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Measuring social value creation

A quantitative study among social entrepreneurs

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Parts of the thesis are confidential because they rest upon an analysis of a dataset that I was allowed to use for educational purpose only. The Schwab Foundation holds the rights for publication. For further information please contact the author.

Abstract

The purpose of this study is to gain further understanding of how to measure social value creation in the field of social entrepreneurship and to reveal factors that correlate with either high or low impact enterprises.

Performance measurement of a commercial business is assessed through the amount of profit it generates. Such a standard approach enables entrepreneurs to keep control over their business projects and strategically manage activities towards profit maximization. In contrast, social entrepreneurs strive for a maximization of social impact. A standard methodology that evaluates the success of a social initiative is non-existing and thus it is difficult to manage a social enterprise in an effective and efficiency way towards a social mission related objective. The study follows two research approaches. On the one side, it attempts to develop an alternative social value measurement model on the basis of a thorough literature review. On the other side, an exploratory analysis of 300 social enterprises based upon a second measurement model derived from the dataset discloses factors that correlate with either high- or low impact social enterprises.

A social value creation measurement model that was constructively developed upon Sen's capability theory is easy to use and quickly implemented by social entrepreneurs. The idea of the model is to assess social value creation from the perspective of the capability set of a beneficiary. A capability set is described as the individual well-being freedom and implies the de facto opportunities someone possesses to do and to be what is most valuable for the person. This model enables social entrepreneurs to assess the individual- and total impact creation as well as the financial effectiveness of the social enterprise.

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1. Introduction

The objective of the study is to gain further understanding of how to measure social value creation in the field of social entrepreneurship. Therefore, the report outlines how an ideal social value measurement model could look like. The concluding discussion depicts how social value can be measured in an alternative way.

A social entrepreneur engages in an entrepreneurial activity that is characterized by a social mission and eventually creates social value (Austin, Stevenson, & Wei-Skillern, 2006, p. 1). As Brooks (2009, p. 122) emphasizes, social value creation can be pursued along different type of firms such as non-profit and for-profit organization, as well as a hybrid types of firms. The underlying social mission is what differentiates social from commercial entrepreneurship (Austin et al., 2006, p. 2). The social mission arises from the objective to focus on shareholder value (Nicholls, op. 2006, pp. 264–265; Zahra, Gedajlovic, Neubaum, & Shulman, 2009) instead of wealth maximization (Davidsson, 2004, p. 15).

Social entrepreneurs look for the most effective methods to serve their social mission, which does not preclude the mutual creation of economic and social value (Dees, 1998, pp. 2–3). Michael Porter, [one of] the most cited author in the field of business and economics (Aktouf, 2008, p. 75) believes that social entrepreneurship is a way to improve confidence and gain trust of the society as a whole into the economic systems worldwide (Porter & Kramer, 2011). Similarly, the President of the European Commission, Jose Barroso, recognized the importance of a strong social business sector for a more sustainable and responsible future of Europe as he outlines: “It is our guiding objective to create the right environment for social businesses, to foster their growth and development across our member states. We need to invest in researching ways to effectively measure and value social impact benefits” (Barroso, 2011).

However, our understanding of social entrepreneurship is limited. A reason therefore may be the infancy status of the related scholarly debate (Smith & Stevens, 2010, p. 577). Instead of building upon each other the research endeavours seem to be fragmented. Moreover, the debate is dominated by qualitative research such as case studies and expert interviews but lacks quantitative research approaches (Hoogendoorn,

Pennings, & Thurik, 2010, p.13-14). This is likely to be a sign of limited availability of high quality datasets.

Moreover, a generally accepted method of how to measure social value creation does not exist (Smith & Stevens, 2010, p. 583). The current methods applied like SROI, shared- and blended value accounting and others are criticised for various reasons such as disagreements about interpretations as well as being too complex for easy integrations (further details see appendix B, table 6). In order to foster the growth and development of the social business sector a well applicable measurement model is indispensable. As only with powerful metrics in place it is possible to evaluate the performance of social enterprises, identify factors related to efficient and effective management, and accordingly leverage the progress of social entrepreneurship significantly.

To ensure a valuable contribution to the debate of how social entrepreneurship can significantly prosper the structure of the (non-confidential) report is designed around the following research question:

How does an adequate, reliable and valid measurement model for social value creation look like?

An adequate model should be understood as well-grounded in theory, applicable for all social entrepreneurial activities, whether mediated through market transactions like the allocation of basic food, or non-market initiatives like the promotion of political freedom. It is emphasized that the model works with a low data input this keep data compilation efforts at a minimum and thus enhances degree of implementation.

In order to present a solid measurement model, a literature review focuses on the core idea of social entrepreneurship and social value, followed by a theoretical discourse of value creation measurement and rounded up by a view on the advantages and disadvantages of current methods in use.

2. Literature review

The objective of reviewing the literature is to understand what a proper measurement model for social value creation need to be capable of. Therefore, this section is concerned to review the literature regarding the most important questions for the development of a measurement model for social value creation: First, what is *social* value and how does it differ from commercial value? Second, what are the objectives of social entrepreneurs and what is their main field of activity? Finally, how are existing social value measurement models conceptualized and what lessons can be learned from currently applied methods? The query was based upon the search engines Web of Science, Scopus, and Google Scholar. A predominant amount of reviewed sources are published in academic journals, but also books, internet- and other sources were used to gather a wide range of opinions about the aforementioned questions. Detailed information about the searched keywords, the used journals, and the structure of the review can be found in appendix A.

2.1 Definition and assessment of (social) value

What is value? Value is a concept of worth which is “linked to the use of a product or service and perceived by customers rather than objectively determined (Dumond, 2000, p. 1062). Bowman and Ambrosini introduce two perspectives on value. First, use value which is defined as “subjected by customers, based upon their perception of usefulness of the product on offer”, and second exchange value, explained as “the amount paid by the buyer to the producer for the perceived use value” (2000, p. 4). Lepak et al. (2007, p. 182) suggest on the above mentioned definition, that “value creation depends on the subjective value realization of a user - whether individual, organization, or society – and translates into the user’s willingness to exchange a monetary amount for the value received”. In other words, when customers are willing to pay a higher amount of money for a commodity than it costs to produce it, while taking factors like capital, labour, equipment, and logistics into consideration, value is being created.

When assessing value, economists often refer to the utility theory and the idea of marginal utility (Bowman & Ambrosini, 2000, p. 2). The theory roots in the understanding that consumers spend their income in a way that they maximize the satisfaction they get

from the possession of products. Total utility refers to the total satisfaction a person gains from the possession of a commodity and marginal utility refers to the satisfaction deriving from one more unit of a good. An important assumption in the utility theory belongs to the law of diminishing marginal utility. This incorporates the higher the consumption, the lower the marginal utility gain will be. It applies because there will be certain threshold of satisfaction in consuming a specific good.

