guide to Structural Equation Modeling. *The Counseling Psychologist*, 34 (5): 719-751.
- Winter, S. (2017) Comment on 'Market and management failures' by Pankaj Ghemawat, *Capitalism and Society*, 12 (1): article 2.
- Witkap M.J., Raven R. P., Royakkers L.M. (2011). Strategic Niche Management of Social Innovations: the Case of Social Entrepreneurship. *Technology Analysis & Strategic Management*, 6: 667-681.
- Wolverton, B. (2003). Surviving tough times. Chronicle on Philanthropy, October 30.
- Yiu, D.W., Wan, W.P., Ng, F.W., Chen, X., Su, J. (2014). Sentimental drivers of social entrepreneurship: A study of China's Guangcai (Glorious) Program. *Management and Organization Review*, 10(1): 55–80.
- Zahra, S. A., Gedajlovic, E., Neubaum, D.O., Shulman, J.M. (2009). A typology of social entrepreneur: Motives, search process and ethical challenges. *Journal of Business Venturing*, 24: 519-532.

Appendix 1

Dendrogram for hierarchal cluster analysis using Ward's method



Main characteristics of clusters based on means and standard deviation

		personal confrontation	number of clients	number of potential clients reached	performance measurement: concrete targets	performance measurement: assessment on regular basis	performance measurement: standardized reports	adaptability of business model	social impact	transnationality	diversity	economic performance	networks	experience
social bricoleurs	mean	3,92	1,92	2,24	1,84	1,40	1,16	3,00	2,68	3,13	2,88	3,03	2,00	2,60
	min	2	1	1	1	1	1	2	1	1	1	2	0	1.17
	max	5	4	5	2	2	2	4	4	5	5	5	4	4.67
	sd	1.00	0.95	1.20	0.37	0.50	0.37	0.71	1.07	1.17	1.48	0.75	1.32	0.85
social mediators	mean	3.15	2.20	2.07	1.67	1.55	1.36	2.91	2.64	2.77	2.89	3.15	5.76	3.16
	min	1	1	1	1	1	1	1	1	1	1	1	4	1.33
	max	5	5	4	2	2	2	4	4	5	5	5	7	4.50
	sd	1.46	1.21	1.00	0.47	0.50	0.49	0.75	0.99	0.89	1.45	0.90	0.79	0.76
social constructionists	mean	4.56	4.02	2.42	1.79	1.65	1.48	3.46	3.21	3.10	2.35	3.31	5.50	3.20
	min	3	2	1	1	1	1	2	1	1	1	2	3	1.00
	max	5	5	5	2	2	2	4	4	5	5	5	7	5.00
	sd	0.61	0,90	1,05	0,41	0,48	0,50	0,61	0,91	1,07	1,31	0,82	0,90	0,89
total	mean	3.85	2.86	2.24	1.75	1.56	1.37	3.14	2.87	2.97	2.67	3.19	4.95	3.07
	min	1	1	1	1	1	1	1	1	1	1	1	0	1.00
	max	5	5	5	2	2	2	4	4	5	5	5	7	5.00
	sd	1.27	1.40	1.06	0.43	0.50	0.48	0.73	1.01	1.02	1.42	0.85	1.72	0.86

