# Measuring the social impact of social enterprises on SDG3

## An analysis of the perspectives of funders and social enterprises

EPA2942: Master Thesis

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TU Delft

# Measuring the social impact of social enterprises on SDG3

**An analysis of the perspectives of funders and social enterprises**

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# Preface

This thesis marks the end of my academic career at Delft University of Technology, for which I am immensely grateful. The journey to this point and the insights gained were indispensable. Applying the theory learned over the past six years to complex systems was challenging but highly educational. I want to sincerely thank my supervisors from the graduation committee, particularly Saba, whose time and guidance in this project were invaluable to me. Despite your busy schedule, every meeting ensured that I, even in moments of doubt, became motivated again to continue with the project. Similarly, I would also like to thank Andrea and Alexander for their valuable insights and feedback on this research. Additionally, I want to thank everyone who filled in the survey or took the time to talk to me during this research. The enthusiasm with which you talked about your company or mission was contagious. This project would not have turned out this way without your interesting insights. I would also like to thank my family and friends for their support and listening ear.

Finally, I want to give a big shout-out to Gerard and the rest of the Unifix Care team! Running a start-up (and a million other things) is busy enough, but I especially want to thank Gerard for always finding the time to help me! I could not have done it without your feedback and valuable insights. Spending Wednesdays in the office really made my graduation journey a lot more fun, and I want to thank the whole team for making it such a great experience!

Enjoy reading this thesis.

*Zoé Huizing*
*Amsterdam, December 2023*

# Executive Summary

Social enterprises play a significant role in achieving the Sustainable Development Goals (SDGs). Measuring the social impact of social enterprises presents several challenges, including the complexity of social issues, the need for standardized metrics, and the limited resources available. Obtaining funding is crucial for social enterprises to fulfill their mission. When applying for funding, they often have to report on the social impact they generate, as it is an essential part of the value they create. Another difficulty is that social impact is experienced differently by various actors. The research, therefore, adopts an exploratory approach to understand how funders and social enterprises perceive the impact assessment, particularly for those contributing to SDG 3. Thus, the central question of this research is 'How are funders and social enterprises aligned in measuring social impact on SDG3?'.

This research was conducted in partnership with Unifix Care. Unifix Care is a social enterprise whose mission is to improve access to safe surgical care in Sub-Saharan Africa. The findings presented were derived from a review of the literature, interview rounds, and a survey. The first round of interviews were exploratory interviews with general impact funders. The second round consisted of interviews with social enterprises contributing to SDG and funders funding these social enterprises. The survey aimed to validate statements based on literature and interviews and to give an idea of the data funders and social enterprises use some impact indicators.

A finding of this research is that the change in how the Theory of Change is used, from an internal tool to an external accountability mechanism, indicates a misalignment between funders and social enterprises. While funders may demand accountability, social enterprises initially used it for internal improvement. This shift suggests a divergence in how both parties perceive and utilize this tool for measuring social impact. Social enterprises' power imbalance and dependency on funders can lead to a misalignment in measuring social impact. Contributing to this is the fact that aligning the mission of social enterprises with the strategic goals of funders is considered very important.

A subsequent finding is that there could be a reporting difference between easier-to-measure KPIs from the Theory of Change (input, activity, output) and harder-to-measure KPIs more aligned with the overall goal (outcome and impact). The survey results indicated a mild divergence in opinions between funders and social enterprises on the priority of measuring input, activity, and output indicators versus outcome and impact indicators. Social enterprises were somewhat in favor, whereas funders were somewhat opposed. In terms of quantifying outcome and impact indicators, a simple, state-of-the-art calculation was generally adequate for most social enterprises, in contrast to the preferences of funders. These findings could result in the miscalculation of social impact generated by social enterprises. For this, it is necessary to bring back the Theory of Change as an integrated framework.

Another finding is that both social enterprises and funders focus more on a social enterprise's positive rather than negative impacts. Given that every social enterprise likely has some adverse effects, these should be acknowledged to ensure a comprehensive assessment of the overall positive social impact. Additionally, it is found that the inconsistency in defining 'impact investors' and the varied interpretation of 'impact first' approaches reflect a lack of uniformity in how social impact is perceived and measured. This variability can lead to challenges in aligning the measurement approaches of funders and social enterprises.

The main limitations of this study are related to the small survey sample size, which only provides an indication. More research is needed to draw definitive conclusions. Another limitation is the selection and categorization of indicators in the survey; an attempt was made to do this as generically as possible. However, future research would benefit from validating this selection and categorization by multiple experts.

The following recommendations aim to foster effective collaborations between funders and social enterprises, enhancing transparency and accountability in social impact measurement. A publicly accessible database should be created to share the social impact results of social enterprises. This will allow for establishing normal distributions and facilitate the assessment of the likelihood of success of similar interventions. Therefore, a portion of funding should be dedicated to monitoring the long-term impact of social enterprises. This enhances transparency and allows for a deeper understanding of the effectiveness of various investments in achieving social impact. Funders should also publicize the Theories of Change of the social enterprises in their portfolio. This transparency helps understand how the impact is achieved and mitigates the risk of 'impact washing.' The initiative for these recommendations, particularly the database and publication of Theories of Change, should come from the government or the actors funding the funders. They have the influence to drive more impact-focused decisions and support impact-driven social enterprises. Future studies should incorporate comparative cognitive mapping and game theory to understand better the preferences and incentives of funders and social enterprises. Additionally, using Agent-Based Modelling or System Dynamics with the EMA workbench could yield insights into the effectiveness of specific policies in a complex, uncertain environment.

# Nomenclature

**Abbreviations**

| | |
|---|---|
| Low- and-middle-income countries | LMICs |
| Engineering and Policy Analysis | EPA |
| Sustainable Development Goals | SDGs |
| World Health Organization | WHO |
| Key Performance Indicators | KPIs |
| Corporate Social Responsibility | CSR |
| Human Resource Ethics Committee | HREC |

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# 1. Introduction

## 1.1 Problem Statement

Social enterprises aim to accomplish a specific social mission by selling goods and services while achieving financial sustainability (Di Domenico et al., 2010). In other words, social enterprises, like non-profit organizations, strive to achieve social goals but also, like organizations in the private sector, to generate revenue. These social entrepreneurs are pivotal in achieving the Sustainable Development Goals (SDGs) (Rahdari et al., 2016). Social enterprises maintain their operations through commercial activities. Their main objective is pursuing a social mission instead of profit, locating them within the overlap between the for-profit and non-profit sectors (Doherty et al., 2014, p.). Capital is essential for the inception and expansion of these mission-focused businesses (Cetindamar & Ozkazanc-Pan, 2017). To obtain capital, social enterprises have often relied on grants; however, they are increasingly turning to banks and venture capitalists for assistance (Doherty et al., 2014). The worth of a social enterprise extends beyond what conventional financial assessment techniques can measure, presenting challenges in securing funding. This difficulty stems from the fact that there are no widely accepted methodologies or units for measuring social impact, in contrast to accounting rules for financial success assessment (Molecke & Pinkse, 2017). This importance of social impact has resulted in funders - including foundations, governments, and different types of impact investors - and social entrepreneurs placing increased importance and expectation on social impact measurements (Molecke & Pinkse, 2017).

According to the Organization for Economic Cooperation and Development (2010), social impact is defined as ‘’the positive and negative changes that result from a development intervention, whether intended or unintended and that occur directly or indirectly.’’. Social impact measurement is thus vital for social enterprises to meet accountability standards, fully capture their value to secure financial support, and improve their operational effectiveness (Ebrahim et al., 2014; Ebrahim & Rangan, 2014; Nicholls, 2009). This importance is echoed externally, as funders prioritize transparency, accountability, and demonstrable financial and positive social impact as core criteria (Carman, 2010; Hammad et al., 2023; McEvoy et al., 2016). Small- and medium-sized social enterprises confront significant obstacles in their entrepreneurial path, including a shortage of funding and investors (Abraham et al., 2017). The impact reporting process, which is often time-consuming and resource-intensive for small organizations, also complicates this (Chapman et al., 2023; Ringhofer & Kohlweg, 2019; Roberton & Sawadogo-Lewis, 2022). So, since time and resources are explicitly constrained in small to medium-sized enterprises (Woschke et al., 2017), it is even more essential to work optimally to maximize the chance of survival and potential future impact. Improving impact reporting is thus desirable for social welfare.

## 1.2 Scope of the Research

This research is conducted in collaboration with Unifix Care, a social enterprise dedicated to improving surgical healthcare in Sub-Saharan Africa. This research will thus focus on the social impact measurement of small to medium-sized social enterprises aligned with SDG 3, good health and well-being. SDG 3 occupies a central position among the other SDGs. The comprehensive attention given to the targets of SDG 3 is crucial because their successful attainment is considered essential for achieving the targets of other SDGs (Fernandez, 2020; Situm et al., 2021). In the past years, the rise of global health initiatives has brought about significant changes in providing technical and financial support for health to achieve SDG 3 (Nove et al., 2023). However, according to this same paper, the impact of these initiatives on health systems and the importance of monitoring their impact through appropriate methods and processes have often been neglected.

Assessing impact can be seen as part of a more extensive system. Indeed, social enterprises are each trying to contribute to and influence the achievement of SDG3. Assessing the impact of social enterprises by funders takes place in a decision arena. The actors have roles and interrelationships within the decision arena and act by specific rules. Two assumptions are made to describe it this way. These two assumptions are that agents are expected to make deliberate choices about what to do based on goals when they assume rationality. Actors do not always act with a complete understanding of the system. The presumption of resource reliance is the second one; it explains how actors rely on resources that are under the authority of others. This system is schematically illustrated in Figure 1 (Hermans & Cunningham, 2018). This research focuses on the decision arena, a social space where strategic actors interact and decide how to impact the system of interest.

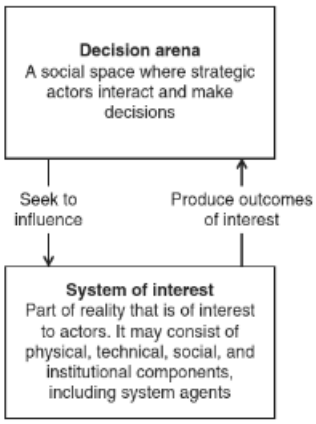



*Figure 1: Framework for actor and strategy models (Cunningham & Hermans, 2018)*

The impact assessment system is a multi-actor system. Interest groups across various domains, including researchers, policymakers, NGOs, impact funders, and the general public, may have different views regarding what constitutes impact. Personal and societal perceptions of what is considered valuable and essential influence the selection of impact metrics and indicators. Such decisions significantly affect allocating scarce resources toward funding and support services (Ma & Agnew, 2022). In multi-actor systems, various participants are engaged, each with unique perspectives on the issue, priorities, and preferences (Enserink et al., 2022). Three critical conceptual dimensions—values, resources, and perceptions—explain some actors' actions in the decision-making process. Values serve as a guide to comprehending the purposes and driving forces behind an actor's actions, and these could also be stated as the objectives. In order to communicate values in more precise terms, objectives and associated concepts like goals, targets,

and criteria are helpful. For example, objectives can be used to establish indicators indicating desired future states. Values are translated into a preference ordering over particular actions, solutions, or outcomes by the positions and preferences of the players (Hermans & Cunningham, 2018). According to Hermans and Cunningham (2018), resources give actors useful tools or means by which they can accomplish their goals. With the help of resources, actors can affect other actors, relationships, network rules, and the environment around them. Perceptions pertain to individuals' mental model of their surroundings, including their view of other participants and the challenges and matters within a sphere of activity (Hermans & Cunningham, 2018). This same paper states that information and perceptions are intricately connected. A person's mental framework or perspective functions as a filter for perception, highlighting and interpreting specific occurrences in a particular manner while rendering others unnoticed and obscured. These filters are shaped by social and cultural influences, shaping and strengthening individuals' preferences and values. Consequently, perceptions and values often have a mutually influential relationship.

This research looks further into the perceptions of impact funders and social enterprises trying to contribute to SDG3 and how these differ. A simple actor analysis can be found in Appendix A. Figure 2 represents the system's power interest grid. The actors in the blue square have been considered in this research. All the actors identified as key players have been grouped in this research as 'funders,' the social enterprises have also been grouped as one.

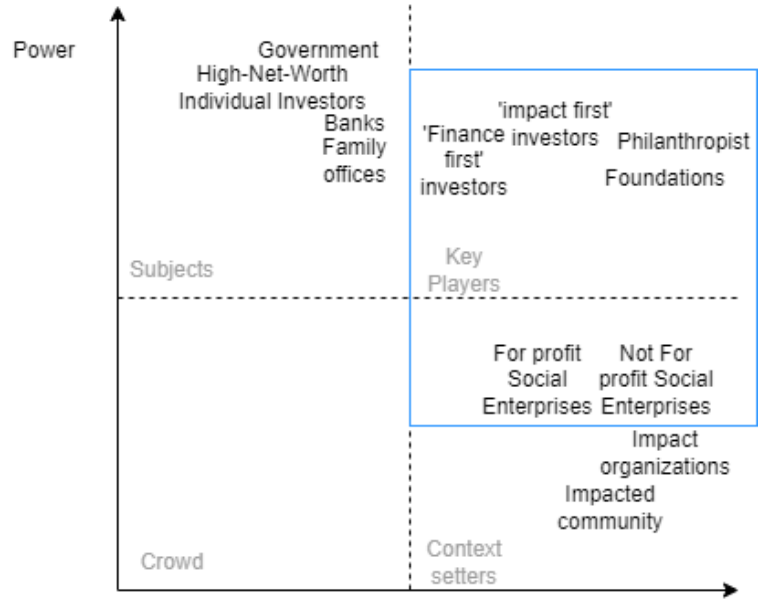



*Figure 2: Power/Interest Grid*

## 1.3 Knowledge Gap

Social impact measurement of social enterprises is a complex task associated with several challenges. The Theory of Change is a framework often used by funders and social enterprises to reflect their social impact accurately. The Theory of Change ensures that the right indicators are identified to reflect the impact of a social enterprise properly. However, a comprehensive overview of all the indicators used in assessing the impact of social enterprises that collaborate to achieve

SDG3 is needed. This can make it confusing for social enterprises that already have limited resources to determine which indicators to use.

Another layer of complexity arises for small to medium-sized social enterprises with limited resources; these organizations must strategically decide how best to demonstrate their social impact. They need to consider which metrics resonate most with funders and how to measure them without diverting excessive resources from their primary mission. For these enterprises, efficiency is paramount; they must ensure that each effort and resource is optimized to maximize social impact.

This difficulty is also amplified by the fact that the relationship between funders and social enterprises also presents challenges, primarily due to information asymmetry and power imbalance. Funders seeking assurance on their investments often have high expectations for impact reporting. This can lead organizations to focus excessively on external reporting, sometimes at the expense of internal efficiency and genuine impact creation. Furthermore, the lack of standardized methods and indicators results in a communication gap, as organizations need a common language to articulate and compare their impact results. This ambiguity can lead to 'impact washing,' where enterprises might overstate their social contributions.

This research seeks to derive exploratory conclusions offering insights into harmonizing impact measurement between funders and social enterprises. The research adopts an exploratory approach to understand how funders and social enterprises perceive the impact assessment, particularly for those contributing to SDG 3.