The benefit of consuming one more unit of a good (marginal utility) depends on the use value of the respective good perceived by a user. To gain further understanding into the subjective evaluation of use value, it can be related to Amabile's concept of novelty and appropriateness that she used to assess the value of creativity (Lepak et al., 2007, p. 182). "A product or response will be judged as creative to the extent that it is a novel and appropriate, useful, and valuable response to the task at hand" (Amabile, 1996, p. 35). Thus, Lepak et al. claim, "the greater the perceived novelty and appropriateness of the product or service under consideration, the greater the potential use value and exchange value to the user" (2007, p. 182).

It is important to note that people are not entirely rational while assessing their options but spend their money on what they expect will give them most satisfaction (Bach, 1987, p. 92). Similarly, Bowman and Ambrosini (2000, p. 2) argue that the judgement of the amount of utility a potential purchaser gains, depends among other on their beliefs about the brand, their individual needs, and unique experiences. Lepak et al. (2007, p. 183) believe that the "subjective and context-driven definition of novelty and appropriateness" provide a suitable explanation to the competing views among consumers of what is considered to be valuable.

In commercial entrepreneurship, the profit a company generates can be used as a reasonable indicator for the value it produces (Dees, 1998, p. 3). Dees (1998, p. 3) concludes that if an entrepreneur is not able to attract a sufficient number of customers to pay an exchange value for the offered product higher than the involved costs, it is an indication that insufficient value is being created. On the one hand, businesses that fail to create a reasonable amount of value eventually run out of resources to continue production and thus go out of business. On the other hand, businesses that succeed to

create value have cash to attract the needed resources to grow further and strengthen their market position and develop the corporation.

However, the market is only a solid indicator for value creation if the exchange of valuable commodities involves a monetary transaction, the so-called exchange value. Auerswald (2009, p. 54) points out, that the exchange value relies upon an individual willingness to pay and consequently this willingness is a function of the person's income. A person that makes a dollar a day can offer a very limited amount as exchange value only even though if the associated use value would be considerably higher.

As an illustration, the Indian Aravind Eye Care hospitals reveal the dilemma of measuring value creation in a social entrepreneurial context. Aravind developed an innovative and low-cost procedure for the restoration of sight. The beneficiaries of the service are the blind and many of them are desperately poor. Since the establishment in 1976 the hospitals have performed more than four million surgeries most of them free of charge or highly subsidized (Naidoo, 2012). The beneficiaries do not have health insurances and consequently have not paid an exchange value for the surgery. Nevertheless the received use value - restoration of sight - is extremely high.

When it comes to the measurement of wealth creation the classical utilitarian perspective with the focus on maximizing profit provides a suitable basis, however, the Aravind case reveals that the utility theory is not always able to capture the value creation adequately. Although wealth creation is a common aim for commercial entrepreneurship (Kirzner, 1973; Schumpeter, 1934) and is typically measured by financial returns (Austin et al., 2006), the social business context is divergent from this norm: "Wealth creation is just a means to an end for social entrepreneurs" (Dees, 1998, p. 2). As central and explicit in social business models are the creation of social value, so-called "mission related impacts" (Dees, 1998; Wei-Skillern, 2007).

What exactly is social value about? Certo and Miller clarify that "social value has little to do with wealth creation but instead with the fulfilment of basic and long-standing needs such as providing food, water, shelter, education, and medical services to those members of society who are in need" (2008, p. 267). Further, social value is among others explained as the creation of social wealth like education and economic development (McLean, 2006; Sullivan Mort, Weerawardena, & Carnegie, 2003), social

justice (e.g. reduction of gender inequalities) (Thake & Zadek, 1997) or the resolution of social problems (e.g. reduction of poverty) (Drayton, 2002). In an economic perspective social value may be similar to what Bowman and Ambrosini call use-value with the constraint that an adequate exchange value may not be paid. Santos comments, “[social] value creation can be defined as the sum of the value added to all members of society minus the value for all resources used” (2009, p. 27).

However, social value cannot be adequately measured with the theory of marginal utility because a market based exchange value is not guaranteed (Dees, Wei-Skillern, & Anderson, 2004; Santos, 2009). On top of that the utility approach is unable to measure the creation of value in social initiatives that do not work through market transaction like efforts to increase political freedom, or to address gender inequalities. In order to measure how well an entrepreneur performs in the creation of social value, Auerswald (2009) emphasizes the capability approach of Amartya Sen. The Indian economist was awarded the 1998 Nobel Memorial Prize because his contribution to welfare economics provides a basis for interpersonal comparisons of well-being (The Nobel Foundation, 1998). Auerswald (2009, p. 54) brings it to the point: “The key was to focus not on commodities and willingness to pay as in a utility model, but rather on capabilities and willingness to live”.

Sen’s capability approach is rooted in the critique of Rawls’s “Theory of Justice” (2005, c1971) claiming that classical utility perspectives with a focus on maximizing wealth are unable to account for the distribution of wealth and accordingly increases inequalities in societies (Renouard, 2011, p. 87). The capability theory is inherent in the idea that the greatest human need is to achieve well-being which is not per se equivalent to maximization of wealth. Well-being is understood in terms of individual capabilities, meaning real opportunities to be and do what is most valuable in the viewpoint of each human being individually (Sen, 1979). This is also stressed by Alkire (2005) who explains that the capability approach assesses the situation of individuals or groups in terms of their abilities to do and to be what is most meaningful to them.

The two central pillars of Sen’s theory are functions and capabilities. Everything what a person can undertake, the so-called “beings and doings” belong to the functions. Being educated, being nourished, being part of a community are typical examples of “beings”,

whereas playing football, traveling, reading, or consuming energy resources represent the “doings”. Together they belong to the functioning set of a human being. The evaluation of well-being is linked to the amount of available functions. Sen calls that the “well-being freedom” which serves as the basis for the individual well-being (Sen, 1992, p. 40). However, a prerequisite for the availability of a function, are corresponding capabilities. In order to achieve a functioning one needs to have certain capabilities. While traveling is the function, the real opportunity to travel is the preceding capability. Moreover, the opportunity to travel can vary and need to be considered in the context. Sometimes access to public transport or a car can be considered as suitable, if the destination is within walking distance, legs may also be considered as capability.

This should not be confused with capabilities in the context of a resource-based view. “A focus on the relational capability of persons and groups allows for an evaluation, not in the viewpoint of material resources and growth, but from the viewpoint of the quality of the social environment and of empowerment” (Renouard, 2011, p. 86). The capability approach is based upon the idea that each person has different interests and therewith also different ways to achieve well-being. It is not important of whether or not people take up the options they do possess instead the fact that they do have options is significant (Sen, 1999). Martha Nussbaum supports the capability approach, although she argues that Sen’s theory “give us no sense of what a minimum level of capabilities for a society might be” and that this way, “the use of capabilities in development is comparative merely, but concerning what level of health service, or what level of educational provision, would deliver as a fundamental entitlement is suggestive but basically silent” (Nussbaum, 2003, p. 35).