Appendix 2

Questionnaire Variables: Items, Factor Loadings, Cronbach's Alpha and References

Variables, Items & Cronbach's Alpha	Factor Loadings	Items sources/previous applications
Intentionality (4 items, alpha = .743) Scale: Slider 0 – 100. Values not visible on scale for respondent Please decide for each of the following pairs of statements, how important they are for your venture. The closer the slider to a statement is, the more important it is: 1) To tackle a social issue vs. To create a profitable venture 2) To help others, help the community vs. To increase the number of employees considerably 3) To raise awareness for the problem in society vs. To increase the budget considerably 4) To share our experience with others vs. To increase the market share	.759 .694 .757 .794	Own development. “Social items” adapted from Shaw and Carter, 2007 and Renko, 2013.
Personal confrontation (1 item) Likert scale (1-5) not at all to very strongly 1) How strongly was/were the founder(s) of the venture or their close families and friends confronted with the social issue the venture addresses?	n.a.	Own development based on ideas from Hockerts, 2015.
Team experience (6 items, alpha = .630) Likert scale (1-5) not at all to a very high degree Prior starting to work in your current venture, what kind of experiences did the staff bring to the venture? 1) Entrepreneurial experience? 2) Experience in the same economic sector? 3) Managerial experience? 4) Marketing experience? 5) Non-profit experience? 6) Charitable or humanitarian experience?	.806 .516 .727 .241 .738 .576	Based on Song et al. 2008; Sharir and Lerner, 2006.
Network intensity (1 item) Likert scale (1-5) not at all – very strong. Score for variables 1-6 (below), based on count of intensity of collaborations existed. Have you got partnered with any of the following actors? How strong has each affected the overall process? 1) Private individual donors 2) Funds and foundations 3) Non-profit organizations 4) Governmental institutions 5) Banks, consultancies, business Angels 6) Academic institutions	n.a. n.a. n.a. n.a. n.a. n.a.	Based on Weber and Kratzer, 2013, based on Index of Blau (1997).
Business model strength (4 items, alpha = .470) Likert scale (1-5) not at all to fully achieved To what degree did your venture achieve each of the following items in the last 3 years?		Economic performance variables typically used, e.g. Song et al., 2008.

1) Considerable growth of budget	.740
2) Considerable growth of financial profit	.456
3) Considerable growth of number of employees'	.621
4) Considerable improvement of quality of our service/product	.664

Output (1 item)

Likert scale (1-5) very few to 5 almost all

Talking about *potential* clients of your venture, what do you think, how many of your *potential* clients have your venture reached by now? n.a.

Based on Kratzer, Weber 2013, based on Kalleberg and Leicht 1991

Social outcome (1 item)

Talking about the impact your venture has on its clients, which of the following statements applies most to your venture?

- | | | | |
|---|------|---|--|
| 1) It is not proven yet to what extent peoples' lives have been improved. | n.a. | } | Based on Kratzer, Weber 2013, based on Kalleberg and Leicht 1991 |
| 2) Results are sufficient to suppose that people's lives were improved, but documented evidence is still limited or lacking in proof. | n.a. | | |
| 3) Rudimentary evidence shows tangible impact on people's lives with supportive quantitative and qualitative documentation. | n.a. | | |
| 4) Evidence is convincing of significant tangible improvements in peoples' lives, with substantial documentation. | n.a. | | |

Company age (1 item)

Please indicate the year of your ventures foundation.

Control variable typically used

Appendix 3

Inducement prize competitions and support programmes targeting social innovation in Europe