## 1.4 Research Questions

This section presents the main research question that this study aims to answer, followed by sub-questions that will aid in answering the main research question. To give insight into the perspectives of the social enterprises and funders on how they view specific indicators. This may cause resources and time to be spent better to report on impact.

'How are funders and social enterprises aligned in measuring social impact on SDG3?'

In order to answer the main research question properly, sub-questions have been formed.

1. What are the perspectives of funders and social enterprises on social impact measurement practices?

The first research question focuses on understanding the common impact assessment practices and how social enterprises and funders view them.

2. How are the social impact indicators of SDG3 currently being used by funders and social enterprises?

After establishing the common practices, gathering all the indicators used to assess the impact of social enterprises and how funders and social enterprises have used them is essential.

3. What aspects are considered important by funders compared to those deemed important by social enterprises?

The third research question examines and compares the perspectives of Social Enterprises and funders on various aspects found important when assessing the impact of social enterprises.

## 1.5 Research Relevance

Several facets of this research's applicability are mentioned below. The relevance to science and society is described first. The importance of the master's program, Engineering and Policy Analysis (EPA), of which this thesis is a component, is then examined.

### *Academic relevance*

This research makes multiple contributions to existing scholarly work. First, it extends prior studies on using the Theory of Change by social enterprises and funders. Second, this study sheds light on the focus of different actors in the arena by analyzing their perspectives on the impact assessment of social enterprises. Finally, this study's findings offer policymakers insights on enhancing transparency in the impact reporting of social enterprises.

### *Societal relevance*

The social relevance of this report begins to closely align the perspectives of social enterprises and funders to achieve social impact, thereby simplifying the funding application process. Consequently, more resources can be dedicated to improving health and achieving SDG3. Additionally, more effective spending of funds leads to better resource allocation to impact-driven companies, resulting in a more significant positive impact. The report also explores the standardization of KPIs for reporting impact on SDG3. Such standardization would enable policymakers to make data-driven decisions and facilitate easier comparisons among organizations, leading to more efficient resource allocation to social enterprises.

### *EPA relevance*

Wicked problems stand central in the EPA program. Given the information available, EPA wants to arm decision-makers with accurate information to select the best course of action. Technology, social finance, and impact investing are frequently considered solutions for the world's wicked problems (Peterson et al., 2020). Implementing practical financial engineering has the potential to unlock substantial financial resources, enabling the mobilization of deep pools of capital, which would significantly contribute to creating a healthier world (Bugg-Levine et al., 2012). This research also takes a multi-actor approach to tackle the system of impact assessment to unlock capital for social enterprises.

## 1.6 Report Outline

This report consists of eight chapters. Chapter 1 describes the background, research scope, knowledge gap, and research questions. The second chapter elaborates on the methodologies used to answer the research questions. Chapter 3 examines the state-of-the-art of the literature on impact assessment for social enterprises. Chapter 4 delves deeper into the various perspectives of social enterprises and funders on these practices. Chapter 5 shows how funders and social enterprises use specific health impact indicators. The sixth chapter explores which assessment areas are important for funders and social enterprises. Chapter 7 contains a discussion of the results found in the previous chapters, the limitations of this research, and recommendations for future research. The final chapter answers the main research question.

# 2. Methods

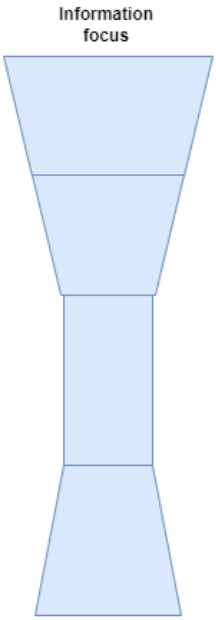
This chapter's goal is to give a comprehensive description of the research methodology and to support the design decision. It provides insights into the connections between the research approaches, methods employed, and the sub-questions addressed in this study.

Section 2.1 displays the research flow diagram, representing the research methods, activities, and their link to each sub-question. It depicts the research flow and structure of this report. Section 2.2 provides a detailed explanation of the different methods employed to address each sub-question.

## 2.1 Research Flow and Structure

Figure 3 presents a research flow diagram to visually depict the research process and the utilization of various methodologies. This diagram delineates the different chapters of the research, indicating the specific methods employed at each stage and identifying which sub-questions each chapter addresses. This visualization represents an 'information funnel.' Initially, it presents a broad overview of the information, but as the report progresses, it narrows down, focusing more specifically on SDG3. In order to give a complete overview, the research questions are stated again. The main research question is as follows:

‘How are funders and social enterprises aligned in measuring social impact on SDG3?'



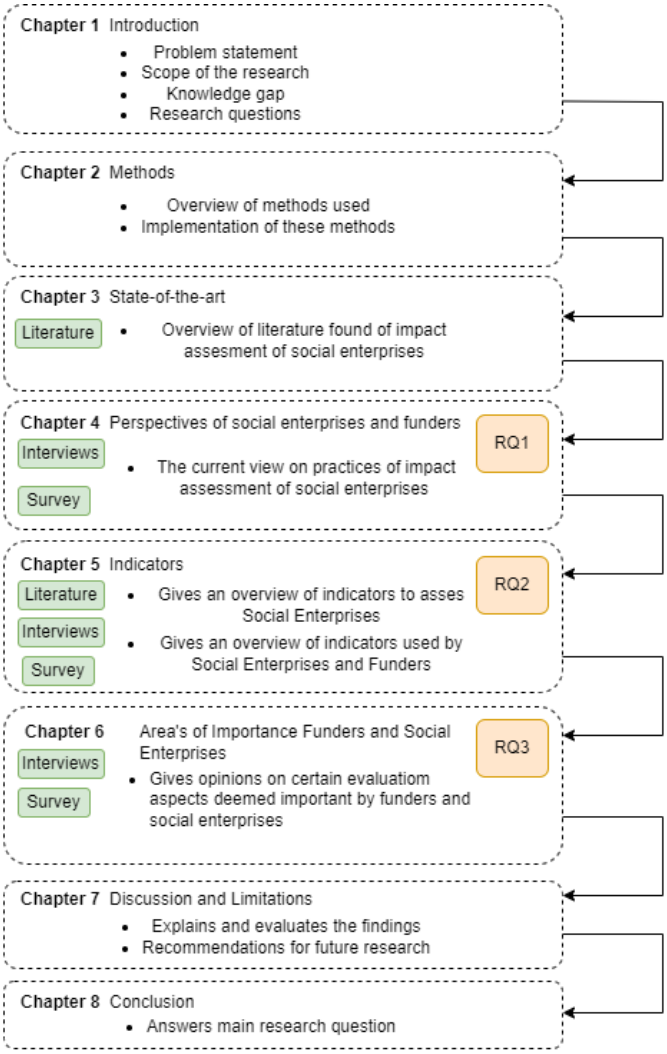




*Figure 3: Research Flow Diagram*

The following sub-questions will help to answer this question:

1. What are the perspectives of funders and social enterprises on impact measurement practices?

2. How are the social impact indicators of SDG3 currently being used by funders and social enterprises?
3. What aspects are considered important by funders compared to those deemed important by social enterprises?

## 2.2 Methods in Sub-questions

In order to provide a thorough analysis, this study employed a literature review, qualitative semi-structured interviews, and a survey. This section will further detail the various research methodologies employed, their purpose, and how they contributed to the answer to each sub-question. Figure 4 shows a schematic overview of the methods used in this research.

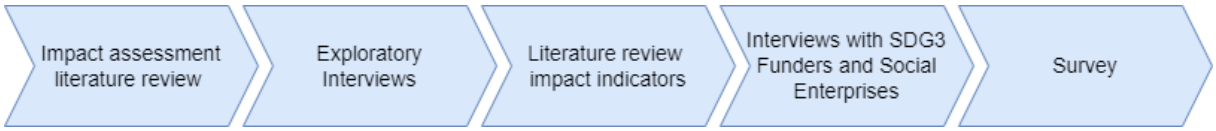



*Figure 4: Overview of Research Methods*

### 2.2.1 Method Triangulation

A qualitative research method is selected for this study as it facilitates the exploration of questions that are challenging to quantify, aiding in comprehending human experiences. This approach enables the investigation of the practical aspects of certain social phenomena in their real-life context, enhancing the depth of knowledge and understanding (Cleland, 2017). This approach is aptly suited to the subject matter under investigation, aligning well with the thematic focus of the research. This qualitative research uses the triangulation technique to foster a thorough understanding of the subject being studied. Multiple methods and data sources are utilized in this approach. Triangulation acts as a strategy in qualitative research, enhancing the validity of the findings by integrating data from various sources (Carter et al., 2014). This research employs Method Triangulation, one of four triangulation types, primarily focusing on data gathering and analysis through various methods like interviews, observations, and field notes. This study's primary data sources are literature reviews, interviews, and a survey, which were synthesized to extract valuable information pertinent to the research topic. The details of the literature review are available in section 2.2.2. The interview process, divided into exploratory interviews and those involving funders and social enterprises contributing to SDG3, is elaborated in section 2.2.3. Section 2.2.4 provides detailed information regarding the survey.

### 2.2.2 Literature Review

Two literature reviews were used to answer sub-questions 1 and 2 partly. The first research question focuses on understanding the current knowledge and practices used to assess the impact of social enterprises in general. The second research question aims to overview the impact indicators currently used by organizations and funders assessing SDG3 indicators.

#### *Impact assessment and knowledge gap*

The following search string was used in Scopus to gather information on the impact assessment of social enterprises:

TITLE-ABS-KEY ( ( "Logic Model*" OR "Logic Frame*" OR "Impact measurement" OR "Impact measuring'" OR "Impact Assessment*" OR "Theory of Change" OR "Impact Pathway*" ) AND ( "Funder" OR "Donor" ) AND ( "Performance Measurement" OR "Evaluation" OR "Accountability" ) ).

One hundred seventy documents were found.
The following inclusion criteria were employed to decide whether papers should be included in this review: 1) Accessibility of the article, 2) Relevance of the article to the Theory of Change, or a similar Logic Frame in conjunction with the evaluation of an initiative/organization, and 3) Focus on providing funders or donors with a means to evaluate initiatives for financial support.
Ultimately, this literature review used 32 articles. The snowballing technique is used to add two more articles to this review.

#### *Impact indicators*

This literature review aims to get the state of the art on the currently used indicators to report on the impact of social enterprises contributing to SDG 3 to answer the second research question. It is used to map the different data.

The following search string was used in Scopus to determine peer-reviewed articles:

TITLE-ABS
KEY ( ( ( health OR medical OR clinical ) AND ( funder* OR donor* OR fund OR invest* ) AND ( "Impact Investment*" OR "impact measurement*" OR "monitoring and evaluation" OR "M&E" ) AND ( "Indicator*" OR "KPI*" OR "metric*" ) ) ) . This search resulted in 144 document results.

Another search was done in PubMed with the following search string: ( funder*[Title/Abstract] OR donor*[Title/Abstract] OR fund[Title/Abstract] OR invest* [Title/Abstract]) AND ( "Impact Investment*"[Title/Abstract] OR "impact measurement*"[Title/Abstract] OR "monitoring and evaluation"[Title/Abstract] OR "M&E" [Title/Abstract]) AND ( "Indicator*"[Title/Abstract] OR "KPI*"[Title/Abstract] OR "metric*" [Title/Abstract]). This resulted in 133 articles.

Ninety-four duplicates were removed in this search, which resulted in 183 remaining articles. These articles were then scanned by title and abstract to see if they were relevant to this research. The following inclusion criteria were set up: 1) related to impact assessment, 2) accessible, 3) includes ways to develop indicators, and 4) Healthcare oriented. This resulted in 94 remaining articles.

Afterward, a full-text analysis was conducted. The articles were included with the same inclusion criteria. The snowballing method was used, and four more articles were added to this review. In total, 44 articles were included in this literature review.

### 2.2.3 Qualitative Semi-structured Interviews

In the context of this research, it is necessary not only to rely on academic articles but also to understand real-world applications. After all, funders ultimately decide which of the social enterprises are funded by them. Therefore, this research encompasses two rounds of qualitative semi-structured interviews, which lasted approximately 30 minutes. Interviews were conducted in Dutch for participants who spoke Dutch; with participants who did not speak Dutch, interviews were conducted in English. The first round of interviews took place in the latter part of May 2023—the second round focused on social enterprises and funders operating specifically on SDG3. The interviews with the funders occurred in the latter part of July and early August 2023. The interviews with the social enterprises took place in the second half of August. The order in which funders were interviewed first and then social enterprises were chosen because of the predominant influence of funders within the sector. The goal was first to gain insight into funders' perspectives and views on various relevant issues and how social enterprises view these things. A consent form and data management plan were developed and approved by the Human Resource Ethics Committee (HREC) of the TU Delft. The consent form was discussed during the interview, and the participant consented. These interviews were recorded and transcribed using Microsoft Teams. Subsequently, a transcription summary was made and sent to the person being interviewed. If the interviewee had objections, these changes were implemented and sent again for approval; this process repeated itself until it was approved.

#### First round: exploratory interviews

This study conducted five exploratory interviews with various impact experts to deepen understanding of social enterprise impact assessment practices. Although all were planned as semi-structured, one interview was conducted via written responses due to time constraints. Participants were selected from a diverse group of companies and experts in impact measurement, including impact investors, foundation professionals, and specialists from knowledge institutes and small business impact measurement organizations. This approach aimed to gather varied opinions on impact assessment across different sectors, not exclusively SDG3-focused. The participants were approached on Linkedin, primarily through sending friend requests accompanied by messages, utilizing both the search function and the snowball technique. The questions and complete list of participants are stated in Appendix B.

### Second round: SDG3 funders and social enterprises interviews

Nine interviews were conducted for this study, five with SDG3 funders and four with SDG3-focused social enterprises. The aim was to gain insights into the importance of specific impact indicators on SDG3 from the funders and social enterprises. For this step, individuals working for Social Enterprises contributing to SDG3 or funders financing these organizations were approached. Using personal contacts and through LinkedIn, 20 funders and 20 social enterprises were approached. The questions and more information on the interviewees can be found in Appendix B.

## 2.2.4 Survey

The study sought to clarify social entrepreneurs' and funders' opinions and practices. Interviews indicated challenges in extracting clear insights about indicator usage and interpretations. As a result, a survey was employed, prompting stakeholders to articulate their evaluations more explicitly. Initially, the Delphi method was considered. The Delphi technique is a method that involves subject matter experts to reach a consensus through a series of interviews and questionnaires (Adler & Ziglio, 1996). However, reaching a consensus proved challenging because of the diversity of social enterprises. Therefore, an exploratory survey was chosen to gather initial data, potentially informing a future Delphi method application.