That is a reason why Nussbaum developed a list of fundamental capabilities, separated into 10 topics that are central for a life in social justice (Nussbaum, 2003). First, being able to live a life of normal length, second and third capability are bodily health (being able to have good health, adequately nourished and shelter) and integrity (being able to move freely). Fourth, is having access to education in order to be able to develop sense, imagination and thought. Fifth, be able to show emotions without fear of freedom. Sixth, be able to demonstrate practical reasoning which means being able to critical reflect about the planning of one’s life. Affiliation, being able to live a life with non-

discrimination is the seventh fundamental capability, followed by a concern and relation to other species (animals, plants, and nature). Ninth, be able to play, laugh, and enjoy recreational activities. Finally, control over one's environment reflected as having political choices, being able to participate in political activities, and being able to hold property.

Nussbaum emphasizes that the list should not be seen as a guideline for people as how they should live their life and introduced it for “political purposes only” (Nussbaum, 2003, p. 42). This is reflected in her focus on capabilities rather than on functions (capabilities are the prerequisite for functions, thus with a capability people have the *ability* to attain functions and can *choose* which functionings they want to pursue). However, the list is criticized among other by Charusheela (2009, p. 3-5) as an almost impossible balancing act of being universalistic enough to capture fundamental needs of human nature, and flexible enough to cope with the great diversity of local contexts that shape the meaning of people's life. In addition, Sen criticizes any form of universalism because it does not adequately reflect the importance of individual needs and personal well-being (Karaçay, 2010, p. 97).

2.2 Objectives and field of activities for social entrepreneurs

What is social entrepreneurship? “Organizations seeking business solutions for social problems” is a simplified definition by Thompson and Doherty (2006, p. 362) providing a brief idea that social entrepreneurs focus on social outcomes, like support and awareness for positive and responsible behaviour, empowerment and sustainable economic activities by using entrepreneurial principles. In the same way, the concept of social entrepreneurship is gaining popularity in science and business. In the USA and UK social entrepreneurs are portrayed to have a key role for the support of national economy after the recession because their innovative ideas in areas of welfare and environmental policy (Nicholls, 2009, p. 755; Seelos & Mair, 2005). However, Smith and Stevens claim that the increased contribution of articles challenges the scientific development of the field (2010, p. 575).

The academic database *Web of Knowledge* lists in a query for “social entrepreneurship” app. 1.000 contributions published in social science journals. In fact, almost 50% (457) are published within the last two years. Under those circumstances, the research domain could be regarded as emerging. However, the development of the field is

challenged because the research stays rather fragmented instead of building upon each other (Mair & Martí, 2006, p. 36). This is among other reflected in the way scholars are debating of what social entrepreneurship is about. Some scholars argue to broaden the domain (Light, 2006; Sullivan et al., 2003) others suggest a greater clarity and precision in regards to the definition (Dees, Wei-Skillern, & Anderson, 2004; Nicholls, op. 2006).

Problematic is already the term social entrepreneurship itself, as it combines two ambiguous words meaning different things to different people (Mair & Martí, 2006).

Disagreements persist about the domain of entrepreneurship (Davidsson, 2004; Shane & Venkataraman, 2000) and adding the often ill-defined prefix “social” further accelerate this definitional debate (Santos, 2009; Zahra et al., 2009). In general, social entrepreneurship is understood as a sub-discipline of entrepreneurship (Certo & Miller, 2008, p. 267). Thus, the definitional debate may best be approached by reviewing of what entrepreneurship is about and then relating it to social sub-domain.

A general agreement consists when entrepreneurship is explained as identification, evaluation, and exploitation of opportunities (Kirzner, 1973; Stevenson & Jarillo, 1990; Shane & Venkataraman, 2000). However, the term opportunities already raise discussion: Certo and Miller (2008, p. 267) or Chell (2007, p. 6) interpret an opportunity simply as creation of something of value which is basically met as soon as products and services are exchanged. Whereas Drucker (1985) argues that not every new business on the market is entrepreneurial. It needs to involve innovation and therewith Drucker relates entrepreneurship to a Schumpeterian perspective. Schumpeter described the entrepreneur as an agent of change, someone who pursues innovation by new combinations of resources (Schumpeter, 1934). In contrast, Davidsson (2004, pp. 6–7) favours a definition as distinct and well defined as possible and thus quotes in his book “Researching Entrepreneurship” the Austrian economist Kirzner who concludes entrepreneurship is the “competitive behaviours that drive the market process” (1973, pp. 19–20). Hence, an entrepreneur creates value by providing customers with new choices, forces the competitors to more efficiency, and eventually attracts new entrants that accelerate the range of products and services within a certain market.

The differentiation from the domain of entrepreneurship towards the sub-field of social entrepreneurship comes by highlighting “pro-social motives that drive the primary

mission and emphasize social outcomes at the expense of the surplus that may be reinvested into the enterprise to assure sustainability” (Chell, 2007, p. 11). Scholars agree that what distinguishes a social entrepreneur from a commercial entrepreneur is the predominant focus on a “social mission” (Austin et al., 2006; Dees, 1998; Wei-Skillern, 2007). This is done in an entrepreneurial approach through the identification, evaluation, and exploitation of opportunities that pursue social value creation for the society, opposed to economic value (wealth creation) for individuals (Dees et al., 2004; Santos, 2009).

May only social entrepreneur be able to create social value? No, social value is not solely created by social entrepreneurs but may likely be a by-product of an (commercial) entrepreneurial activity as described by Davidsson (2004, pp. 6–7). Nevertheless, Santos points to the example of the Mexican bank *Compartamos* and argues that an enterprise needs to decide whether the focus is on the creation of social or economic value: “This choice is so central for an organizational identity that any perceived shift or ambiguity causes upheaval on stakeholders and may lead to a loss of legitimacy” (Santos, 2009, p. 9).

The concept of social entrepreneurship summarized by Mair and Marti (2006, pp. 37–41) as a process of creating value by combining resources in new ways to pursue opportunities to create social value by stimulating social change or meeting social needs. This definition reveals that social entrepreneurship is in the business approach identical to entrepreneurship but different in the objective. Austin et al. (2006, p. 2) define social entrepreneurship as an “innovative, social value creating activity that can occur within or across the non-profit, business, or government sector”. Similarly, Dorado (2006) as well as Thompson and Doherty (2006) state that social and economic goals do not necessarily eliminate each other and thus social entrepreneurs may also be profit-oriented which should not be confused with seeking profit maximization.

In the field of entrepreneurial identity Fauchert & Gruber (2011, p. 936) describe among other the *communitarian* which treat their firms as social objects supporting a particular community because of mutually beneficial relationships, and the *missionaries* that see their firms as political objects advancing a particular cause for the benefit of society at large. Both types may be strongly related to the idea of social entrepreneurship as

illustrated by among others Dees, Nicholls, Mair and Martí. Accordingly, the drive of a social entrepreneur may be rooted in the creation of mutually beneficial relationships and benefits for the society.

Typical fields of activity for social entrepreneurs

What are suitable field of activities for social entrepreneurs? A modern economic system with profit-maximizing actors and regulated market conditions may be an optimal system for the aggregation of wealth but often generates inequalities in the distribution of resources and welfare (Santos, 2009, p. 15). Moreover, it can be assumed that in such an economic framework the commercial entrepreneur is more effective in creating value than the social entrepreneur, due to a better access to resources needed for growth. Santos (2009, p. 20) points out the mechanism that work in favour for the commercial entrepreneur: “skilled employees favour a high salary, partners looking for an equity revenue share, and investors looking for a high return on investment.”