eligibility and selection criteria					characteristics				governance and stakeholders			sample
<i>title of prize competition or support programme</i>	<i>project level</i>	<i>applicant level</i>	<i>type of support, prize volume in Euro (if appl.)</i>	<i>periodicity, launch year</i>	<i>mission statement/social innovation concept</i>	<i>thematic focus</i>	<i>target sector (applicant activity)</i>	<i>target phase (applicants' projects)</i>	<i>geographical scope (applicants)</i>	<i>(i) competition/ programme owner type and (ii) main stakeholder types (funding and other support)</i>	<i>(i) competition/ programme owner and (ii) main stakeholders (funding and other support)</i>	<i>included, yes/ no (N)</i>
Act for Impact	projects close to market launch; (potential) social impact and (local) social impact in Germany; financial sustainability; growth potential	start-ups/ventures not older than 3 years; operations headquartered in Germany or abroad	mentoring, networking and prize of up to 40k	annual, since 2012	"The competition provides risk capital and helps scaling (concepts of) <i>social enterprises in the non-profit sector</i> "	education; integration; social mobility	non-profit sector	start-up phase; early growth phase	German-speaking European countries, but social impact/funding investment locally (Germany)	(i) Private and academic sectors (ii) Private and academic sectors	(i) Vodafone (Foundation); Social Entrepreneurship Academy (ii) Vodafone (Foundation); Social Entrepreneurship Academy	yes (3)
Are you the next Ben & Jerry's? (Join Our Core Competition, German section)	innovativeness; potential social or ecological impact; financial sustainability	age limit 18 to 40 years; soft skills	mentoring, networking and prize of up to 10k	annual, since 2014 (German section)	"Focus is on building and developing a cool new sustainable business [model]"	n.a.	private sector	start-up phase	selected countries in Europe (UK, DE, FR, NL, SE)	(i) Non-profit and private sector (ii) Private, government, non-profit and academic sectors	(i) Ben & Jerry's; Ashoka (ii) Ben & Jerry's; Impact Hub Berlin; The Do School; Raise Impact; betahaus; Social Entrepreneurship Academy; German Crowdfunding Network; Seedmatch; Startnext; wemakeit.com; Social Impact Alliance ¹	yes (7)
Ashoka (Venture and Fellowship)	innovativeness; (proven) social impact; scalability	nomination for programmes required; entrepreneurial experience; integrity	mentoring, networking and funding of up to 150k	annual, since 1980	"Rather than leaving societal needs to the <i>government or business sectors</i> , <i>social entrepreneurs</i> find what is not working and solve the problem by changing the system."	n.a.	private, government and non-profit sectors	start-up phase; early growth phase	global	(i) Non-profit sector (ii) Non-profit and private sector	(i) Ashoka (ii) Ashoka; McKinsey & Company; Corporate Executive Board; Latham and Watkins Hogan Lovells LLP; Hill + Knowlton Strategies; Scoop.it	yes (45)
Aspirin Social Prize	innovativeness; social impact; work/processes well documented	registered non-profit organisation (six months before competition)	Prize of up to 15k	annual, since 2010	" <i>Projects</i> that provide new offers at the <i>interface between the health industry and non-profit</i> aid and thereby supplement local healthcare systems."	healthcare (services)	private and non-profit sectors	start-up phase; early growth phase	Germany	(i) Private sector (ii) Private sector	(i) Bayer (Foundation) (ii) Bayer (Foundation)	no (13), narrow thematic focus

enorm Mag - start-up fund	early stage/planning phase, (potential) social impact	n.a.	Prize volume depends on sold mags and advertisement sales in mag; <10k	annual, since 2012	" <i>Social enterprises at early stage with a business model and clear social impact potential for a challenge.</i> "	n.a.	private sector	start-up phase	Germany	(i) Private sector (ii) Private and non-profit sector	(i) enorm Mag (ii) Ashoka; Schwab Foundation; BonVenture	yes (3)
European Social Innovation Competition	innovativeness; solution not fully developed or implemented; (potential) social impact; financial/organisational sustainability; scalability	n.a.	mentoring, networking and prize of up to 50k	annual, since 2012	"Competition aims to provide solutions to societal challenges and foster sustainable and inclusive growth in Europe. [...] Ideas and proposals from all sources, sectors and all types of individuals or organisations including for-profit, non-for-profit, or private companies are welcome."	thematic focus changes annually, e.g. unemployment; poverty; migration; ageing population; inclusion; healthcare	government, private and non-profit sectors	start-up phase	European Union Member States (residence)	(i) Government sector (ii) Non-profit and private sectors	(i) European Commission, DG Grow (ii) Nesta; Kennisland; Impact Hub; Shipyard and Matter&Co	yes (10)
Generation-D	innovativeness; creativity; (potential) social impact; financial sustainability	university enrolment, any discipline	Prize of up to 5k	annual, since 2008	"Innovative student-driven projects that solve topical challenges in Germany."	gender; migration; environment; social mobility; education; healthcare; wildcard field	n.a.	start-up phase	Germany	(i) Academic sector (i) Private, non-profit and academic sectors	(i) Social Entrepreneurship Academy (ii) Allianz (Foundation); AT Kearny; Süddeutsche Zeitung; Bayrisches Eliteakademie; Social Entrepreneurship Academy; Marktwirtschaft (Foundation)	yes (18)
Founding Live (formerly Founder's Garage)	idea on business model or non-profit project; no market sales realised	German literacy	mentoring and prize of up to 20k	annual, since 2012	"Idea competition for entrepreneurial individuals with <i>business models or non-profit projects</i> [...] ideas may come from anywhere in society."	n.a.	private and non-profit sectors	start-up phase	German-speaking European countries	(i) Private and academic sectors (ii) Private, academic and government sectors	(i) Google; Stiftung Entrepreneurship (ii) E.ON; Google; Volkswagen; KPMG; digitale heimat; Mandalah; Stiftung Entrepreneurship; Alexander von Humboldt Institute for Internet and Society; International Chamber of Commerce Berlin	yes (20)
German Civic Engagement Prize	projects not at conceptual stage (proven civic engagement); non-profit orientation of project (not necessarily registered org.); social impact	former prize winners in local competitions for civic engagement	Prize of up to 10k	annual, since 2009	"The prizes honour exceptional civic engagement of individuals, initiatives, companies and government administrations"	5 thematic prizes" targeting a wide range of topics	private, government and non-profit sectors	well-established or past activity	Germany	(i) Non-profit sector (ii) Non-profit, private and government sectors	(i) Non-profit Alliance ("Bündnis für Gemeinnützigkeit") (ii) Generali Insurance; F. Ministry f. Family, Elderly, Women and Youth; German Television Lottery (Foundation)	no (37), competition does not focus on innovative projects