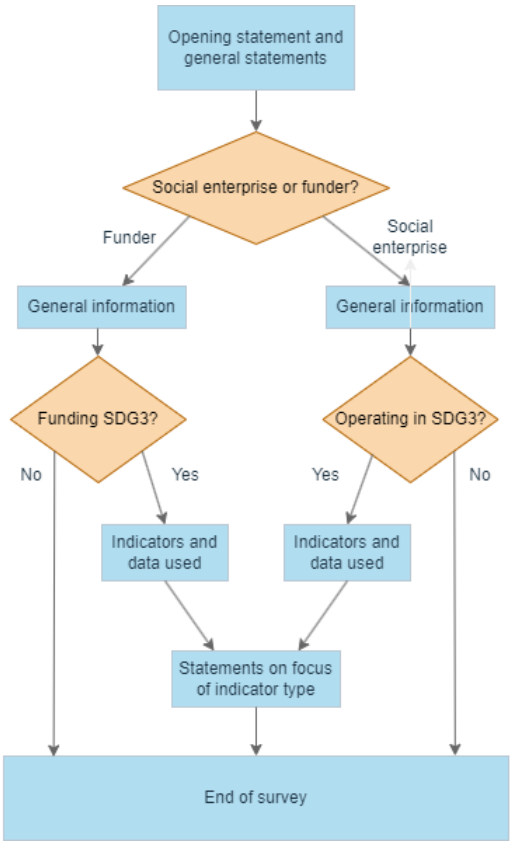



*Figure 5: Survey flow*

Qualtrics was used to set up and distribute the survey. The survey was divided into three parts. A schematic of the survey's flow is shown in Figure 5. In the first part, participants were presented with five statements derived from existing literature and conversations with funders and social enterprises. Participants were asked to rank these statements using a five-point Likert scale and had the opportunity to provide additional feedback. The second part of the survey varied between funders and social enterprises. This section collected general information about participants to determine if they worked for or funded enterprises that helped achieve SDG3. If they did not, the survey ended for them at this point. Next, the survey addressed what kind of data the social enterprises and funders used specific impact indicators. The selection of indicators was the same for social enterprises and funders. The final part of the survey consisted

of three statements applicable to funders and social enterprises. Participants had to rate these statements, again using a five-point Likert scale. Selection of participants

### Selection of participants

A post with the link to the survey was shared on LinkedIn, which generated four reposts and 1823 impressions. However, targeted approaches to get people to complete the survey proved more effective. Both funders and social enterprises were strategically approached to participate in the survey, using LinkedIn and e-mail for communication and engagement. The funding companies approached were based on a list from the European Venture Philanthropy Association (EVPA), the European network for investing in impact co-funded by the European Union. Their members comprise various organizations, including foundations, banks, academia, and impact funds. Members were filtered for those active in healthcare, and the organizations were contacted via their general e-mail. Then, the companies were also searched on LinkedIn, and the individuals who work at those companies and are responsible for impact assessment of healthcare companies were contacted. One hundred twenty-six messages were sent to funders, most based on this list and using the snowball technique on LinkedIn. One hundred fifty-three messages were sent to people from social enterprises, mainly through LinkedIn. Names of social enterprises were collected primarily by looking at the portfolio companies of the funding companies approached, personal contacts from Unifix Care, "most impactful health startups in Africa" listings on Google, lists from the Bill and Melinda Gates Foundation, and by using the snowball technique on LinkedIn.

### Analyzing results

A total of 44 responses were analyzed. In this process, the export function in Qualtrics was used. This function creates an Excel file containing all answers, including incomplete answers. The dataset was initially transferred to Microsoft Excel for a comprehensive analysis of the results. First, whether the respondents were unique was identified by looking at the different IP addresses. This analysis revealed that two responses had the same IP address. Next, the responses were examined more closely, and it was determined that they were from two different individuals from the same company. Therefore, both responses were included in the analysis. As described earlier, efforts were made to end the survey early for funders and social enterprises that did not operate in SDG3. However, it was noted during the analysis that one social enterprise focused on food processing, which is outside the scope of SDG 3. Therefore, their response was excluded from the survey results. In addition, one funder indicated that they had yet to undertake any health-related projects and marked many indicators as irrelevant. Their response was also omitted from the final analysis. A 95% confidence interval was used to analyze the results for the Likert-scale statements. A t-distribution has been used as the n is lower than 30.

# 3. State-of-the-art

This section summarizes the body of literature examined in this study. A literature review has been conducted to enhance the understanding of the prevailing insights into social enterprises' societal impact measurement practices.

The chapter begins with a detailed examination of the crucial role that social impact measurement plays in the operation of social enterprises. Additionally, it outlines a structured approach for evaluating social impact, known as the Theory of Change.

## 3.1 The Necessity of Social Impact Measurement in Social Enterprises

The precise definition of social entrepreneurship remains a topic of debate among experts (Bugg-Levine et al., 2012). Nevertheless, a common consensus among scholars is that social enterprises primarily aim to deliver social value while ensuring financial sustainability (Lall, 2019). Providing goods and services is an essential component of social entrepreneurship, similar to conventional entrepreneurship. However, this is not an end goal. Instead, it serves to achieve societal change (Grieco, 2015).

According to Bugg-Levine et al. (2012), two distinct factors led to the emergence of social entrepreneurship: business ethics and corporate social responsibility (CSR) on the one hand and NGOs and the third sector on the other. Focusing on economic activities helps distinguish social enterprise from pure social movements and charitable and philanthropic endeavors (Grieco, 2015). However, the transformative social ambition sets social entrepreneurs apart from businesses with a conscience and other ways to do good, like CSR; instead of only aiming to create money without harming the environment, social entrepreneurs prioritize achieving their social missions (Grieco, 2015).

All businesses struggle with evaluating performance beyond existing financial criteria, yet for social entrepreneurs, this concern is amplified as it is their primary concern. They are typically held accountable to a wide range of stakeholders as they employ corporate methods to achieve social goals; their organizational capability is also frequently low to medium (Grieco, 2015). According to this research, social impact measurement can be used as an internal tool to help with resource allocation and aid social entrepreneurs in running their businesses. Second, it is a reporting tool that can inform stakeholders of the goals the business is achieving. This latter element is especially crucial since it speaks to investors who want assurances about the value of their investments. Mainly because a study by (Block et al., 2021) shows that the importance of the societal problem a social enterprise addresses is a criterion different impact investors see differently in importance. They state that this criterion is fundamental to all impact investors, ranking second out of seven criteria. However, it is less important to more finance-first investors than to more impact-focused investors.

## 3.2 The Theory of Change: A Framework for Measuring Social Impact

The preceding section established the essential nature of measuring the social impact within social enterprises. Especially as the emphasis on accountability in intervention programs and services is progressively increasing (Carman, 2010; Lynch-Cerullo & Cooney, 2011; McEvoy et al., 2016; Scheirer, 2000), it has become even more essential. It is now commonplace for governments, accreditors, funders, and communities to request updates on social accountability progress from relevant institutions (Wood et al., 2022). However, measuring social impact is challenging due to the intangibility of social outcomes. To render performance metrics tangible, the Theory of Change often determines them in a social enterprise (Ringhofer & Kohlweg, 2019; Roberton & Sawadogo-Lewis, 2022). The Theory of Change links social issues to related activities and impacts, establishing the foundation for defining a social enterprise's contribution (Bugg-Levine et al., 2012; Grieco, 2015), making it increasingly favored by funders (Breuer et al., 2016; Chapman et al., 2023; Esponda et al., 2021; Jackson, 2013; Prinsen & Nijhof, 2015). They also prefer the Theory of Change because it enables them to fund specific program components that align closely with their goals and interests (Lynch-Cerullo & Cooney, 2011).

The Theory of Change is an outcome-driven approach, typically illustrated in schematic diagrams like Figure 6, that delineates a program's logical progression from inputs to long-term results, highlighting the causal relationships, assumptions, and risks (Adedeji et al., 2022; Breuer et al., 2016). Academic consensus defines 'output' as an intervention's direct results, 'outcome as its medium-term effect, and 'impact 'as the long-term consequences (Amin et al., 2022; Bodem-Schrötgens & Becker, 2020; Hodson et al., 2023). Indicators often help to track these categories of a Theory of Change (Adedeji et al., 2022).

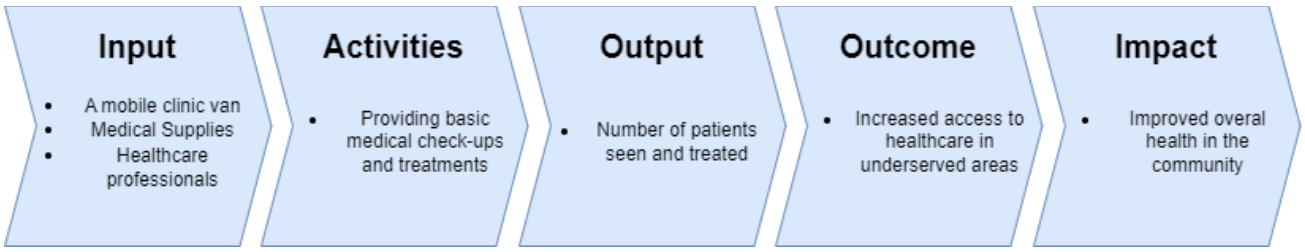



*Figure 6: Example of a simple Theory of Change*

The Theory of Change, originating from the Logical Framework Approach (Chapman et al., 2023), shares components with it, as both examine assumptions, engage stakeholders, and evaluate program logic (Ringhofer & Kohlweg, 2019). Both methods outline a program's inputs, processes, outputs, and outcomes (Breuer et al., 2016). Because the Logical Framework Approach became more rigid over time, the Theory of Change revived its original analytical components, offering a flexible alternative that encourages critical thinking (Ringhofer & Kohlweg, 2019). (Breuer et al., 2016) also states that the Logical Framework Approach can be inflexible and needs the Theory of Change's explicit illustration of the causal pathways that affect change. The Theory of Change

delves deeper into social change, offers a comprehensive view, and addresses gaps often missed by the Logic Framework Approach. It stresses inclusive participation, continuous exploration of causal links, and periodic reviews to refine program assumptions (Chapman et al., 2023).

The Theory of Change is a valuable evaluation tool for various organizations and initiatives. For instance, Adedeji et al. (2022) used it to assess the impact of a digital health system in Nigeria, specifically for mother and child healthcare in LMICS. Similarly, Traynor et al. (2022) employed this approach to study the effects of nature-based early learning on children's health. Additionally, Strachan (2021) utilized the Theory of Change to guide research on interventions preventing female genital mutilation/cutting, emphasizing quantifiable outcomes.

## 3.3 Challenges in Measuring Social Impact

The literature identifies three main challenges below that underscore the need for enhancements in this area.

### 3.3.1 The High Cost of Measuring Social Impact

As previously highlighted, social enterprises frequently face challenges assessing their social impact due to limited recourses. As the demand for impact measurement is growing, the increased emphasis on impact and accountability has heightened the pressure on social organizations to focus on measuring performance (Bassi & Vincenti, 2019). The monitoring and evaluating of an intervention is often time- and resource-consuming (Roberton & Sawadogo-Lewis, 2022). Additionally, relatively small organizations with few resources usually perform social impact measurement, making investing time and resources unrelated to their primary business activity a high opportunity cost (Dufour, 2019).

In the context of these challenges of impact measurement, the Theory of Change is often mandated by funders to assess the social enterprise's impact due to its advantage of correctly mapping impact. However, Chapman et al. (2023) have pointed out that applying the Theory of Change can sometimes be incomplete or inadequate. This shortfall is primarily due to the enterprises' limited capacity to conduct thorough evaluation and learning procedures within the Theory of Change. Furthermore, Ringhofer and Kohlweg (2019) highlight the operational challenges of its implementation, particularly the constraints related to time and resources. This sentiment is echoed by Carman (2010), who mentions that the intensity of the Theory of Change can pose challenges. Recognizing these challenges, some social finance organizations are becoming more attuned to the potential strain their reporting requirements might place on social enterprises (Lall, 2019).

### 3.3.2 Navigating Power Imbalances in Impact Measurement and Funding Relationships

An additional challenge in impact measurement arises from the power dynamics between funders and recipients (Foster et al., 2021). In the monitoring and evaluation of international development

projects agencies, these issues also often arise (Amin et al., 2022; Valcárcel-Dueñas & Solórzano-García, 2019). A complex stakeholder network, knowledge gaps, and a lack of precise alignment between delivered benefits and community needs make agency theory particularly relevant to these programs (Carman, 2010). With this, the funder is viewed as the principal and the organization as the agent. Adverse selection and moral hazards are common risks associated with agency theory, and emphasizing the agents' accountability and transparency helps prevent these risks (Carman, 2010). This may lead to funders imposing too many restrictions on organizations reporting on their impact.

Frey (2021) notes that funders often impose their views and preferred Theory of Change on the organizations they support. While aiming to use their funds effectively, they set specific rules and impact metrics, sometimes overlooking crucial aspects. This can push organizations towards short-term achievements over lasting impacts and solid relationships. Short-term funding can also diminish an organization's long-term influence. Thus, while funders' intentions are positive, they should weigh the long-term consequences and foster genuine partnerships with their beneficiaries.

Chapman et al. (2023) echo this by highlighting tensions between donor expectations and the genuine intent of a Theory of Change. They emphasize the mismatch between on-ground realities and funder demands, with some funders acknowledging complexity but still imposing rigid expectations, especially concerning the Theory of Change, thereby limiting adaptability and evolution in the process. The manifestation of learning through iterative development cycles plays a crucial role in promoting social accountability. This iterative process facilitates continuous improvement and adaptation, ensuring organizations remain accountable to their stakeholders and actively learn from their experiences (Wood et al., 2022).

A study by Valcárcel-Dueñas and Solórzano-García (2019) underscores the importance of monitoring and evaluation practices for Third Sector entities and their imperative to communicate and demonstrate their results and efficiency. Stakeholders, including funders, require information about Third Sector entities' performance and socioeconomic impact. External pressures and norms influence this demand for transparency. The paper emphasizes the need for a standardized monitoring and evaluation methodology that effectively integrates internal information needs with external stakeholder demands. However, there is a concerning trend where the Theory of Change, indicator lists, and data gathering become disjointed initiatives. Instead of logically deriving valuable insights for stakeholders, governments, and local communities, these practices often devolve into mere tick-the-box exercises to satisfy donors (Roberton & Sawadogo-Lewis, 2022). This same article further notes that their significance is lost without clearly understanding what indicators measure. When reported indicator numbers fall short of targets, they are viewed as a collection of metrics rather than what they should be: a depiction of whether a project's intended "impact pathways" were effective.

Additionally, Lynch-Cerullo and Cooney (2011) caution that overemphasizing external-oriented reporting can stifle organizational learning, reducing its overall utility. This sentiment is echoed by Bakibinga-Gaswaga (2019), as many development initiatives need to meet expectations or achieve the desired impact on the intended communities, often due to rushed attempts to secure funds, improper objective definition, and the exclusion of beneficiaries from early project decisions. Carman (2010) further emphasizes the need for improvement in transparency practices. He critiques the sector's narrow emphasis on external outcome reporting, arguing that this approach needs to pay more attention to other valuable evaluation methods, thereby limiting organizational learning and growth.

Monitoring and evaluation reports are a crucial component of the funder's responsibility to funding agencies and stakeholders and are used to judge success or argue for funding. However, monitoring and evaluation methods concentrating on straightforward measures portray an unrealistically simplistic picture (Njah et al., n.d.). Additionally, Brigham and Hayes (2013) state that organizations frequently adopt the viewpoints of funders in order to position themselves favorably for future funding. Organizations may overstate their capabilities to secure funding. Addressing these issues requires funders and organizations to invest resources and effort in monitoring, performance measurement, and oversight (Carman, 2010). Bassi and Vincenti (2019) agree as they state that there is the problem of control over results, which refers to how managers exert control over their interventions and the outcomes they achieve.