The needed redistribution to raise every individual in society beyond a minimum accepted level of welfare is usually undertaken through the government at regional and national, through charities (Santos, 2009, p. 17), and through so-called *Social Bricoleurs* (Zahra et al., 2009) at local levels. Zahra et al. identify the *Social Bricoleurs* as a type of social entrepreneur embedded in the ideas of Hayek (1945) who proposed local knowledge and contextual information play a vital role in the entrepreneurial process. Even though their impact is small and due to the local and tacit knowledge hardly scalable, their effort helps to maintain a “social equilibrium” (Parsons, 1971) characterized through social peace and order (Zahra et al., 2009, pp. 523–525).

In developing countries or non-democratic regimes the demand for redistribution is even higher and social entrepreneurs play a major role in reaching a social equilibrium because governments either lack capabilities or motivation to adequately redistribute resources (Santos, 2009, p. 21). Zahra et al. (2009, p. 525) highlight those social entrepreneurs that are characterized through the creation of “alternative structures to provide goods and services that governments, agencies, and businesses cannot” as *Social Constructionist*. This type of social entrepreneur is particular driven by what Kirzner describes as “alertness for opportunities” and the “willingness for change” (Kirzner, 1973, p. 71). Due to the unaddressed and on-going needs *Social*

Constructionist are able to grow to national or international reach, limited only by scarce financial and human resources (Zahra et al., 2009, p. 525).

The raise of social entrepreneurship in developing countries like India or Bangladesh may be explained with the inability of governments to address the social needs in the respective countries. However, social entrepreneurial activities are also substantial in developed countries like the UK, United States, and Germany (~ 40% of the enterprises of the Schwab Foundation dataset are from Europe and North America; see 3.1, sample). In those countries, governments should have both the motivation to provide social value because in democratic structures society's members can penalize governments that fail to deliver social benefits through their votes, and the ability to provide reasonable social benefits for the society through capital generation from tax collections (Santos, 2009, pp. 20–21).

Santos proposes that the distinctive field of activity of social entrepreneurs is “addressing problems involving neglected positive externalities” (Santos, 2009, p. 22). Externalities are economic side-effects that occur when market activities create an impact that goes beyond the objective function of the agents engaged in the economic activity (Rangan et al., 2006). On the one hand, impacts can be negative in nature like the high risk for cancer and therewith increased healthcare costs due to tobacco consumption. Governments try to internalize negative externalities mainly through regulation and taxation but also corporate self-regulation with the establishment of social responsibility programs help to correct negative externalities (Porter & Kramer, 2011, p. 5). Examples are corporates zero-emissions goals and the use of organic products. On the other hand, externalities can be of positive nature like the under-provision of beneficial goods by self-interested actors because they do not perceive a potential for profit-maximization (Rangan et al., 2006). Again, governments try to correct those shortcomings for instance through creation of state-owned organizations (e.g. the “BVG” as public transport provider in Berlin) or substitution for self-interested organizations like monetary incentives for research and development efforts towards sustainable technology innovations.

However, Santos claims that positive externalities are not always realized by the government and illustrates it with the example of *Unis-Cite* a French social enterprise

that creates civic service opportunities for young French people to help them develop soft skills and a social understanding. The French government had not supported the initiative until French youth started revolts against society and caused major problems. Thereafter the government initiated a legal framework for civic work and has started to support through funding large-scale rollout of the program (Santos, 2009, pp. 22–23). That this is not an isolated case demonstrates Ashoka, a network with almost 3.000 social entrepreneurs (Ashoka) claiming that more than half of their members have “achieved changes in national government policies” (Sen, 2007, p. 541). Zahra et al. (2009, p. 526) calls this entrepreneurial type, *Social Engineers*, because they “identify systematic problems within the social systems and structures and address them by bringing about revolutionary change”. The idea of a *Social Engineer* is linked to the Schumpeterian approach of entrepreneurship, as an innovator through “creative destruction” (Schumpeter, 1942).

2.3 Social value measurement models in practice

Assessing the performance of a social enterprise is much more challenging than monitoring the performance of a business enterprise (Mair & Martí, 2006, p. 42). The problems are rooted in the different objectives of commercial and social entrepreneurship. Commercial entrepreneurship aims at profit maximization (Kirzner, 1973; Schumpeter, 1934), thus practitioners and researchers can focus on financial information like revenues, costs, and profit to calculate return on investments and forthwith the success of a business (Austin et al., 2006, p. 15). Moreover, the field of operation are “narrowed” towards specific products and services and “well-defined” through market transactions (use-value is traded against an exchange value) (Austin et al., 2009, p. 758). In contrast, the “mission-based objective” (Dees, 1998; Wei-Skillern, 2007) of social entrepreneurship aim for positive impacts in social and environmental areas, which are not naturally mediated through market transactions and rather subjectively assessed (Auerswald, 2009).

“We do good things, don’t we”, applies as a core ethos within the field of social entrepreneurship (Nicholls, 2009). Although it is honourable that the field is willing to do good things, internal and external voices call for better auditing. On the one hand, social purpose organizations are willing to demonstrate that they work effectively, perform

better in terms of social impacts and are more accountable than their counterparts (Nicholls, op. 2006). On the other hand, foundations, governments, and individual donors request more reliable monitoring of their social investments (John, 2006). Social entrepreneurs approach the theme differently, one side is “enthusiastic about measuring social value” (Mulgan, 2010, p. 38) the other side believes that “most elements of social value stand beyond measurement and quantification” (Emerson, 2003, p. 40).

Nevertheless, several attempts of social impact reporting practices have been initiated (Nicholls, 2009) and the most discussed models are presented in appendix B (see, table 6).

Nicholls published in 2009 the first study about social impact reporting in the field of social entrepreneurship (2009, p. 766). As an explanation of the lack of a methodological standard for social value assessment the author identified among other the following striking questions. “What is to be measured and reported?” The question emphasizes the “complex relationship of input factors (grants, volunteers, market income, social capital, etc.) and the social outputs that correspond to the social mission of the organization” (2009, p. 758). “How to measure what is to be reported?” Herewith, Nicholls addresses the challenge on the lack of comparability of the various measurement efforts. According to the author, the field of social entrepreneurs is quite heterogeneous across market and non-market activities which in turn make it “very difficult” to develop performance metrics which can be compared across industries” (2009, p. 758). Mulgan (2010, p. 38) points out that a burden for a reliable social value reporting is the assumption that “social value is objective, fixed, and stable” as opposed to “subjective, malleable, and variable” which would create in his point of view better metrics.