Get Active Social Business Award (formerly Ideas against Poverty)	social impact; cost efficiency; financial sustainability; project feasibility; innovativeness; business plan	n.a.	mentoring and prize of up to 80k	annual, since 2008	"Companies, non-profit organisations, alliances or individuals with project or project ideas"	thematic focus changes annually, e.g. poverty; inclusion; migration; marginalised youth	private and non-profit sectors	start-up phase	Austria	(i) Private and academic sectors (ii) Private and academic sectors	(i) Coca Cola (ii) Coca Cola; Der Standard; Vienna University (WU)	yes (13)
Program Engagement with Perspective	innovativeness; (potential) social impact; proof of concept; potential for professionalisation	age limit 16 to 27 years; non-profit legal entity (if appl./registered); integrity; civic engagement experience; German residence	mentoring, training and fellowship/grant of up to 15k	annual, since 2012	"Young people founding projects that address societal challenges. The programme aims to professionalise projects and help establish new social enterprises."	migration; healthcare; youth; education	n.a.	start-up phase; early growth phase	Germany	(i) Non-profit sector (ii) Private and non-profit sectors	(i) Ashoka (ii) Ashoka; SAP; Malteser	yes (14)
Schwab Foundation for Social Entrepreneurship	innovativeness; organisational /financial sustainability; proven social and/or environmental impact; reach and scope; self-monitoring activities; scalability	potential multiplier/"ambassador"	networking	annual, since 1998	"Social entrepreneurs drive social innovation. [...] Similar to a business entrepreneur, they build strong and sustainable organisations, which are either set up as not-for-profits or companies."	education, health, environment; human rights, workers' rights, environment, economic development, agriculture etc.	private and non-profit sectors	start-up phase	global	(i) Non-profit sector (ii) Private and non-profit sectors	(i) Schwab Foundation (ii) Motsepe Foundation; Frey Charitable Foundation; Zurich Insurance; Citi; Pearson; Nestlé; Siemens; SK Group; VimpelCom; Firestar Diamond	yes (263)
seif Awards	innovativeness; social and/or environmental impact; replicability; quality of the business plan; financial sustainability	professional skills	prize of up to 9k	annual, since 2010	"seif supports individuals or teams seeking to apply innovative business ideas to respond to current social and/or environmental problems, otherwise known as social enterprises."	n.a.	n.a.	start-up phase	global	(i) Non-profit sector, private sector since 2015 (ii) Private, government and non-profit sectors	(i) Social Entrepreneurship Initiative & Foundation (seif) (ii) Confederation's innovation promotion agency; CTI; Gebert Rüf Foundation; Impact Hub Zurich; Blyss; Visible Impact; Investiere Venture Capital; Ashoka; ClearlySo; Social Entrepreneurship Academy; European Venture Philanthropy Association; Global Social Entrepreneurship Network; Fase; Viaduct Ventures	yes (14)
SILQUA-FH programme	innovativeness; (potential) social impact; collaborative research approach; knowledge transfer/dissemination concept	consortia including universities of applied sciences and other partners (non-profit organisations and/or local companies)	project grants of up to 270k	annual, since 2009	"Social innovations for greater life quality of the elderly"	healthcare; elderly inclusion	government, private and non-profit sectors	research/pre-start-up phase	Germany	(i) Government sector (ii) Government sector	(i) Federal Ministry of Research and Education (ii) Federal Ministry of Research and Education	no (21), selected projects have a strong research focus