Nonprofit managers and leaders encounter three main challenges. First, they must determine which aspects of their organization's operations can be measured, such as inputs, activities, outputs, outcomes, or impacts. Second, they must identify the specific measurements funders require to ensure accountability. Finally, they must explore how measurement practices can improve the organization's effectiveness in fulfilling its mission (Bassi & Vincenti, 2019).

### 3.3.3 Flexibility versus Standardization in Assessing Social Impact

Grieco (2015) highlights the complexity of assessing social impact due to challenges in formulating qualitative and quantitative reporting measures; various groups have devised numerous models to address this, but no single model suits all organizations given their diverse sizes, capacities, and focuses. Social enterprise performance evaluation systems vary significantly in response to several endogenous and exogenous variables associated with various organizational settings, including economic, political, social, and cultural factors (Bassi & Vincenti, 2019). This same article states that there needs to be more satisfaction among funders with the current systems of social impact evaluation of social enterprises. There is a surge of unstandardized performance measurement tools, overwhelming managers and hindering the goal of enhanced efficacy (Lynch-Cerullo & Cooney, 2011). Thereby, Carman (2010) highlights the importance of the need for more standardization in evaluation tools and reporting requirements

imposed by funders, leading to distractions and debates regarding the superiority of various evaluation systems.

In contrast, Camoletto et al. (2017) reached a conclusion that challenged the notion of standardization. Instead, they advocated for more flexible and adaptable approaches. Using a Logic Framework Approach model, they looked at different evaluation models and directly quantified the relationship between inputs and outputs. The social value, which is monetized, is accompanied and supported by the created financial value. This monetizing uses models like cost-benefit studies, randomized controlled trials, and the social rate of investment. However, it is essential to acknowledge the existence of methodological gaps that continue to pose challenges. Despite this, there was a growing recognition that the sharing of values and alignment of goals between stakeholders was an indispensable prerequisite for achieving a more accurate measurement of social benefits. By striving for common ground, the quest for more precise and insightful assessments of social impacts could overcome these hurdles and pave the way for improved practices in the future (Camoletto et al., 2017). In addition, Jäger & Rothe (2013) state that funders would benefit from a broader perspective to achieve actual value for money, even if it means moving away from traditional, easily measurable outcomes. Impact evaluation cannot be limited to just economic effects. Companies must equally incorporate economic and social challenges. Key performance metrics for non-economic issues are vital for funders who want transparency. Organizations working in economic development should give donors information on non-economic impacts to demonstrate that they accomplished their goals (Jäger & Rothe, 2013). Some indicators can be assessed or calculated using various methods, such as vignettes, record reviews, consultation observations, or observation and re-examination to gauge the standard of care. Each method involves a trade-off between the amount of resources needed (time, tools, technical know-how) and the precision and range of the measurement (Roberton & Sawadogo-Lewis, 2022).

## 3.4 Conclusion

In conclusion, this chapter has delved into the intricate nature of social impact measurement within social enterprises, the essential role of the Theory of Change as a framework for such evaluations, and the significant challenges these organizations face in this endeavor. While the Theory of Change provides a structured approach to link activities with intended impacts, it also presents practical difficulties, notably when scarce resources and power imbalances exist between funders and grantees. Moreover, the varied expectations of funders and the diverse nature of social enterprises make the standardization of social impact assessment complex and often contentious. The dialogue between standardization and flexibility in assessment methods reflects the need for a dynamic approach that accommodates the unique contexts of different social enterprises.

# 4. Diverse Perspectives and Practices in Social Impact Measurement

In the previous chapter, the state-of-the-art of impact assessment for social enterprises was discussed. With these insights, the perspectives of funders and social enterprises on specific issues are discussed in this chapter. Therefore, This chapter aims to answer the first research question: "What are the perspectives of funders and social enterprises on impact measurement practices?". Exploratory interviews and a survey were used to answer this research question.

The interviews were conducted with various types of funders to obtain as general a view as possible of the different opinions on social impact measurement techniques for social enterprises. An overview with the description of the interviewed companies and questions can be found in Appendix B.

## 4.1 Perspectives of Funders on Social Impact Measurement Practices

Most funders interviewed insist on utilizing a Theory of Change to evaluate social enterprises. Company 3 points out that while the Theory of Change helps formalize its impact process within the company, its primary function is understanding the operational steps necessary to create a meaningful impact. Company 5 emphasizes the need for investor alignment and champions the development of a consolidated questionnaire that caters to all investor needs without burdening social enterprises. Company 5 also underscores the necessity for a paradigm shift in impact measurement. They advocate for investors to prioritize the most fitting approach over mere compliance. Reporting emerges as a significant challenge, especially for social enterprises. Ideally, reporting should be an intuitive extension of impact management activities, demanding greater transparency and relevance.

Company 1 acknowledges the prevailing complexity in the impact assessment field due to the abundance of impact measurement models. While diverse models cater to specific needs, organizations need a unified language to measure their impact accurately. A few widely recognized tools would greatly assist in streamlining impact measurement practices; the field needs to be more cohesive, leading many entities to need help finding the most suitable approach. Company 3 emphasizes standardizing KPIs across sectors or within specific domains. However, they also highlight the need to consider contextual differences. While standardization is seen as a way forward, the process should account for the unique characteristics of each domain. Collaboration and agreement, similar to the approach used for the SDGs, are crucial in establishing standardized indicators for different impact domains. Attempting to quantify impact with consideration of contextual factors can lead to complete assessments. Company 3 recognizes the need for a common language in impact measurement and sees the SDGs as the only option.

Company 3 states that a prominent challenge for companies in Africa is the effective tracking of KPIs. Existing frameworks guide defining pertinent KPIs, but tracking them remains problematic. The intricate nature of these frameworks can deter companies from embracing them entirely, leading to ambiguity. To navigate this, companies should pinpoint their needs and amalgamate relevant components from diverse frameworks to shape their impact measurement strategies.

## 4.2 Alignment and Differences between Funders and Social Enterprises

Five statements were crafted from literature findings and interviews with funders to validate the collected data and examine how social enterprises differ in their perspective. These statements were included in a survey, where respondents were prompted to indicate their level of agreement on a scale of 1 to 5, with 5 representing 'Strongly Agree' and 1 representing 'Strongly Disagree'. The weighted average of the scores for each statement and the 95% confidence interval are presented in Table 4. A clustered stacked bar chart of the results of the statements is represented in Figure 7. The results for each statement are discussed below.

*Table 1: Weighted mean and confidence interval for Statements 1 - 5 (Scale: 1-5)*

| **Statements** | **Weighted Average Score SE (n=25)** | **95% Confidence interval SE (n=25)** | **Weighted Average Score Funders (n=19)** | **95% Confidence interval Funders (n=19)** |
|---|---|---|---|---|
| S1. Social enterprises need to define their own specific impact indicators when seeking funding | 4.28 | [3.88, 4.68] | 3.84 | [3.28, 4.40] |
| S2. It is essential to have a concrete Theory of Change when running a social enterprise. | 4 | [3.60, 4.40] | 4.47 | [4.10, 4.84] |
| S3. Social enterprises should continuously measure their impact. | 4.56 | [4.32,4.80] | 4.74 | [4.52, 4.96] |
| S4. Meeting or failing to meet agreed impact targets by the social enterprise should have financial consequences (e.g., bonus). | 3.44 | [2.98, 3,90] | 3.53 | [3.01, 4.05] |
| S5. There is a need for comparable impact KPIs for social enterprises. | 4.48 | [4.19, 4.77] | 4.42 | [4.02, 4.82] |

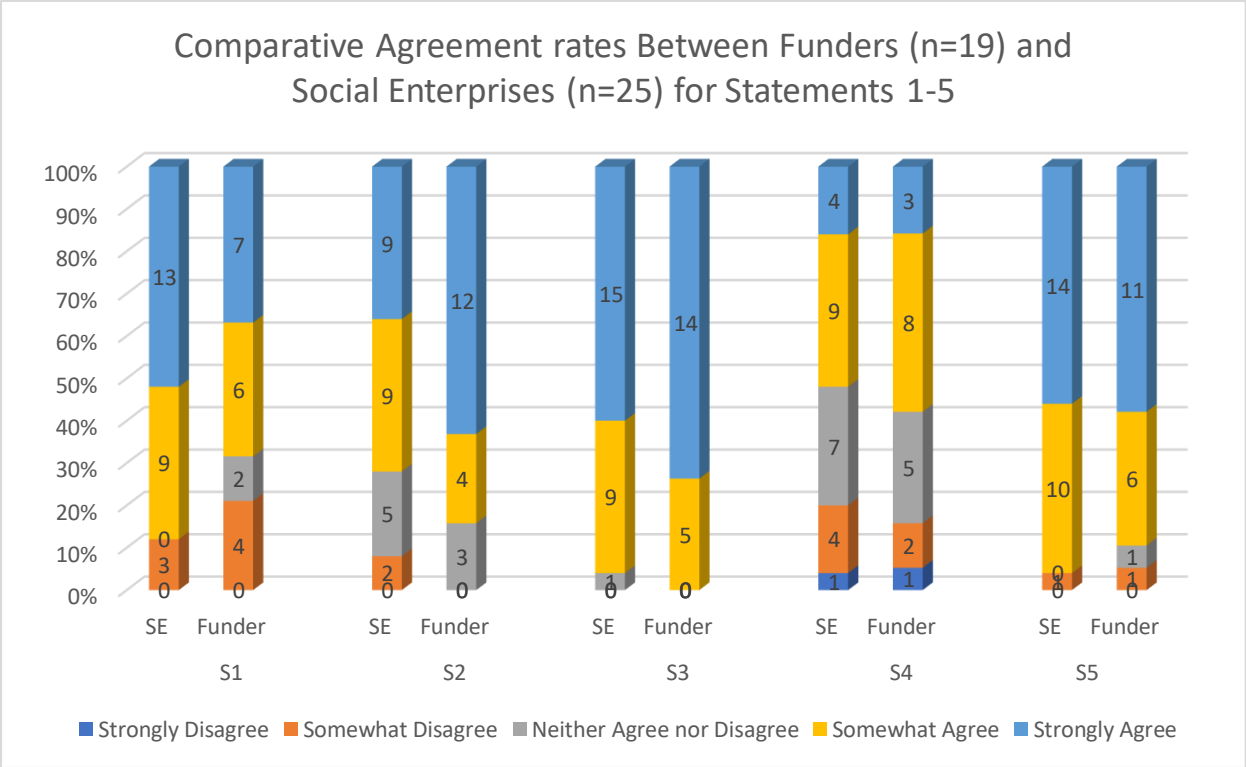



*Figure 7: Clustered stacked bar chart of statements 1-5*

### *S1. Social enterprises need to define their own specific impact indicators when seeking funding*

Social enterprises generally agree that they need to define their social impact indicators when seeking funding, as they have a weighted average score of 4.28, with funders slightly less in agreement (weighted average score of 3.84). The relatively wider confidence interval for funders suggests a greater diversity of views compared to the responses from social enterprises.

Additional feedback from funders on this statement includes that it is considered essential to define their own KPIs, not just because of the impact made but also to emphasize the commercial value-added. Some other comments include that social enterprises should consult with investors when defining impact indicators, as investors often require specific impact indicators for reporting purposes. It is essential to align with the priorities and drivers that funders deem important. Therefore, some indicators are already given to maintain credibility and avoid biases, but others may be added depending on the benefit. Some funder also states that impact is a highly diluted concept among investors and entrepreneurs. Social enterprises should set the bar high but do not have to reinvent the wheel. Using an indicator like "amount of lives saved" or "tons of CO2 reduced" is good enough. One funder who somewhat disagreed with this statement stated that individualization can sometimes compromise the comparability of the impact across different enterprises or sectors. Another funder states that social enterprises must have a clear goal of

making social impact and check what investors are looking for; otherwise, getting funding will be very difficult. Social enterprise is a journey of improvement, making more impact, and tackling more problems, but not all at once.
The feedback of the social enterprises included that they firsthand experienced that tailoring their own indicators guarantees they pick the best metrics. Additionally, social enterprises should do this for their own sake because they want to know if they make a difference – not for funding. Another social enterprise agrees for this reason, but they state that funders must also have their own criteria as a guideline. Another social enterprise states that in a funding stage, they may not know their exact indicators, and they still want to go ahead, so picking their own indicators is preferable.

### *S2. It is essential to have a concrete Theory of Change when running a social enterprise*

Social enterprises somewhat agree that having a concrete Theory of Change is essential, with an average score of 4. The range of the confidence interval is 0.80, which indicates a moderate level of dispersion in the opinions of social enterprises. Funders agree more strongly, with an average score of 4.47. Their confidence interval is slightly narrower, with a range of 0.74, pointing to a tighter clustering of opinions among funders compared to social enterprises. The higher lower bound of the confidence interval and the higher weighted average indicate that funders are generally more convinced about the necessity of a Theory of Change.

Funder's feedback on this statement includes that they agree that, in this way, social enterprises are forced to think about the problem they are solving. They state that there is a tendency for some to conceptualize their mission too broadly, such as aspiring to solve climate issues while also addressing poverty through a single, inexpensive product. Funders advocate for a focused approach, where impact is envisioned in the long term, necessitating precise measurements to realize the intended impact. Additionally, it is noted that the Theory of Change model is more effective in particular ecosystems, implying that its applicability may vary based on the context and nature of the social enterprise. Another funder states that a Theory of Change is essential to set the scene for what a social enterprise tries to accomplish as a guide to customers, investors, and stakeholders.

One social enterprise strongly agrees that a Theory of Change is needed to generate testable hypotheses. However, one social enterprise somewhat disagrees with this statement as they state that a Theory of Change does not have to be applied in the traditional form; however, an idea with causal links between their activities and impact aspects is preferable. It can be concluded that, however, the exact theory of change is not necessary; social enterprises should have some Theory of Change or a similar method case showing the intended impact. Another social enterprise states that the Theory of Change is needed as a living strategy document.

### *S3. Social enterprises should continuously measure their impact.*

There is strong agreement among social enterprises on the continuous measurement of impact, with a high average score of 4.56 and a 95% confidence interval of [4.32, 4.80]. This narrow confidence interval indicates a strong consensus among social enterprises on continuously measuring their impact, with most responses clustering towards the higher end of the agreement scale. Funders have a weighted average score of 4.74 with a 95% confidence interval of [4.52, 4.96], even narrower than social enterprises. This interval shows a firm agreement among funders, with an even tighter consensus around the importance of continuous impact measurement.

This agreement is also echoed in the feedback of this statement as a funder states that impact is the social enterprise's real currency. However, it should be simple (ideally 1, max 3 KPIs) and all within reasonable means (small ventures have limited bandwidth). Ideally, it is a straightforward metric that is both a commercial and social KPI (e.g., the number of patients or professionals supported). Measuring impact should complement, not hinder, a company's daily activities that contribute to its growth and subsequent impact enhancement. Recognizing the growing importance placed by investors on impact measurement, companies are proactively incorporating these assessments into their operations. This simplifies the process and aligns their strategies to meet investors' evolving expectations and needs. It should be measured yearly as the generated impact may change. One funder agrees but states that qualitative and anecdotal evidence is abundant regarding impact. Social enterprises should show why they are efficient in achieving tangible impact compared to other ventures seeking funding. Another funder states that social enterprises should do this to check if their work is really making an impact. Measurement is, therefore, necessary to make improvements along the way if they are not making the impact as planned or hoped.