Karoly (2008) reviewed 39 social initiatives that were analysed by methods of capturing social value. She came to the conclusion that approaches integrating costs into the evaluation are not well developed and face difficulties among other in the following points: monetization of many important social benefits is rare if ever possible. The so-called shadow price, a social benefit of an associated initiative projected with a dollar value, does not consistently capture the complete range of social benefits because of the different nature those benefits. A social benefit may have direct and indirect effects,

and sometimes sizeable in the long-term only. Moreover, it is difficult to compare shadow prices among different social programs as a methodological standard for transferring the social benefit into an economic value is non-existing (2008, pp. 77–81). This is in line with what Mair and Marti (2006, p. 42) conclude: “The real problem may not be the measurement per se, but how the measures may be used to quantify the performance and impact of social entrepreneurship”.

Most of the reporting models depend on two classical evaluation approaches: the cost-benefit approach (CBA) and the cost-effectiveness approach (CEA). The main idea of CBA is to monetize an initiatives costs and benefits to enable analysts a decision upon effectiveness of social initiatives. The outcome can vary from a simple net benefit calculation (benefit – costs), a ratio (benefits / costs), and an internal rate of return (the rate of growth a project is expected to generate). In contrast, CEA is applied in areas not possible to monetize the created benefit (e.g. crime prevention, education programs). The benefit will be measured in a natural unit, in general terms this can be defined as “cost of something” (e.g. cost of arresting criminals, cost of one year of schooling). This way the costs can be compared to the non-monetized benefit and an effectiveness rate, cost per unit of benefit, is the outcome. Logically, the effectiveness can only be compared within an area and not across different areas.

A study by Tuan (2008), who examined social business models, came to the conclusion that the field of social entrepreneurship lacks comprehensive social outcome and cost data. Although all models have strength and weaknesses, none managed to become a standardized measurement approach yet. The lack of data may be due to the limited reporting requirements of social enterprises depending on the type of corporation and regional reporting differences (Nicholls, 2009). Tuan (2008, p. 25) rounds up her review with the remark that any reporting method of a more or less sophisticated model is highly subjected to interpretation of how the perceived social effect on the stakeholders is weighted. She argues that the same data may yield to opposite results in another methodology.

Overall, any social entrepreneur who wants to finance operations, improve effectiveness, and strategically drive performance should establish some form of metrics that clarify how inputs can contribute to outcomes (Nicholls, 2009). In addition, reporting

should be used proportionately as it does not make sense for a small social enterprise to invest scarce resources into a comprehensive and maybe controversial method to assess the social value created (Mulgan, 2010). Finally, Mulgan (2010, p. 43) calls attention to not be naive with the interpretation of social impact results: “Even such seemingly objective metrics as profits are not always the facts they appear to be [...] as shown in the case of Lehman Brothers”.

3. Discussion

This section discusses the research questions that are stated in the introduction and examined throughout the report. Based upon the findings of the literature review, a model to measure social value creation is suggested. [...] Finally, the Schwab Foundation dataset is evaluated in terms of its suitability to develop an adequate, reliable, and valid measurement model for social value creation.

3.1 Development of a measurement model for social value creation

The perceived use-value of a good, meaning its novelty and appropriateness from the perspective of the consumer is crucial for the assessment of value creation. Lepak et al. (2007, p. 182) claim, “the greater the perceived novelty and appropriateness of the product or service under consideration, the greater the potential use value [...]”. This applies for commercial- and social entrepreneurship because in either way a high use-value yields to satisfaction and well-being for the consumer and respectively the recipient (Bowman & Ambrosini, 2000, p. 2). In economic terms the benefit of consumption is commonly described as *total utility* (Parkin et al., 2005, p. 143).

What distinguished commercial from social entrepreneurship is the involvement of an exchange value to reach utility, explained by Ambrosini and Bowman (2000, p. 4) as “the amount paid by the buyer to the producer for the perceived use value”. In other words, it is the willingness of the consumer to pay for a good. The more utility a consumer expects to gain from a certain commodity the higher the willingness to pay for it. The existence of such a market-driven, monetary exchange value simplifies the measurement of value creation in commercial entrepreneurship. Generally, the entrepreneur creates value, in economic terms called *producer surplus*, when the paid exchange value exceeds the costs of production of the product (Parkin et al., 2005, p. 103). Consequently, the profit an entrepreneur generates can also be understood as the amount of value created. Further, it must not be underestimated that the value creation is measured in a monetary unit because that attracts investors and enables easy access to financial resources, which in turn are essential for the development of an enterprise.

In social entrepreneurship it may not be the case that an (market-driven) exchange value is paid. This may among other be explained with the “mission-related impacts” as objective for a social enterprise (Wei-Skillern, 2007) contrasted to “wealth generation” (Dees, 1998) in commercial enterprises. In addition, stakeholders of social entrepreneurs are usually not able to pay a market driven-exchange value for the provided goods and services due to scarcity of financial resources. A typical “social impact” objective of social entrepreneurs is to raise individuals beyond a minimum accepted level of welfare (Santos, 2009, p. 17). In this case the objectives of social entrepreneurship are consistently with those of the recipients that want to gain satisfaction and personal well-being from the consumption. Thus, in a social context, the entrepreneur only creates value when the provided product or service is of value for the recipient and consequently raises the recipients’ total utility. In contrast to a commercial context, as economists differentiate among producer and consumer surplus (Parkin et al., 2005). As an example, a consumer is misled by a high exchange value for a specific product, expects to gain a high use-value in turn but realizes after the purchase that the utility gain is not as high as expected. Nevertheless, the producer created value.

That is why a value creation measurement model for social entrepreneurship needs to capture the added utility from the perspective of the beneficiary. Correspondingly, Mulgan (2010, p. 38) explains that better metrics for social value creation can be developed when it [value] is approached from a *subjective* point of view. Auerswald (2009, p. 54) points out how to measure value in a context of social entrepreneurship: “The key is to focus not on commodities and willingness to pay as in a utility model, but rather on capabilities and willingness to live”. In addition, Auerswald suggests the capability theory developed by Amartya Sen as a theoretical fundament for a social value measurement model. The capability theory is inherent in the idea that the greatest human need is to achieve well-being (Sen, 1979). Thus it is a theory derived to measure well-being of people and consequently represents the objective of social entrepreneurs, the creation of social impact (Dees et al., 2004).

The two central pillars of Sen’s theory are functions and capabilities. Functions reflect the various things a person may value doing or being. For instance being educated, being nourished, being part of a community are typical examples of “beings”, whereas

playing football, traveling, reading, or consuming energy resources represent the “doings”. Together they belong to the functioning set of a human being. Those available functions are the capabilities of a person. The evaluation of well-being is linked to the amount of capabilities a human being can choose from. Sen calls that the “well-being freedom” which serves as the basis for the individual well-being (Sen, 1992, p. 40). Moreover, Auerswald (2009, pp. 54–55) highlights that capabilities can be measured, regardless of whether the initiative is mediated through a market transaction or directly affect the target audience.