Social Impact Start	innovativeness; no market sales (yet) realised; feasibility; (potential) social impact; sufficient (time) resources available for starting up	legal business entity not (yet) registered; know-how/experience of founder/team	mentoring, networking and prize of up to 12.5k	annual, since 2011	"Social-innovative individual founders or teams, whatever legal status (<i>corporate or non-profit</i>), working on <i>web-based solutions, fundraising or aid projects, or new products and services.</i> "	n.a.	private and non-profit sectors	start-up phase	German-speaking European countries	(i) Non-profit, private and government sectors (ii) Private sector	(i) Social Impact Alliance ^x (ii) SAP	yes (126)
startsocial	(potential) social impact; project involves volunteering/civic engagement; prevention orientated; cost efficiency; scalability	one branch of the project/organisation resident in Germany	mentoring, training and prize of up to 5k	annual, since 2001	"Professionalise how social projects are run via know-how transfer from volunteering private, government and non-profit actors."	n.a.	n.a.	start-up phase; growth phase or established model	Germany (operational location, not necessarily impact-wise)	(i) Non-profit sector (ii) Private sector	(i) Startsocial Alliance: see (ii); (ii) Allianz Insurance; Deutsche Bank; Atos; Vodafone (Foundation); ProSiebenSat1 Media; McKinsey & Company	yes (49)
Social Innovation Tournament	innovativeness; (potential) social impact; financial/organisational sustainability; scalability; cost efficiency; implementation capacity/sufficient commitment of resources	n.a.	mentoring and prize of up to 50k	annual, since 2012	"It aims to attract interest from non-for-profit and for-profit organisations, young entrepreneurs and social enterprises, CSR departments in companies, NGOs and (local) government entities, university communities, high school teams [...] whose primary purpose is to generate a social, ethical or environmental impact."	wide range of fields, but places additional emphasis on a specific topic each year, e.g. unemployment; education; migration; urbanisation; inclusion; healthcare	private, government and non-profit sectors	start-up phase; early growth phase	European Union Member States, Candidate/Potential/EF TA countries (residence)	(i) Government sector (ii) Government sector	(i) European Investment Bank (Institute) (ii) European Investment Bank (Institute)	yes (34)
BENISI Incubator Network	innovativeness; (potential) social impact; scalability	n.a.	not applicable; networking depends on access to facilities (membership fees)	2013-15	"BENISI is a trans-European consortium identifying/highlighting 300 of the most promising, impacting and employment-generating of these SIs that are often only developed locally – in the government, private, third, social enterprise and cooperative sectors."	n.a.	private, government and non-profit sectors	start-up phase; early growth phase	European Union Member State (residence)	(i) Non-profit and private sectors (ii) Government sector	(i) BENISI: Impact Hub, i-propeller, DIESIS, Eurada, FondazioneCariplo, Pefondes, Oksigen Lab (ii) European Commission, FP7 funded program	yes (338)

ⁱⁱ The Social Impact Alliance includes the following stakeholders: Federal Ministry for Family, Elderly, Women and Youth, KfW (Foundation), SAP, JP Morgan (Foundation), drosos, Haniel, Otto Beisheim Foundation, Deutsche Bank (Foundation), Telefonica (Foundation), Hans Weisser Foundation, Barclaycard, HIT (Foundation), Paritätische Wohlfahrtsverband, Froebel e.V., European Commission (FP7; ESF), Berlin Senate, LAGeSo Berlin, Brandenburg Federal State, Ashoka, Schwab Foundation.

ⁱⁱⁱ The five fields comprise 1) education, youth, sports, integration, refugees, religious initiatives; 2) environment, healthcare, prevention, emergency; 3) cross-generational activities, demography, elderly care; 4) inclusion, culture, cultural diplomacy, international projects; 5) democracy, political engagement, human rights.