One social enterprise emphasizes that continuous measurement is crucial but should not impede the organization's progress. Another enterprise echoes this sentiment, highlighting that execution should precede extensive measurement, assuming sufficient funding is available. Initially, the focus should be on measuring deliverables and outputs. Subsequently, the impact should be assessed periodically to ensure that the enterprise is moving towards achieving its intended social objectives. One social enterprise states that measuring impact should be done for internal measurement (being on track) and external (for investors or marketing). However, it depends on the indicator; for example, health trials might take time.

### *S4. Meeting or failing to meet agreed impact targets by the social enterprise should have financial consequences (e.g., bonus).*

Social enterprises are neutral or disagree on average regarding financial consequences based on impact targets, with a lower average score of 3.44. The broader interval points to a more significant spread in opinions among social enterprises regarding financial consequences for meeting or not meeting impact targets. Funders have a similar average opinion, with an average

score of 3.53; the range of their significance interval is even wider than that of the social enterprises, suggesting that funders' opinions vary slightly more on this statement.

Since opinions are divided, this is also reflected in the feedback from funders. Funders agree, but only when the company is in a later stadium. In the early startup stage, it is more important to set targets that incentivize experimentation to find optimal product-market fit and impact fit. Also, it is noted that it is essential to keep the company's values coherent. Another funder states that this statement requires more nuance: in principle, he entirely agrees; in practice, it shows some difficulties.
A funder disagrees as he states it is generally not intentional if targets are unmet. Fraud or negligence could be unintended results. Some funders also suggest imposing targets on startups or scale-ups is not advisable due to prevailing uncertainties. The initial focus should be on diligent work toward product development and maximizing impact. Setting targets becomes more feasible once the business is well-established and running smoothly. Positive incentives are also encouraged. Another funder states that he favors bonuses (aligning everyone with the same goal). However, they should be based on a good set of criteria: impact targets should be based on a range to achieve, not a specific number, taken over a couple of years (long-term based). Also, criteria for all stakeholders should be in there (e.g., customer satisfaction).

Social enterprises often disagree with material or financial incentives being the primary motivators, as these tend to be weaker in a social enterprise context. However, correlating financial outcomes with impact can be beneficial. It is stated that there are two notable exceptions where financial incentives seem compelling: 1) Offering cheaper capital, such as lower interest rates, when impact targets are met, and 2) Linking bonus payments for impact venture capitalists to the achievement of impact targets. Additionally, social impact can sometimes be too vague or influenced by factors beyond the enterprise's control. Hence, it is hard to set demanding goals, and could result in impact washing. Another perspective from the social enterprises is that establishing new objectives often requires initial phases of research, piloting, and testing before robust impact targets can be set, necessitating adequate funding to facilitate these foundational activities. Another social enterprise states that it depends on the organization's stage and the company's purpose. Startups are more likely incentivized by having the same values as the funders.

### *S5. There is a need for comparable impact KPIs for social enterprises*.

With an average score of 4.48 and a 95% confidence interval of [4.19, 4.77], social enterprises strongly agree on the need for comparable impact KPIs. The range of this interval indicates some variability but generally points to a shared understanding of the importance of such KPIs. Funders are closely aligned with social enterprises, with an average of 4.42. The funder's interval range is 0.80, broader than social enterprises, suggesting a slightly wider spread of opinions among funders. However, they also generally agree on the need for comparable impact KPIs.

Funders agree, as everyone demands different things. This makes it hard for social enterprises to keep up with all the investors wanting something different. A social enterprise hints at the IMF framework and the IRIS+ indicators for comparable KPIs. One funder proposes integrating impact KPIs into the standard performance indicators for conventional businesses or even mandating their adoption across all companies to amplify overall impact significantly—one social enterprise demands at least transparency on how the impact is measured.

## 4.3 Conclusion

Funders favor using a Theory of Change to evaluate social enterprises, seeing it as a tool to understand the steps needed to create impact and align with investor expectations. They call for a shift from compliance to choosing the most fitting impact measurement approach and urge using standardized KPIs while recognizing the need for adaption to specific contexts. The challenge remains in standardizing these KPIs and ensuring they are contextually relevant.
On the other hand, social enterprises acknowledge the need to define their impact indicators tailored to their unique mission and goals. However, they also recognize the necessity to align with funder requirements to a certain extent. The survey results reflect a strong agreement among social enterprises on the necessity to continuously measure their impact, with funders expressing even stronger agreement on this practice. There is less consensus regarding the financial consequences of meeting or not meeting impact targets. Social enterprises showed more variability in their views, with a neutral to slight disagreement on average, suggesting a caution against rigid financial penalties. Funders had a slightly more varied set of opinions, with some advocating for financial consequences only at a later stage of enterprise maturity and others calling for a more nuanced approach that recognizes the challenges of start-ups and scale-ups. There is a pronounced agreement among both funders and social enterprises on the need for comparable impact KPIs, indicating a shared understanding of the importance of such measures for transparency.

# 5. Usage of Social Impact Indicators

The previous chapter has shown that there is a need for standardized KPIs, a desire to choose them independently, and the selection of indicators that align with the preferences of funders. In order to gain a clearer picture of how this should be shaped, this chapter is dedicated to the research question: 'How are the social impact indicators of SDG3 currently being used by funders and social enterprises?

Both literature, exploratory interviews, and a survey are used to answer this research question. These interviews contribute to enriching and supplementing the existing list of indicators. More information on the interviewed companies and questions used can be found in Appendix B. Peer-reviewed articles and grey literature have been used to compile the current and previously used impact indicators for assessing organizations. The survey results provided insights into the specific indicators that have been utilized and the manner of their application.

## 5.1 Approach to Indicator Selection

As mentioned, the interviews and many articles in this review also state that organizations must choose indicators according to their Theory of Change (Cole et al., 2014; Roberton & Sawadogo-Lewis, 2022). The indicators often fall into categories related to the inputs, activities, outputs, outcomes, or impacts (Aceituno et al., 2017; Reynolds & Sutherland, 2013; Zhao et al., 2011). Company 4 prioritizes the mission of social enterprises and encourages entrepreneurs to define their own KPIs aligning with their company's values and objectives. Company 3 states that selecting and evaluating indicators involves a trade-off between granularity and standardization.

Schneider et al. (2016) investigated the monitoring and evaluation of capacity building for mental health in LMICs. They only used two types of indicator groups to do this. One group of indicators was their activities, and the other was monitoring outputs. Fretheim et al. (2009) comply by saying that in order to track the progress of a program or policy choice, indicators that are focused on various aspects of the "results chain" (i.e., on inputs, activities, outputs, outcomes, or impacts) are frequently used. In some situations, monitoring inputs—providing resources like persons and equipment—might be sufficient. In others, it could be crucial to monitor the program's activities or outputs (such as the proportion of kids who have received all of their recommended vaccinations). Evidence suggests that policymakers, funders, and service providers deeply value the effectiveness emphasized by performance measurement in programs with their predominant focus on outcome measurement (Lynch-Cerullo & Cooney, 2011).

Others state that while measuring outcomes is valuable in impact investing, experts recognize its complexity and significant costs. These challenges are especially the case for organizations just starting out or in the early stages of their operations. When measuring outcomes is unfeasible or too complex, organizations should track their outputs consistently. They can then use existing research to credibly establish a link between their actual outputs and potential outcomes — a

strategy adopted by several leading impact investors and intermediaries (Meurs, 2017). If an NGO or donor primarily aims to verify if a project was executed as planned, they might focus on measuring indicators related to activities and processes. This approach answers, "Did we do what we said we would do?" Often, this verification is sufficient. Rigorously measuring indicators related to health system functionality and population health can be resource-intensive. Without a willingness to allocate significant resources for such detailed data, it might be enough to confirm that the project went as planned. Therefore, the indicator matrix might only need to focus on immediate activities and outputs in a Theory of Change (Roberton & Sawadogo-Lewis, 2022). Practitioners must balance the data value against the effort required for data collection. In some cases, merely confirming a project's proper execution using activity- and output-level indicators might suffice for stakeholders (Roberton & Sawadogo-Lewis, 2022).

## 5.2 Indicators Found in Literature and Interviews

It is worth highlighting that various stakeholders influence data-gathering systems in global health with their agendas and metrics. The table below gives an overview of all the databases found. The indicators from these sources are added to the indicator database in an Excel File. The long list is also stated in Appendix D.

*Table 2: Overview indicator databases found*

| Indicator Databases | Articles | Interviews |
|---|---|---|
| **WHO** | (Abegunde et al., 2015; Aceituno et al., 2017; Aktar et al., 2022; Cattaneo et al., 2018; Endalamaw et al., 2022; Hammad et al., 2023; Holvoet & Inberg, 2014; Impouma et al., 2021; Jain & Zorzi, 2017; Knoblauch et al., 2019; Mokdad et al., 2015; Ndomondo-Sigonda et al., 2020; Nove et al., 2023; Obare et al., 2014; Ruel, 2017; Thomas et al., 2021) | |
| **SDG targets** | (Holvoet & Inberg, 2014; Maleka, 2017; Reynolds & Sutherland, 2013; Rugg et al., 2009; Situm et al., 2021; Stenberg et al., 2017; Tewari et al., 2021) | Interviews with Company 1, Company 3, Company 4, Company 8, and Company 9. Also, survey respondents mentioned the SDGs. |
| **IRIS+ indicators** | (Burnier et al., 2022; Tewari et al., 2021) | Interviews with Company 3, Company 8, and Company 9. Also mentioned in survey feedback. |
| **Global Fund** | (Frankfurter et al., 2019; Jain & Zorzi, 2017; Nove et al., 2023; Thomas et al., 2021; Zhao et al., 2011) | |

| | | |
|---|---|---|
| **Own Indicators** | (Bao et al., 2015; Endalamaw et al., 2022; Mokdad et al., 2015; Reynolds & Sutherland, 2013, 2013; Roberton & Sawadogo-Lewis, 2022) | Various interviewees also mention that social enterprises compiling their own KPIs is necessary. |
| **Other databases** | (Altare et al., 2022; Bari et al., 2021; Kickbusch et al., 2018; Korenromp, 2012; Murray & Frenk, 2008; Nemser & Addofoh, 2022; Nove et al., 2023; M. E. C. Silva et al., 2020; Tewari et al., 2021; Thomas et al., 2021) (Endalamaw et al., 2022; Obare et al., 2014) (Aceituno et al., 2017; Hammad et al., 2023; Taggart et al., 2022) | Company 7 |

### *World Health Organization (WHO) indicators*

The WHO published a report in 2023 on World Health Statistics (*World Health Statistics 2023*, 2023). The introduction of this report states that focus and investment – of both financial and political resources - must significantly rise for the world to meet the SDG targets by 2030. The 2023 report only consists of 50 indicators aligned with the SDGs. The forerunner of this report was the Global Reference List of 100 Core Health Indicators in 2018 (World Health Organization, 2018). The 2018 report linked the indicators in a results chain similar to a Theory of Change.

### *SDG targets*

Logically, as this research aims to tackle social enterprise impact measurement aligned with SDG3, the SDGs and their sub-targets play an essential role. Many articles confirm this essential role by using the SDGs to measure impact. The UN provides a global indicator framework related to the SDGs. The framework includes 231 unique indicators. For the database of this report, the indicators were filtered, and only the ones related to SDG3 and its sub-targets were taken into account. This filtration resulted in 28 unique indicators (*SDG Indicators — SDG Indicators*, n.d.). Company 1 takes a comprehensive approach by basing its model on the SDGs. They carefully examine the sub-goals associated with each SDG and establish measurable indicators linked to them. The SDGs serve as a universal language in their model, enabling them to compare initiatives contributing to different SDGs.

### *Global Impact Investing Network and IRIS+ indicators*

The Global Impact Investing Network (GIIN), a nonprofit organization, is pivotal in advancing impact investing, offering tools, resources, and standards, such as the IRIS+ metrics for integrated impact assessments. It provides a set of standardized metrics for describing social, environmental, and financial performance. Some articles list these metrics; for example, Burnier et al. (2022) emphasize the significance of GIIN and its IRIS+ metrics in promoting legitimacy and a unified approach to impact assessment within the diverse landscape of impact investing. However, most of this database is mentioned by multiple interviewees, and the Global Impact

Investment Rating System uses the IRIS+ metrics (*GIIRS | GIIRS Company Assessment Structure*, n.d.). For the database of this rapport, the IRIS+ metrics were downloaded from the Global Impact Investing Network website. The Global Impact Investing Network is a nonprofit organization that works to promote and develop the field of impact investing. The Global Impact Investing Network is a global champion for impact investing. It provides tools, resources, and guidance to investors, asset managers, and other stakeholders interested in integrating impact into their investment strategies. It offers a range of initiatives and services to advance the impact investing ecosystem, including research and market analysis, impact measurement standards, and industry-building activities. It had a total of 737 indicators. First, this list was reduced to all indicators affecting SDG3 and its sub-targets. This reduction resulted in 160 indicators. Subsequently, the indicators were once again filtered. The primary impact category was filtered on Health and Cross-category, including health, and this filtration resulted in 90 indicators.

Company 3 acknowledges that IRIS+ is already regarded as a leader regarding a common language in impact measurement. Company 3 harnesses a Theory of Change methodology for impact quantification, leaning on established standards like IRIS+ and GRI to delineate KPIs to ensure alignment with industry standards and investor expectations.

### *The Global Fund*

The Global Fund is an international organization with the goal of "accelerating the end of the epidemics of AIDS, tuberculosis and malaria". The organization is a public-private partnership and was established in 2002. As these indicators are very context-specific, these indicators are not added to the database.

### *Own indicators and other organizations*

The reviewed articles also name other international organizations such as UNAIDS, bilateral development organizations like the Centers for Disease Control and Prevention (CDC) and USAID, as well as private contributors like the Bill and Melinda Gates Foundation, and that they often impose their agendas and metrics on data gathering systems (Thomas et al., 2021). Roberton and Sawadogo-Lewis (2022) support this notion, stating that donors often have pre-specified indicators and that some NGOs have developed a relevant list of indicators. Other articles use their own indicators (Bao et al., 2015), the number of lives saved (Korenromp, 2012) or Quality-Adjusted Life Year (QALY) (*Werkgroep SDG-impactmeting*, n.d.).

In conclusion, many articles state databases where indicators could be picked, but it is also stated that organizations often have pre-specified indicators or have to come up with their own indicators. The interviews with funders also showed that they used their indicators, IRIS+ indicators, or SDG indicators. All these different sources make it difficult for social enterprises to navigate their way to the right indicator to use.

In this research, 211 unique indicators were identified; the complete list is stated in Appendix D. It is noted that 29 WHO indicators and the SDG indicators are the same. The remaining WHO indicators that do not overlap with the SDG targets are very specific and context-focused. The IRIS+ indicators focus more on 'business'- like indicators (e.g., employee benefit and operations). Many of the scientific articles focused on identifying indicators relevant to specific categories. Examples include articles focusing solely on indicators related to universal health coverage, reproductive health, or non-communicable indicators. Grey literature, company interviews, and reports identify indicators that could be applied more generally. The indicators are categorized based on theme, as found in Appendix D.