The main advantage of the model is the focus on a willingness to live a good life represented by the capabilities, which are in accordance to the “mission based” and “social impact” objectives which is commonly referred to in social entrepreneurship (Certo & Miller, 2008; Dees, 1998; Mair & Martí, 2006). Thus, the creation of social impact may be defined by the allocation of capabilities that empower human beings with the freedom to pursue those functions that they have reason to value. A social value measurement model should look at the bottom line: monitoring the total utility and therewith focusing on how well an initiative helps to preserve or enhance the prospects quality of life. This can be done by measuring the amount of added capabilities available for the recipient through a social initiative. Moreover it takes into consideration the subjective nature of value as Dumond (2000, p. 1062) calls attention to the concept of value as it is “linked to the use of a product or service and *perceived* by customers rather than objectively measured”.

Nevertheless, it may be too trivial to simply sum up the added capabilities for the stakeholders and assess a unit of value to every added capability. Let us take into consideration that the allocation of the capability of “being nourished” is likely to be higher valued than the capability of “playing football”. **The key question is to what extent a capability enhances the quality of the life of the recipient?** Sen argues, the more capabilities a person can choose from the better ones “well-being freedom” and hence the better the quality of life (Sen, 1992, p. 40). However, regarding the importance of an individual capability for the enhancement of life quality it may be vice versa: The fewer capabilities are available, the more someone values those capabilities. Economists (Bowman & Ambrosini, 2000; Parkin et al., 2005) claim the use-value is

crucial for the valuation of a product or service and Lepak et al. (2007, p. 182) add that the use value is determined by the perceived novelty and appropriateness. As a result, the fewer capabilities someone possesses, the higher the chances that a new product or service adds a novelty to the recipients' capability set.

Consider the simplified example of an individual who possesses already the capabilities of travelling by motorbike, by car, by public transport, and by plane compared to an individual who possess as capability to travel only his legs. If a social entrepreneur enables for both the capability of travelling by bike it is likely that the individual with the fewer available capabilities values the opportunity to travel by bike more than the one who has already several opportunities to choose from. It may be similar to Maslow's hierarchy of needs (1943) that argue an individual is only motivated to pursue advanced needs like belonging, esteem, and self-actualization, if basic needs regarding physiological and safety are met. A social entrepreneur that provides people with capabilities concerning physiological and safety needs is likely to create crucial enhancements in quality of life for those people. In turn it can be assumed that those people do not have many capabilities to choose from, otherwise they would not be interested in such basic needs.

Of course, one can always ask the recipients personally how much they value a certain service or product provided by the social entrepreneur. Even though this option, may be the best approach if one truly want to assess the subjective well-being of a group of recipients because their opinion would influence the assessment of value creation in the most direct way. However, in certain situation like social initiatives in areas of conflict and first aid support it may be paradox to use organizational resources to evaluate the social impact of the activity with the recipients. This is likely to be not in line with the objective of maximizing social impact as those employees may better off working on more important tasks. Further, recipients of a social initiative may be so grateful about the help that they tend to overvalue the support.

The fewer capabilities a person can chose from, the higher one value each of them may be a solid point of destination to find a solution for the key question of how to indicate the value added of a social initiative to its recipients. It can be assumed based upon the previous discussion that the value a social entrepreneur creates highly correlates with

the available capability set of a recipient. Based upon that assumption a model for assessing the social impact creation of social entrepreneur has been developed (see, *table 5*, appendix B). Even though the model looks not very comprehensive and it uses an arbitrary measurement unit it has certain advantages.

First, it can easily be implemented by social entrepreneurs without investing disproportional amounts of organizational resources into complicated methods of measurement. The only information the social entrepreneur need to investigate is the available capability set (quality of life) of the beneficiaries. Moreover, it is applicable for social initiatives that are mediated through market activities but also for activities that non-market related like political initiatives. Second, it reveals diverse information like the quality of the initiative, the total impact created, and the financial effectiveness of the social impact creation not after a long-lasting reporting procedure but almost with the point of finishing a social initiative. Alternatively an assessment throughout the initiative is also possible e.g. on a quarterly basis. That information can be used to communicate about the value of social entrepreneurship in general and in particular to increase the transparency of the initiatives. Finally, those insights become a powerful strategic tool when they are set in comparison to each other, in particular in the same fields of activity. It will highlight the high-impact social entrepreneurs and provide facts that can be used to access further financial resources to grow and replicate the social initiatives.

However, before the model can be officially used by social entrepreneurs the assumptions on which the model is based upon need to be confirmed. This can among other be done in a field study. In particular two issues need to be clarified: How many capabilities are available to each beneficiary prior they benefit from the initiative and to what extent the initiative enhanced their quality of life. A quantitative analysis need to test the assumption. In addition, it should be analysed if a direct relationship exists among the amount of capabilities available to individuals and the Human Development Index of the country they life in. If this is the case the worldwide available HDI can be used as a guideline for the needed information about the capability set of the beneficiaries.

3.2 Evaluation of the Schwab Foundation measurement model

The Schwab Foundation compiles the data for the foundation's annual social entrepreneur of the year award. The social entrepreneurs are evaluated in three separate categories: innovation, sustainability, and direct social impact (Schwab Foundation). The question that arises is of whether the data quality is sufficient to evaluate the social entrepreneurs according to the aforementioned categories? This study focused predominantly on social value measurement and thus can only attempt to answer the suitability of capturing social impact with the available data and does not refer to innovation and sustainability measurement models. When are the data "suitable" to assess direct social impact? The same criteria as for the first research question shall apply and thus the data may be labelled "suitable" for the social impact assessment when an adequate, reliable, and valid measurement model can be developed.

An adequate model is understood as well-grounded in theory and applicable for all social entrepreneurial activities including particularly market and non-market transactions. Reliability can be assessed by posing the following three questions (Easterby-Smith et al., 2001, p. 53): First, will the measure yield the same results on other locations? Second, will similar observations be reached by other observers? Third, is there transparency in how sense was made from the raw data? Validity is concerned with whether the findings are really about what they appear to be about and are not caused by unforeseen events (Robson, 2002). Those unforeseen events can be linked to among others the history (e.g. financial crisis may effect social enterprises in Europe and distort results) and data compiling methods (e.g. interviews as mean of data collection maybe subjected to personal opinion).

It is unclear how the Schwab Foundation used the data to assess the direct social impact created by social entrepreneurs. Consequently, the measurement model developed throughout the methodology will be used as benchmark for the evaluation. The model was developed with the attempt to create the best possible metric for social value creation from the Schwab Foundation data and thus may be a suitable benchmark.

Is it an adequate model? In terms of theory linkage it is not based upon a solid theoretical framework like the utility model or the capability theory that are introduced as suitable theories for value creation in the literature review. However, the applied

indicators are linked to the scholarly discussion about social value creation in some way. For instance do Zahra et al. (2006) and Sen (2007) claim that successful social business models affect legislation which is measured in the indicator *extent of transformation of practice*. Furthermore, scholars (e.g. Dees, 1998; Mair & Martí, 2006) agree that the core objective of social entrepreneurs is the creation of social wealth, which is described by Certo and Miller (2008) as the fulfilment of social and long-standing needs. The variable *result tangibility* focuses on the degree to which the entrepreneurs fulfil their social mission.