## 5.3 Usage of Indicators by Social Enterprises and Funders

This research used a survey to understand how social enterprises and funders utilize generic social impact indicators. The survey focused on identifying the use of these indicators, how the categories within the Theory of Change are used, and whether there is an emphasis on the potential adverse effects of an organization.

The indicators used in the survey are based on the indicator list stated in Appendix D. The selection of indicators had to be generalizable and applicable to most social enterprises related to SDG3; therefore, the category-specific indicators have not been used in this survey. This research focuses on social impact indicators; therefore, this survey has not used business-oriented indicators. A selection of indicators emerged as the most generalizable from discussions with funders, social enterprises, and grey literature, the complete list stated in Appendix D. A few indicators were added to this list. From the interviews with funders and social enterprises, it became apparent that, generally, there was more focus on the potential positive effects of a business than on the potential negative effects. This will be further discussed in the next chapter.

Additionally, few indicators targeting negative effects were found in the extensive list of indicators. To further investigate this, several indicators focusing on potential negative consequences have been added to the general list of indicators in the survey. These added indicators include, for example: Increase in medical waste produced in areas with the intervention (kg) and Job losses in sectors impacted by the health intervention (e.g. decline in employment in tobacco industry after an effective anti-smoking campaign, nurses losing their jobs due to technological innovation)(#).

Another objective of the survey was to ascertain how funders and social enterprises employ different categories of the Theory of Change. Therefore, the survey's selection of indicators was strategically based on including at least two indicators from each category. Each indicator in the survey corresponds to a specific category within the Theory of Change framework. This analysis is designed to examine the type of data utilized for each category by social enterprises and funders, providing insights into their application.

The indicators are grouped according to the following definitions (UNCHR, 2018):

- Input: The resources used to implement activities
- Activity: The processes or actions taken by the social enterprise to achieve outputs and move toward outcomes
  Output: The direct and early results of an intervention of a social enterprise
- Outcome: The intermediate results of an intervention of a social enterprise
- Impact: The long-term results of an intervention of a social enterprise

Nineteen indicators that aimed to touch various subjects were selected according to the above criteria. The survey asked about 19 indicators of social enterprises and funder whether these indicators have ever been used. If yes, with what kind of data, qualitative, quantitative, or guestimate? If not, is that because this indicator is not relevant, or could it be relevant, but they just have not used it? The chosen indicators are shown in Table 7, along with some descriptive descriptions of indicator use.

*Table 3: Descriptive descriptions of indicator use (on as scale of 1 to 5) whereby 1 is not used, irrelevant indicator and 5 is used with precise data (quantitative)*

| | **Theory of Change category** | **Mode** | | **Median** | | **Interquartile Range** | |
|---|---|---|---|---|---|---|---|
| **Indicator** | | SE | Funder | SE | Funder | SE | Funder |
| 1. **Hospitalization days avoided due to the intervention of social enterprise (# days)** | Outcome | 1 & 3 | 2 | 3 | 3 | 2 | 2 |
| **2. Number of lives saved due to the intervention of social enterprise (#)** | Outcome | 4 | 4 | 3 | 4 | 2 | 1.25 |
| 3. **Improved life expectancy of impacted area (years)** | Impact | 2 | 4 | 2 | 4 | 1.5 | 0.25 |
| 4. **Quality-adjusted life years (QALY)** | Impact | 2 | 4 | 2 | 4 | 1.5 | 1 |
| 5. **Sick days avoided due to the intervention of social enterprise (# days)** | Outcome | 2 | 4 | 2 | 3 | 1 | 2 |
| **6. Ratio of medical staff to patients or participants in the program (%)** | Input | 2 | 2 | 2 | 2.5 | 3 | 2.25 |
| **7. Number of medical products or devices sourced with recognized environmental or ethical certifications (#)** | Input | 1 | 1 & 2 | 2 | 2 | 3.5 | 2 |
| **8. Prevalence of other diseases increasing inversely to the target disease of social enterprise (#)** | Outcome | 2 | 2 | 3 | 2.5 | 1.5 | 2 |
| **9. Number of people reached with improved health care (#)** | Outcome | 4 | 5 | 4 | 4.5 | 2 | 1 |
| **10. Job losses in sectors impacted by the health intervention (e.g., the decline in employment in the tobacco industry after an effective anti-smoking campaign, nurses losing their jobs due to technological innovation)(#)** | Outcome | 1 | 5 | 1 | 4.5 | 1 | 1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **11. Cost reduction of health treatments (%)** | Outcome | 4 | 2 | 4 | 2 | 0.5 | 0 |
| **12. Reduced healthcare spending (%)** | Impact | 4 | 2 | 4 | 3 | 1 | 2.25 |
| **13. Amount of the products/services sold by the social enterprise (#)** | Output | 5 | 2,3&4 | 5 | 3 | 1 | 2 |
| **14. Number of people served by the intervention of social enterprise (#)** | Output | 4 & 5 | 5 | 4 | 4 | 1 | 3 |
| **15. Increase in medical waste produced in areas with the intervention (kg)** | Outcome | 2 | 2 | 2 | 2 | 1 | 1.25 |
| **16. Demographics of the clients (female, rural, poor, no access before, etc.) (%)** | Input | 5 | 5 | 4 | 4 | 3 | 2 |
| **17. Number of employees who received healthcare benefits through the organization's programs during the reporting period (#)** | Activity | 1 | 5 | 2 | 3.5 | 1.5 | 3.25 |
| **18. Number of occupational injuries that affected any full-time, part-time, and temporary employees of the organization during the reporting period (#)** | Activity | 1 | 2 | 1 | 2 | 0.5 | 2 |
| **19. Number of vulnerable populations reached by health program (#)** | Output | 4 | 5 | 4 | 3.5 | 2 | 2.25 |

### General analysis:

- Indicator 10 (Job losses in impacted sectors) and Indicator 18 (Occupational injuries) show differences in usage between funders and social enterprises. Social enterprises underutilize these indicators, possibly finding them irrelevant. In contrast, funders use these indicators more frequently, likely due to their focus on minimizing risk and understanding the full scope of impact, including potential negative outcomes. Similarly, indicator 15 (Increase in medical waste), a potential negative impact indicator, is largely unused by both parties but found relevant in general. Indicator 8 (Prevalence of other diseases increasing inversely to the target disease of social enterprise) is used relatively more by social enterprises and funders. From these results, it could be concluded that social enterprises use indicators that focus on negative social impact less. One reason for this could be that they have a scarcity of resources. Instead, they focus on the potential positive impact of their enterprises. On the other hand, funders want to minimize risk and will, therefore, handle this more carefully
- Indicator 17 (Employees receiving healthcare benefits) exhibits a notable difference in usage. Social enterprises show limited use of this indicator, implying it might not be a priority in their impact assessment. Funders, however, engage with this indicator to some extent, possibly using it to evaluate the social enterprises' internal practices and employee benefits. The interquartile range of funders and social enterprises is relatively high, indicating a diverse set of observations for this indicator.

- Indicators 19 (Vulnerable populations reached) and 16 (Demographics of clients) are used by social enterprises and funders with primarily quantitative data. However, there is a significant variability of answers. These indicators align with the fundamental mission of social enterprises, as these indicators directly reflect the depth and reach of their social impact.
- Indicators 2 (Number of lives saved due to the intervention of social enterprise), 9 (People reached with improved healthcare), 13 (Products/services sold), and 14 (People served by intervention) show a high median among social enterprises, indicating frequent reporting with quantitative data. These indicators focus on the reach of social enterprises. Funders also commonly quantitatively utilize these indicators, reflecting a shared interest in quantifying the social enterprise's reach.
- Indicators 11 (Cost reduction in health treatments) and 12 (Reduced healthcare spending) pertain to affordability in healthcare. Despite expectations, these indicators show a higher median usage among social enterprises than funders. This is surprising given the financial focus of funders, suggesting that social enterprises are more actively engaged in tracking and reporting financial efficiencies and cost reductions in healthcare.
- Indicators 3 (Improved life expectancy) and 4 (Quality-adjusted life years) show a big difference in usage between funders and social enterprises. These have been almost unused by social enterprises but are considered important. On the other hand, funders have primarily used these indicators with quantitative data. This may mean that social enterprises want to measure these indicators but do not have the resources. These indicators concern more long-term impact indicators, which entail much uncertainty and are difficult to measure.
- Indicators 6 (ratio of medical staff to patients or participants in the program) and 7 (Number of medical products or devices sourced with recognized environmental or ethical certifications) say something about the quality of the products of the social enterprises. Social enterprises or funders often do not use these indicators but have a high variability in answers.

## 5.4 Potential Subset of Indicators

In order to identify a potential subset of indicators for measuring the social impact of social enterprises, the following steps were taken. First, the most frequently used indicator by social enterprises with precise data was identified. This indicator turned out to be indicator 13 (Amount of the products/services sold by the social enterprise), as this indicator was used by 13 of 19 social enterprises. All respondents were deleted to see which indicators covered the remaining social enterprises. These were indicator 1 (Hospitalization days avoided due to the intervention of social enterprise), indicator 5 (Sick days avoided due to the intervention of social enterprise), indicator 8 (Prevalence of other diseases increasing inversely to the target disease of social

enterprise) and indicator 9 (Number of people reached with improved health care). These five indicators cover all social enterprises with precise data.

The same analysis was performed on the funders. Indicator 9 (number of people reached with improved health care) and indicator 10 (Job losses in sectors impacted by the health intervention (e.g., the decline in employment in the tobacco industry after an effective anti-smoking campaign, nurses losing their jobs due to technological innovation) are both used precisely by 6 out of 12 funders. The same steps are taken as stated above, and indicator 14 (Number of people served by intervention of social enterprise) is the last remaining indicator both times. Indicator 14 is used by two out of the remaining six funders.

Indicators 1, 5, 8, 9, and 13 cover all social enterprises with precise indicator quantification data. The same goes for indicators 9, 10, and 14 for the funders. Notably, indicator 9 appears in both subsets, so this is a critical indicator that should be further analyzed.

*Table 4: Potential Subset*

| **Indicator** | **Found in the funder subset?** | **Found in social enterprise subset?** |
|---|---|---|
| 1. Hospitalization days avoided due to the intervention of social enterprise (# days) | | X |
| 5. Sick days avoided due to the intervention of social enterprise (# days) | | X |
| 8. Prevalence of other diseases increasing inversely to the target disease of social enterprise (#) | | X |
| 9. Number of people reached with improved health care (#) | X | X |
| 10. Job losses in sectors impacted by the health intervention (e.g., a decline in employment in the tobacco industry after an effective anti-smoking campaign, nurses losing their jobs due to technological innovation)(#) | X | |
| 13. Amount of the products/services sold by the social enterprise (#) | | X |
| 14. Number of people served by the intervention of social enterprise (#) | X | |

## 5.5 Usage of the Categories of the Theory of Change

Figure 8 shows the frequency tables of the different Theory of Change categories. The indicators have been evaluated on a scale of 1 to 5, where 1 stands for ‘not used, irrelevant indicator, and 5 for 'used, precise data (quantitative)'. The descriptive values are stated in Table 10 below, and accordingly, the following observations are made:

- Social enterprises most frequently utilize input indicators with precise, quantitative data, whereas funders, while not using them as frequently, still find them relevant. The median indicates that social enterprises and funders provide qualitative data for input indicators. However, the wider interquartile range suggests greater variability in the responses, particularly from the social enterprises.
- The indicators of the activity category are generally not to be found relevant by the social enterprises, possibly because this category is too specific and the indicators are not widely applicable. Funders also do not often use this category, but when they do, they usually use precise data.
- The output indicators are often used with quantitative precise data by the social enterprises and funders. Both groups exhibit response variability, with funders having a slightly wider range of views.
- For the outcome indicators, if the funders had used them, it was mainly with a guesstimate, which is to be expected following the Theory of change. Both groups show moderate variability, indicating some differences in views, but less pronounced than in other categories.
- Most of the funders have used the impact indicators with a guesstimate, while social enterprises have not used the impact indicators but found them relevant indicators. Funders have lower variability in answers for these indicators than social enterprises, indicating more consistency in using these impact indicators.

*Table 5: Descriptive data of categories Theory of Change*

| | **Mode** | | **Median** | | **Interquartile Range** | |
|---|---|---|---|---|---|---|
| **Indicator Category** | SE | Funder | SE | Funder | SE | Funder |
| **Input** | 5 | 2 | 3 | 3 | 3 | 2.25 |
| **Activity** | 1 | 2&5 | 1 | 2.5 | 1 | 3 |
| **Output** | 5 | 5 | 4 | 3.5 | 2 | 3 |
| **Outcome** | 2 | 2 | 2 | 3 | 2 | 2 |
| **Impact** | 2 | 4 | 3 | 4 | 2 | 1 |

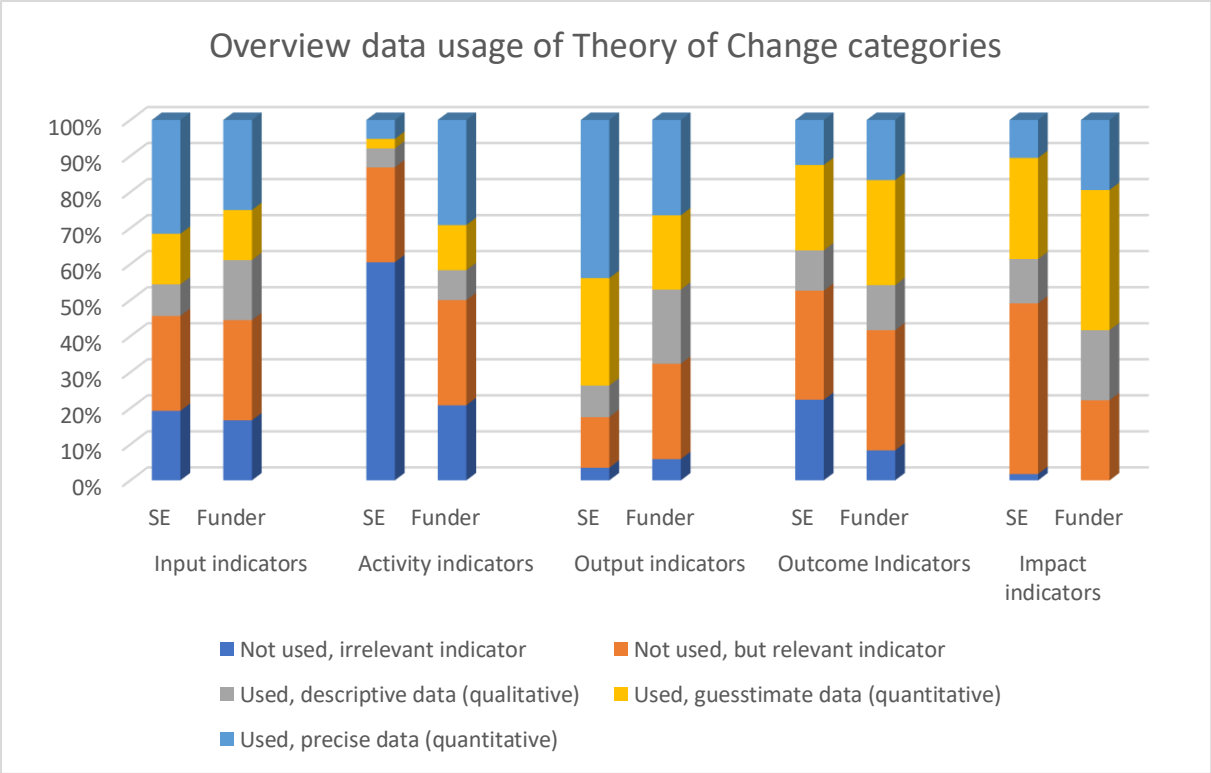



*Figure 8: Frequency data usage of Theory of Change categories by funders (n=12) and social enterprises(n=19)*

## 5.6 Conclusion

The literature reveals various sources that have been used to identify indicators for assessing the impact of organizations. Interviews have uncovered additional databases of indicators, and they showed indicator databases that are cited by both funders and social enterprises. Furthermore, the interviews indicate that some funders possess their own unique set of indicators. A small subset of general impact indicators has been identified to understand better which types and sorts of impact indicators are employed for data analysis. This subset suggests a lesser focus on potential negative impact indicators than positive ones. This focus could imply that a social enterprise could inadvertently generate a negative social impact if not properly managed.

Additionally, a potential subset of indicators with precise data used by all enterprises and funders has been identified. This subset includes Indicators 1 (Hospitalization days avoided due to the intervention of social enterprise), indicator 5 (Sick days avoided due to the intervention of social enterprise), indicator 8 (Prevalence of other diseases increasing inversely to the target disease of social enterprise) and indicator 9 (Number of people reached with improved health care), indicator 10 (Job losses in sectors impacted by the health intervention (e.g. decline in employment in tobacco industry after an effective anti-smoking campaign, nurses losing their jobs due to technological innovation), indicator 13 (Amount of the products/services sold by the social enterprise) and indicator 14 (Number of people served by intervention of social enterprise) for both funders and social enterprises. Indicator 9, the number of people reached with improved

healthcare, has been recognized by both groups, highlighting its importance as an indicator. These indicators are mostly directly tangible. This could give a wrong overview of how much social impact social enterprises create.

The literature also reflects a disagreement on which type of data should be emphasized by social enterprises when quantifying their impact. The survey has attempted to provide more clarity on this matter. It appears that input and output indicators are often used with quantitative, precise data, whereas outcome and impact indicators are more commonly estimated. There is little to say about the activities category.

# 6. Areas of Importance

The previous chapter provided an overview of the indicators used to measure the social impact of social enterprises. It also showed how social enterprises and funders use several generic indicators.

This chapter seeks to answer the third research question: 'What aspects are considered important by funders compared to those deemed important by social enterprises?'. This chapter concluded from the interviews with funders and social enterprises and looks at different areas of importance when assessing a social enterprise. A detailed description of the companies that were interviewed and the questions asked are stated in Appendix B. To repeat, companies 6,7,8,9 and 10 are funders, and companies 11,12,13 and 14 are social enterprises.

## 6.1 Aligning Visions of Social Enterprises with Funders' Strategic Goals

The mission of social enterprises must be aligned with the funder's strategic goals. This conclusion emerges from the funders' interviews. Companies 6 and 7 both demonstrate a structured funding approach, with an imprint on alignment with organizational themes and goals. Company 7's investments, while covering various facets of SDG3, are driven by guidelines from their board of directors, which ensure congruence with the organization's expertise and goals. This congruence is so present that if a project has much direct impact, it must still align with the foundation's expertise to receive funding. This need for alliance is because the foundation has its own Theory of Change, and the companies they invest in must fall in this line. This way, the investment helps them achieve their own goals. This alignment of strategic buckets is also crucial for company 8. For example, they stay as far away from medical products as possible, as in the long run, that is not in line with their sustainability goals (company 8).

The geographic area where funders operate also appears to affect their strategic goals. Indeed, Company 9 states that they use national and EU-level targets to distinguish the importance of healthcare issues and align their focus with global priorities such as the SDGs. Their strategy includes a comprehensive impact analysis, focusing on the scope and depth of healthcare issues to determine where the most significant impact can be made (Company 9). Geographically, their investments are limited to the EU, focusing on democratizing information and improving access to health care. Company 10, operating exclusively in the Netherlands, employs a nuanced strategy. They carefully analyze the bottlenecks inherent in the local healthcare system and strategically invest in initiatives to prevent, replace, and reduce expensive care. They also focus on assessing the market size of interventions in specific regions to measure the potential scale of their impact (Company 10). Company 10 prioritizes proposal research in its evaluation process and ensures it aligns with its overarching goals and strategic objectives. In addition, they assess the market size of interventions within specific regions, allowing them to estimate the potential size and scope of their impact effectively. The literature has also found that health information systems are often

used to identify where more investment should be made by government and international support (Boerma & Stansfield, 2007; Reynolds & Sutherland, 2013; Rommelmann et al., 2005). (M. E. C. Silva et al., 2020) showed a different approach to identifying areas in need of investment. They categorized specific areas of need into four domains: geographic, population characteristics, health system, and health status. With this framework, they could determine which areas needed the most investment in health. So this is in line with what the funders say.

The fact that social enterprises can align better with funders who find the same important is also emphasized by social enterprises. Enterprise 14 states that aligning with actual impact investors who care about their work is crucial. Enterprise 14 sees that these challenges often get in the way of innovation. This same company also finds that support from investors who believe in their mission can broaden the appeal of other funders, thereby increasing impact. This synergy can attract more influential backers, facilitating policy influence and business growth. Another social enterprise, Company 12, also indicates that finding a funder who fits the company's goals and strategies is essential for a mutually beneficial partnership. If not, the social enterprise will have to adapt to the funders' requirements. This adaption is undesirable as it can lead to less focus on the original mission. Company 11's mission is twofold: improving access to health care and reducing carbon emissions. Company 11 typically selects impact indicators that best align with their dual focus on the environment and healthcare, allowing them to access a broader range of themes and align with the priorities of potential funders.

## 6.2 Balancing Profit and Impact in Social Entrepreneurship

The interviews clearly showed that funders place great importance on the financial sustainability of a company as this aspect is crucial for the survival chances and thus also for achieving societal impact by a social enterprise.

The interviews with funders emphasized this greatly. Company 7 states that financial sustainability is particularly vital for social enterprises, even more so than NGOs. This importance is because self-sufficiency aligns inherently with social enterprises' organizational nature and objectives. They find it essential for enterprises to establish a foundation that enables them to remain autonomous and realize their impact after receiving initial funding. Company 6 agrees with this and emphasizes how important it is to prevent projects from becoming continuously dependent on external funding to survive; projects must have strategies to generate income independently so that they can continue to exist and have an impact without being dependent on continuous external financial support (Company 6). Company 8 thus states that they only donate money to self-sufficient initiatives.

Company 7 finds it very important to know the true purposes of social enterprises as they must balance profit and impact. Social entrepreneurs must ensure that the profit, essential for sustainability, is diligently reinvested to maximize social impact. Company 6 prefers organizations

with an ANBI status that align with their thematic focus to ensure that social enterprises have their impact as their priority. This ANBI status ensures that the organization is almost entirely committed to the general interest. The interviews show that companies 6 and 7, both foundations, find impact significant alongside whether a company is well put together financially. With company 10, an impact investor, this needs to be clarified. They state that their impact matrices are not very developed. As a company, its strategic focus mainly lies on reducing healthcare costs. Therefore, the indicators they are mainly concerned with are the reduction of the cost of treatment or QALY. They mainly focus on how large the market is for a particular disease. Both the business and social business cases must be positive (company 10). They also state that the healthcare sector has conflicting interests when looking at the interest of the patient and the interest of society.

An example is developing a drug for rare diseases. Even though the product has a small market, pharmaceutical companies still want the same return on investment. In order to get this same return, the drug price would have to go up. This is a difficult decision because the trade-off is between people's lives and making money (Company 10). Company 8 agrees and argues that selling health care to the highest bidder is not functional as it happens a lot today; this is especially true for health care in the global south (Company 8). Thus, Company 8 also argues that incentives must change to bring this about.

According to Company 9, an impact investor, business, and impact indicators should go hand in hand and not be sacrificed for the other. They call it a 'stepped ladder alignment,' which means that as one increases, so does the other. Company 9 also states that reporting on impact is even more critical for enterprises in healthcare because there is much potential for adverse external effects. Because of the risks, this company is reluctant to invest in social enterprises in healthcare and, therefore, has invested in a few enterprises (Company 9). In addition to being self-sufficient, companies 6, 7, and 8 are also looking for an innovative mechanism with a market opportunity or can subsequently be taken over by public healthcare.

Social enterprises also note that impact investors often prioritize business aspects and sometimes focus more on profitability than actual impact. For example, Company 13 states that despite their product being cost-effective compared to alternatives, investors often propose price increases to raise revenue. This indicates a more substantial interest in financial profits than in societal benefits. Company 13 says that investors consider impact a secondary, "good to know" factor rather than a necessity. Company 13 believes in a balanced approach, where business and impact figures are intertwined for holistic growth. They emphasize the importance of tracking impact alongside revenue and see this as essential for accelerating growth. Their unique perspective redefines business metrics, such as monthly revenue, as "lives saved," underscoring their commitment to making a meaningful difference while maintaining financial sustainability. Company 12 also notes that financiers weigh sales or sales potential heavily when evaluating an

investment. The business case is built around the impact of the disease and its prevention. Demonstrating actual impact is crucial and must be consistent with the original goals and promises. The size of the disease being addressed also affects the total impact and correlates with market size. Company 11 also sees a predominant focus on the business plan in funding applications, often making up about 70 percent of the evaluation criteria. This emphasis on business viability is also reflected in conversations with financiers. In the first conversation, the impact a company wants to make is often discussed briefly, and then the conversation shifts to the company's business plan.

## 6.3 Beyond Good Intentions: A Critical Look at Social Impact

In the interviews, a social enterprise emphasized that funders often ignore the potential negative consequences of interventions. Company 14 cites as an example initiatives that provide payment plans for motorcycles in Kenya, which have independence as a positive consequence. However, the risk of accidents also increases as there are more motorcycles due to the intervention. This increase in accidents affects people's ability to work and earn money. Investors claim to stimulate the motorcycle industry by providing loans and insurance, making people more independent. However, they often overlook the uninsured motorcyclists and the resulting loss of livelihood due to accidents. According to the social entrepreneur, impact investors must conduct thorough due diligence to add value truly and have a meaningful impact. The funders also raise this phenomenon. According to Company 8, there is a problem: Companies have no incentive to change if the positive and negative external effects of behavior do not appear on the balance sheet. According to Company 8, the game must change rather than just working on the symptoms. Impact measurement is so rigid that it needs to be more flexible and come out of the outdated, completely outdated, numbers-based accounting approach. There must be a way to report what is good, what is wrong, and what works as long as people do not lie to fall into a specific industry for better taxes (Company 8). According to Company 8, products can be directly linked to social impact or cross-subsidy products, which can be both negative and positive.

A positive example is a company that employs blind women to detect the early stages of breast cancer. This not only employs blind women but also enables the disease to be detected earlier. On the other hand, a negative example is offering free eye surgery in India, intended for people who cannot afford it. However, people are also flying from the United Kingdom to India to claim this operation because it is cheaper there, causing negative external environmental effects. These potential negative externalities need to be thoroughly investigated (Company 8).

## 6.4 Navigating Impact Quantification

It remains to be seen which impact categories from the Theory of Change the social enterprises should focus their reporting on. In discussions with funders, the following emerged regarding quantifying the Theory of Change categories. Company 9 says that credit can only be given to

KPIs that can be accurately measured. Difficult-to-quantify indicators are included in a company's Theory of Change and written down. However, social enterprises do not necessarily get credit for these as they cannot be proven. Company 7 also states that its primary focus is on making a direct, demonstrable impact rather than just creating conditions that could ultimately lead to improved access to healthcare. This is because the funder has its own Theory of Change and needs to know how much impact they are responsible for through the results of their investments. According to Company 7 and Company 8, the attribution factor also influences this. The attribution factor involves the amount of impact of a social enterprise on which the funder can be charged. Company 8, however, states that more collaboration between financiers is needed. More complementary investments are desired as they give the financier less risk and ensure that the investor reports only once instead of multiple times.

Company 7 states that social enterprises should report on their direct impact (e.g., the number of screenings and training). The indirect impact, often seen as a potential effect of an intervention, is challenging to quantify and often leads to double counting of effects. In collaboration with the social enterprises, what they realistically can account for is examined, varying per project. Organizations must acknowledge their responsibility for the impact made despite inevitable simplifications of reality (Company 7). Therefore, Company 10 usually invests in companies already scaling because more data is available. Company 8 is a foundation and only donates money. However, they still expect as high a social return on their investment as possible. If specific goals are unmet, this can lead to withholding funding, as this is the only means of pressure they have. Usually, they work with self-reported figures, but sometimes, they hire a third party to validate the claimed impact. They contact people on the ground and check if the claims are correct (Funder 8). Company 6 emphasizes the major challenge of data collection in Africa. Collaboration with local governments and organizations is necessary. According to Companies 6 and 7, however, these governments in LMICs often have less incentive because they think Western funds are often available. According to Company 8, a robust impact report can motivate local governments to invest more in specific initiatives.

Social Enterprise 11 states that measuring impact in healthcare is very complex. They now rely on academic research to estimate the potential impact in healthcare, but precise quantification remains challenging due to the inherent uncertainties in healthcare. The process thus remains largely speculative. When seeking funding, they often face the challenge of reporting the expected impact despite being in the early stages. The difficulty lies mainly in accurately quantifying these expected effects. Often, they notice that an estimate of the expected impact is also sufficient because they are still in that early stage.

## 6.5 Insights from Social Enterprises and Funders on Indicator Priorities

Three propositions were developed based on the above findings from interviews with funders and social enterprises. The interviews still need to reveal which indicator category social enterprises

should focus on and with what kind of data. Further research was also desired on the possible focus on positive impact rather than potential negative externalities. These statements were included in a survey, where respondents were asked to indicate their level of agreement on a scale of 1 to 5, where 5 stood for "Totally agree" and 1 for "Totally disagree. The weighted mean of the scores for each statement is shown in Table 6. The bar graph of each statement is shown in Figure 9. The results of the statements are discussed below.