The other criterion for an adequate model is the span over various social entrepreneurial activities. This is in particular difficult if the social value creation is displayed in a monetary value because then it often excluded social initiatives that do not work with market commodities such as political or environmental efforts. The Schwab dataset includes social entrepreneurs within twelve different industry sections like health care, environment, enterprise development, microfinance, technology, water sanitation, education, homeless housing, media and communication, rural development, fair trade, and labour conditions. That is a comprehensive field of activities and does not seem to exclude any important fields of activity of social enterprises from the measurement process.

Is it a reliable measurement model? Both, the “individual value” and total value” constructs were tested for multicollinearity among the indicators. The results were negative and thus from an empirical point of view reliability issues are not revealed. However from a theoretical perspective, reliability issues do arise. Based upon the literature review social value creation is strongly related to the economical term use-value that is described as highly subjective to the customer respectively recipient (Bowman & Ambrosini, 2000; Auerswald, 2009). In the same way Mulgan (2010) and Nicholls (2009) stress that social value measurement models need to approach added value from the stakeholder perspective. It is assumed that this is not done in the data compilation from the Schwab Foundation as it can be seen from the variable *result tangibility*. It attempts to measure the improvements in people’s life based upon “documented evidence”. First of all, it is unknown what those documents are about and second of all, the improvement in people’s life is not measured from the beneficiaries’

perspective but rather from the social entrepreneur's or Schwab Foundations point of view. This yields to uncertainty in the transparency of how sense was made of the data and of whether similar results may be reached by other observers.

Is it a valid measurement model? The empirical tests for validation of the constructs provide some evidence for validation because the constructs showed causal relationships to antecedents (social capital and HDI) that are also theoretically respectively logically linked to each other. Nevertheless, threats to validity are in particular caused through data compilation methods. It is known that the data were compiled through questionnaires, but it is unknown what questions were exactly asked and if any possible events occurred during the collection of the data that have had an effect on the results. A possibility to increase the validity of the findings is to initiate focus groups that are used to discuss the findings in cooperation with the involved social entrepreneurs. This way it may become more explicit why certain results occurred (e.g. regional differences in social value creation) and whether this may be due to validity concerns or caused by other issues.

In summary and based upon the available information, it can be concluded that the Schwab Foundation dataset is only **restricted suitable** to measure direct social impact of social entrepreneurs. A major barrier for an absolute suitability is the lack of a fundamental theory for value assessment and the reliability threats. In particular a measurement model with multiple indicators needs to be strongly based upon a solid theoretical basis to avoid chaotic results and difficult interpretations of the findings (Diamantopoulos and Winklhofer, 2001). In addition, social value creation is subjective and thus the measurement approach needs to take this into consideration by an evaluation of added (social) value from a recipient point of view. Nevertheless, empirical validity and reliability tests provided acceptable results and the data enable social impact evaluations of a wide range of different social entrepreneurial activities which ensures a restricted suitability.

The suitability of the dataset for the measurement of social value creation can be improved by applying the proposed model based upon Sen's capability theory (see discussion 5.1 and table 5). This is in particular due to the well-grounded theoretical basis and a subjective approach for the measurement of social value. Nonetheless the

model is based upon an assumption (the fewer capabilities are available, the higher their use value) that needs further investigation. First, to ensure whether the projected causal relationship among the capability set and use value holds true. Second, to identify possible thresholds for the amounts of capabilities to meaningful interpret the added utility for the recipients, respectively the social value creation of the social entrepreneurs. For example, when does a social entrepreneur has a superior impact on the life quality of the recipient and when is it rather a modest impact on the life quality? Those thresholds need to be identified through a field research study by observing the gained use-value of recipients while assessing their available capability sets.

If the models functionality works as assumed, the Schwab Foundation can make use of a measurement model that is well-grounded in theory and applicable for a wide range of social entrepreneurs. Furthermore and due to the limited need of information (size of the capability set, amount of beneficiaries) and the possibility for a standardized approach to gain those information (proposed linkage to Human development index) it is also a highly practicable model. This results into a (theoretical) limitation of reliability and validity threats, because it is expected that the simple data decreases complexity and therewith also the possibility of measurement errors. In short, it may be an adequate, reliable, and valid measurement model for social value creation and a valuable tool for the Schwab Foundation's evaluation for their annual social entrepreneur award.

4. Conclusion

The study was conducted around two central questions which led to a parallel examination of different research issues. On the one hand, the research concern was about the development of an adequate, reliable, and valid measurement model for social value creation. On the other hand, an exploratory analysis of a Schwab Foundation dataset should reveal factors that differentiate among high impact and low impact social entrepreneurs. The findings of both research questions complement each other and may be useful for further research investigations in the respective areas.

An adequate measurement model for social value creation implies to be well-grounded in theory, applicable for all areas of social entrepreneurship while guaranteeing reliable and valid findings. The developed measurement model (see appendix B, figure 3) is based upon the capability theory of Nobel Prize winner Amartya Sen. Sen proposed in his theory that the capability set, meaning the amount of opportunities to do and be what is most valuable for a person, constitutes the well-being freedom and eventually the quality of life. This means the more capabilities a person can choose from, the higher the quality of life will be.

In turn, Sen's argument leads to the assumption that the fewer capabilities a person can choose from, the higher they will be valued. This claim is strengthened through the definition of "use value". Economists (Bowman & Ambrosini, 2000; Lepak et al., 2007; Parkin et al., 2005) explain that the perceived use-value is based upon the novelty and appropriateness of a product or service. Logically, the fewer capabilities are possessed, the higher the chance that an added capability is novel from the perspective of the recipient. The appropriateness of a capability, may be exemplified with Maslow's hierarchy of needs that first of all individuals strive to satisfy physiological and safety needs before they are motivated to pursue advanced needs like belonging, esteem, and self-actualization (Maslow, 1943).

Accordingly, a social entrepreneur who manages an initiative for the allocation of basic food to people in need is likely to deal with a target group that possesses a limited capability set. Based upon Maslow's hierarchy, those people suffer to satisfy basic needs otherwise they would not be attracted by such an initiative. For this reason the

social entrepreneur is able to provide a high impact through the basic food initiative because this way the entrepreneur adds the capability of being nourished to the recipients capability set and this capability is likely to have a superior use-value and consequently the life quality of the beneficiaries will increase.

It is suggested that a field study further investigates the assumed causal relationship between available capabilities and use value of consumed services and products.

Moreover, the Human Development Index (Klugman, 2011) should be taken into consideration as it is believed that the quality of life index which is conducted in 185 countries can in some way be a guideline for the assessment of the capability set. If further studies are able to proof the assumed relationship than the developed model may enable all kind of social entrepreneurs to estimate their individual and total social value creation as well as their financial effectiveness by only investigating insights about the capability set of the beneficiaries and the total amount of beneficiaries served.

The research findings complement each other for the following reason. If the underlying assumptions for the developed social value measurement model hold true, the Schwab Foundation may in future use the model for more reliable and valid identification of their candidates for the annual social entrepreneur of the year award. Therefore the foundation could focus their comprehensive data collection procedures upon information about the beneficiaries' capability sets.

Finally, the model may be a powerful tool to further elaborate on the presented results through continuous explanatory studies within the aforementioned research fields. Additionally, other actors (e.g. social entrepreneurs, social fund managers, politicians) interested to measure social value creation could benefit in various ways from the uncomplicated and practical approach to social value creation that the proposed model provides.

Limitations to the study

[...]

As emphasized the developed measurement model for social value creation is based upon an assumption that needs further investigation. First, to ensure whether the projected causal relationship among the capability set and use value holds true. Second,

to identify possible thresholds for the amounts of capabilities to meaningful interpret the added utility for the recipients and the social value creation of the social entrepreneurs. For example, when does a social entrepreneur has a superior impact on the life quality of the recipient and when is it rather a modest impact on the life quality? Those thresholds need to be identified through a field research study by observing the gained use-value of recipients while assessing their available capability sets.

Finally, the results of the literature review may be limited in particular due to the high quantity of contributions in the fields of social entrepreneurship and the file-drawer problem that implies a possible bias of publications towards “positive” (meaningful) results.

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Appendices

A: Details literature review

Table 1: Structure of literature review

Structure	Key words	Academic Journals
Definition and assessment of (social) value	<ul style="list-style-type: none"> • Capability theory / approach • Marginal utility • Measurement + personal / social wealth creation • Shared value • (Social) + value + conception • (Social) + value + creation • (Social) + value + capture • Theory of value • Use / exchange value • Utility theory • Value appropriation • Value management • Willingness to live • Willingness to pay 	<ul style="list-style-type: none"> • Academy of Management Review • Business Horizons • British Journal of Management • California Management Review • Cambridge Journal of Economics • Entrepreneurship Theory and Practice • Feminist Economics • International Journal of Operations & Production Management • Journal of Business Ethics • Journal of World Business • Stanford Social Innovation Review
Objectives and field of activities of social entrepreneurs	<ul style="list-style-type: none"> • Conceptualization + SE • Definition + SE / entrepreneurship • Domain of SE • Economic system + SE • Ethics + SE • Field of activity + SE • Meaning + SE • Objective + SE • Positive (negative) + externalities + SE • Phenomenon + SE • Stakeholders + SE 	<ul style="list-style-type: none"> • Accounting, Organizations and Society • Business Horizons • Entrepreneurship & Regional Development • Harvard Business Review • International Journal of Nonprofit and Voluntary Sector Marketing • Journal of Business Ethics • Journal of Business Venturing • Stanford Social Innovation Review • Strategic Management Journal • The Academy of Management Journal • The Academy of Management Review

Social value measurement models	<ul style="list-style-type: none"> • Social equilibrium • Typologies + SE • Understanding + SE • Blended + value + measurement • Cost + benefit + analysis • Cost + effectiveness + analysis • Metrics + performance + SE • Monetisation (Quantification) + social + value (impact) • Social business (enterprise) evaluation • Social (shared) + value + assessment / evaluation • Social return on investment • Accounting, Organizations and Society • Entrepreneurship Theory and Practice • Harvard Business Review • Journal of World Business • Public Management Review • Stanford Social Innovation Review
Exploratory analysis	<ul style="list-style-type: none"> • Discriminant analysis + reliability (validity) • Formative (reflective) + measurement • Measurement model + specification (misspecification) • Missing + value + analysis • Structural + equation + modelling • Theory + constructs (latent variables) • Journal of Applied Psychology • Journal of Business Research • Journal of Consumer Research • Journal of Marketing Research • Journal of Modelling in Management • MIS Quarterly • Zeitschrift für Betriebswirtschaft

B: Social value measurement models

Table 2: Measurement model for social value creation

	Assessment of individual social value creation		Assessment of total social value creation	Assessment of financial effectiveness
Key question:	To what extent has the social initiative enhanced the quality of life of an individual recipient? ¹		How many recipients has the social initiative reached in total?	How much does a unit of social impact creation cost?
Example:	70% had a superior increase in life quality / 30% had a high increase in life quality		5.000 recipients have been reached in total	The social initiative costs in total 1 Million EUR
Measurement:	Units of utility / arbitrary measurement			EUR / unit of utility
Interpretation:	Superior social impact	10 units	$(5.000 * .7) \times 10 \text{ units} = 35.000 \text{ units}$	1.000.000 EUR / 46.250 units = ~ 22 EUR per unit of utility
	High social impact	7.5 units	$(5000 * .3) \times 7.5 \text{ units} = 11.250 \text{ units}$	
	Modest social impact	5 units	Total social impact created = <u>46.250 units of utility</u>	
	Low social impact	2.5 units		

¹ **Assumption:** The fewer capabilities a recipient can chose from the more one values the capability provided by the social entrepreneur. The threshold of when an added capability provides a superior respectively high, modest, low, etc. enhancement of quality of life need to be investigated in a field study.

Table 3: Summary of social value measurement models in practice

Method	Description	Example	Problems
Cost-benefit analysis / cost-effectiveness analysis Source: (Tuan, 2008)	Calculate the total costs of an initiative and quantify the benefits (e.g. with one of the other methods) to assess the cost-benefit or cost-effectiveness ratio.	In a job reintegration program the total project costs are set in relation to the saved unemployment payments for the stakeholders mediated to new jobs.	Disagreement of the numbers and weightings used in the calculation and therewith also uncertainty in results.
Stated preferences Sources: (Mulgan, 2010)	Asks people what they would pay for a specific good or service to reveal the perceived use-value.	To assess the social value of a water treatment initiative in Berlin, people may be asked what they might pay to improve the water quality of the Spree.	Stated preferences often do not correlate with actual behaviour
Revealed prices Sources: (Kendall & Knapp, 2000; Paton, 2003)	Compare the goods or services with similar commodities elsewhere and examine the exchange value consumer are willing to pay for it.	A water initiative distributes 1.000 litre of water in a desert region and uses as proxy the water price in another market.	Valuation often fails due to unavailability of proxy data or disagreements of the correct proxy commodity.
Social impact assessment / social return on investment Sources: (Emerson, 2003; Mulgan, 2010; Westall, 2009)	Linking of inputs to outputs to outcomes to impacts.	Inputs = total costs of an initiative; outputs = quantitative effects e.g. jobs created, kg of food distributed; outcomes = better levels of health or income; impacts = actual situation – situation without the initiative	Disagreements about numbers and weightings used. Final result is one number only which causes problems of interpretation
Blended Value or Shared Value Accounting Source: (Emerson, 2003; Porter & Kramer, 2011)	Understanding of value creation from a holistic point of view. Markets are defined by economic and social needs, thus value need to be brought together to reflect the diversity of market needs	Fair trade products which are commercially traded but also meeting certain social objectives like fair payments throughout the value chain.	Problems of ambidexterity. The reporting guides organizations towards maximization of social and financial values.
Life satisfaction assessment Source: (Schepelmann, 2010)	Examines social initiatives by how much extra income a beneficiary would need to achieve an equivalent gain in life satisfaction.	OECD initiative “better life index” and the EU initiative “beyond GDP” work on well-being assessment by research social and environmental indicators.	New approach that remains unproven. Highly sensitive to input assumptions.