*Table 6: Weighted average score and confidence interval statements 6-8 (Scale:1-5)*

| **Statements** | **Weighted Average Score SE (n=25)** | **95% Confidence interval SE (n=25)** | **Weighted Average Score Funders (n=19)** | **95% Confidence interval Funders (n=19)** |
|---|---|---|---|---|
| S6. Given limited resources, small to medium social enterprises should prioritize quantifying input, activity, and output indicators versus outcome and impact indicators when applying for funding. | 3.45 | [2.83, 4.07] | 2.77 | [1.91, 4.63] |
| S7. A back-of-the-envelope calculation is enough for small to medium-sized social enterprises to show their outcome and impact. | 3.05 | [2.42, 3.68] | 2.31 | [1.44, 3.18] |
| S8. When assessing the impact of social enterprises, there is a bigger focus on potential positive impact of the social enterprise versus on unintended negative consequences. | 3.8 | [3.18, 4.42] | 3.77 | [3.02, 4.52] |

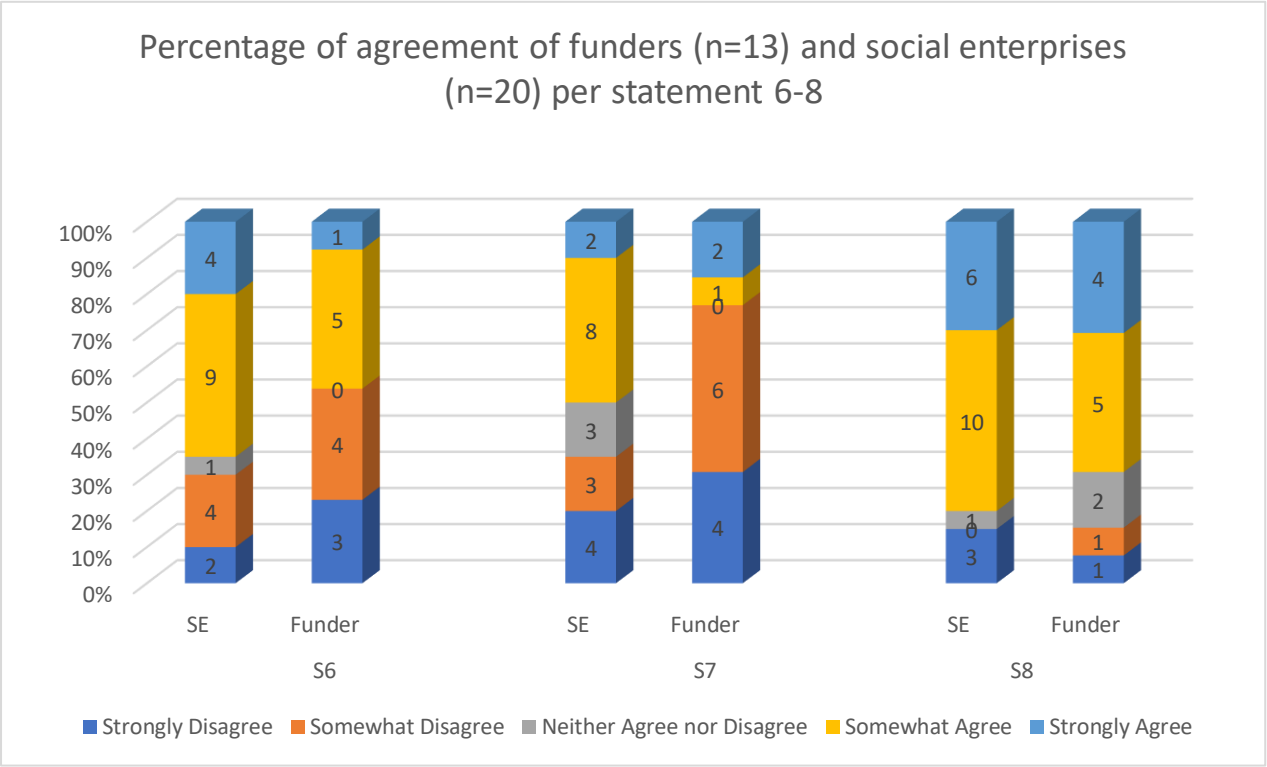



*Figure 9: Agreement of statements 6-8 of funders and social enterprises*

*S6. Given limited resources, small to medium social enterprises should prioritize quantifying input, activity, and output indicators versus outcome and impact indicators when applying for funding.*

The average score of the social enterprises is 3.45, indicating a moderate agreement that small to medium social enterprises should focus on quantifying more immediate measures like input, activity, and output indicators rather than long-term outcome and impact indicators when applying for funding. The confidence interval range shows relatively wide spread of opinions among social enterprises. Funders have a lower average score of 2.77, suggesting a weaker agreement with the statement than social enterprises. The wide confidence interval indicates a diverse range of opinions among funders, suggesting no strong consensus exists.

*S7. A back-of-the-envelope calculation is enough for small to medium-sized social enterprises to show their outcome and impact.*

Social enterprises are neutral towards this statement, indicating a mixed opinion on whether simplistic calculations can demonstrate outcome and impact. The spread suggests a variety of opinions, with some social enterprises believing that more detailed calculations are necessary and others finding more straightforward calculations sufficient.

Funders disagree with this statement, suggesting that they prefer more comprehensive and detailed calculations when evaluating the outcome and impact of social enterprises. The high standard deviation indicates diverse opinions, but the general trend leans towards disagreement.

*S8. When assessing the impact of social enterprises, there is a bigger focus on the potential positive impact of the social enterprise versus unintended negative consequences.*

The average score of 3.8 indicates that social enterprises generally agree that there is a greater focus on the potential positive impact. The confidence interval suggests a reasonable consensus but with some variation in views. The funder's average score of 3.77 is very close to that of the social enterprises, indicating a similar level of agreement. Their confidence level is slightly wider than the social enterprises, indicating a marginally broader opinion range among funders.

## 6.6 Conclusion

Funders have their own Theory of Change and strategic objectives. The geographic location is often linked with these objectives. The number of people affected determines the amount and depth of the impact social enterprises can make, similar to a standard business case. The funders also want to achieve the most impact for their strategic objectives. Therefore, they want social enterprises that align with their goals. Attribution is therefore also important. Funders need to know how much impact they are accountable for. Therefore, they favor direct, quantifiable impact. More vaguely quantifiable outcome and impact indicators are noted, but social enterprises will not necessarily receive credit for it. Funders want to know how much impact they are accountable for. According to social enterprises and funders, the negative consequences of interventions should be looked into more. More due diligence is necessary by funders. One funder states that companies must account for these positive and negative externalities to report on them. Given limited resources, small to medium-sized enterprises should prioritize quantifying input, activity, and output indicators versus outcome and impact indicators when applying for funding remains debated. Social enterprises tend to agree more with these statements than funders, as they tend to disagree more. However, the high variance shows that there is much disagreement between both funders and social enterprises. If then a back of the envelope was enough for the social enterprises to quantify the data. A significant difference can be seen between funders and social enterprises. Funders lean toward disagreement; however, some also agree with the statement. The social enterprises are neutral. However, the opinions are very mixed. An agreement can be found in the fact that there is more focus on positive than negative impact when assessing social enterprises. It is also essential to capture the scale of impact made and the depth of the impact.

# 7. Discussion

In this chapter, the discussion revisits the main findings and interpretations derived from the results. Additionally, the primary limitations of this research are addressed, and suggestions for future research are presented.

## 7.1 Reflection of Findings

The Theory of Change has deviated from its original purpose. This shift in application has redirected its focus from promoting internal learning and organizational improvement to meeting external accountability requirements. This change, coupled with the existing power dynamics between funders and social enterprises, could compel the latter to prioritize presenting favorable results, portraying a picture of success that aligns with funders' expectations. This situation is further exacerbated by the resource dependency between social enterprises and funders, as social enterprises depend entirely on funding decisions. This change could also lead to impact washing, where actual effects are overstated or misinterpreted, potentially resulting in resource allocation not favoring the most impactful social enterprises. Initially designed for internal application, the Theory of Change aimed to illustrate how a social enterprise catalyzes changes and achieves impact (Bugg-Levine et al., 2012; Grieco, 2015). The demand for the Theory of Change by funders is first mentioned in the literature (Breuer et al., 2016; Chapman et al., 2023; Esponda et al., 2021; Jackson, 2013; Prinsen & Nijhof, 2015). Subsequent interviews with several funders revealed that a Theory of Change is often expected of social enterprises to demonstrate their anticipated impact. This expectation arises because it helps funders assess if social enterprises align with their own Theory of Change, as evidenced in both interviews and literature (Lynch-Cerullo & Cooney, 2011). Interviews with both social enterprises and funders showed the importance of alignment between social enterprises and funders who share the same mission and objectives for funding. These interviews also revealed a tendency to emphasize potential positive impacts over negative ones, confirmed by survey results from both groups. This emphasis may stem from social enterprises avoiding transparently mapping out potential negative impacts to prevent losing funding to others with a more positive-only image.

The broad criteria for defining ‘impact investors’ also contribute to this trend. Since impact is perceived differently by various actors, the inconsistent application of the 'impact first' label makes it difficult to discern authentic impact-driven intentions. This inconsistency can lead to challenges for social enterprises in anticipating funders' values, potentially resulting in diminished impact and slower achievement of social impact goals. In impact investing models prioritizing impact first, the primary objective is generating quantifiable social impact, with financial returns being secondary. These returns can vary, extending from simple capital repayment (equivalent to a 0% return) to a return that aligns with market rates adjusted for risk. However, from interviews with funders and social enterprises, impact perceptions vary. One ‘impact first’ funder admitted that their impact metrics are underdeveloped. Social enterprises noted that in discussions with

impact funders, the importance of impact is often seen as a bonus rather than a necessity, lacking a clearly defined minimum value. If capital managers, claiming to prioritize impact, are still primarily driven by financial returns, there is a significant risk of neglecting the true essence of social impact.

Consequently, incentives must be created that encourage honest reporting from both funders and social enterprises. Without such measures, the full spectrum of an enterprise's impact remains obscured, as the fear of unfavorable perceptions can deter full transparency. Without the incentive for complete transparency, even a social enterprise aimed at positive societal contributions may inadvertently create negative impacts, diminishing its overall social impact on society. For funders, it is essential to cultivate a change in the mindset. Achieving this cultural transformation hinges on our ability to place an understanding of social impact on equal footing with the appreciation of economic value. These incentives must come from the actors in the power/interest matrix (figure 10) with the most power, the subjects, and the key players, as they maintain control over financial resources and can alter the rules in the arena. These subjects, whose assets are mostly managed by funders, have the leverage to press funders for concrete results. They can significantly influence how funders, in turn, evaluate and interact with social enterprises in the decision arena. For instance, linking financial bonuses to the achievement of impact could stimulate a change in the mindset of the funders. This action would try to change the objectives of the funders. This shift in objectives could lead to a change in the allocation of resources to more impact-driven social enterprises instead of social enterprises that score better economically. Another way to create transparency is for funders to publish the Theory of Change of their portfolio companies to allow for cross-checking. This exposes impact-washing, where unrealistic optimistic assumptions are made and negative outcomes are neglected. These published Theories of Change can also serve as a guideline for social enterprises to cross-check their assumptions and get inspiration on what high-impact initiatives could be.

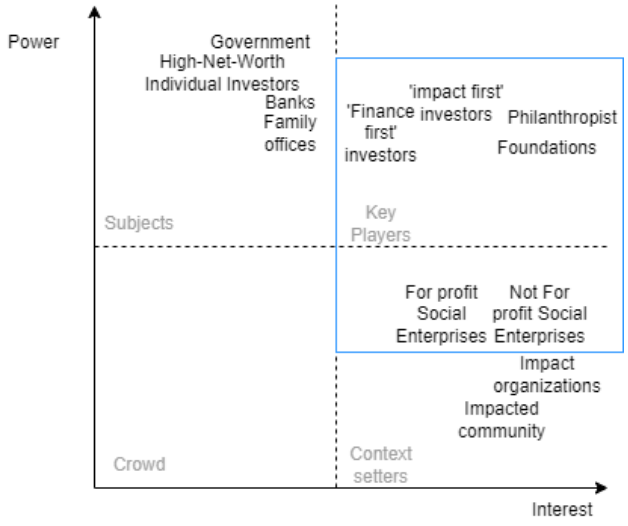



*Figure 10: Power/Interest Grid*

Another observation is that funders and social enterprises should adopt a holistic approach to the Theory of Change rather than focusing on separate categories. Since social enterprises cannot determine the actual social impact based on indicators before operations begin, the Theory of Change offers a promising method for ensuring transparency and aligning assumptions from activities to impact and only considering specific indicators, whether input, activity, outcome, or

impact, will not encompass the entirety of the strategy. The Theory of Change is fundamentally a hypothesis about the cause and effect within an organization's activities. It assumes that measuring inputs will also gauge outputs and impact on the broader system under certain assumptions (Adedeji et al., 2022; Breuer et al., 2016). Literature offers varying perspectives on which Theory of Change categories to prioritize to report on. Schneider et al. (2016) emphasize activities and outputs, and Lynch-cerullo and Cooney (2011) highlight the importance of measuring outcomes. Meurs (2017) suggests focusing on outputs rather than outcomes when resources are limited, supported by Roberton & Sawadogo-Lewis (2022). Interviews with funders indicate a preference for easy-to-measure indicators, suggesting input, activity, and output indicators as a priority for social enterprises to measure. Survey results reveal a split between funders and social enterprises on prioritizing specific indicator categories. Social enterprises favor prioritizing input, activities, and output for funding applications, using simple calculations for outcome and impact. Funders appear less aligned with this approach, possibly due to risk minimization and specific, detailed data preference. The question is whether there should be a difference in prioritization. Easily measurable indicators are a good way for small to medium-sized companies to understand the impact they are having. However, suppose the Theory of Change is misused, and no emphasis is placed on longer-term indicators. In that case, it can create a muddled picture of a social enterprise's social impact. A realistic picture is maintained by continuously monitoring whether the assumptions in the intermediate steps are correct and updating if they are not. There is also a risk of potential misalignment between the social mission and the activities being funded, as funders may navigate towards safer, more 'easy to measure' initiatives rather than those most needed by the communities they serve, which may be more challenging to measure.

A suggestion would be to immediately allocate a portion of the funded resources to evaluate the long-term results of social enterprises. By agreeing on this in advance and earmarking a portion of the funding for this purpose, the likelihood that the evaluation will be conducted increases. There are already companies, for example, 60 decibels or ActivityInfo, that gather actionable benchmarked social impact data. Furthermore, more valuable insights can be derived if the collected data is stored directly in a comprehensive central database. There needs to be transparency concerning the data collected in a central database. Different applications of the Theory of Change and the ensuing results should be systematically compiled to understand how interventions impact societies in specific contexts. While much of the Theory of Change data currently comes from scientific publications, which is very valuable, there is a need for more empirical data from the field. If enough data is gathered regarding the impacts of different interventions on communities, the outcomes could be displayed as a normal distribution when compared across various contexts. This highlights the probable range within which the results of any intervention lie. The common goal is to realize the most favorable outcome from an intervention, and such reporting could facilitate this aim. A more accurate depiction would enable

funders and social enterprises to gauge the possible effects of an intervention more effectively without defaulting to the most optimistic expectations. This would lead to more effective and realistic financing due diligence for the funders and social enterprises that want to invest their profit in the best way. An independent organization should regulate this database. Because if a party with specific interests managed the database, it could manipulate the data to favor certain outcomes or interventions. An independent organization can mitigate power imbalances by providing a neutral ground for data handling.

Another observation is that funders should offer a standardized selection of impact and outcome indicators from which social enterprises can choose a customized subset that best fits their impact goals. There are more than 200 KPIs that social enterprises could choose from. In literature, it was first found that there was a need for a standardized way of measuring impact (Bassi & Vincenti, 2019; Carman, 2010). However, there was no complete agreement since Camoletto et al. (2017) also clarified that there must be room for flexibility and diversity in social enterprises. This was emphasized in the interviews as it is stated that it is difficult to find standardized indicators, especially in healthcare, since the organizations are all so different. The survey statements also revealed this contradiction. On the one hand, the survey revealed that social enterprises are expected to create impact indicators that best reflect their business. This emerged from both social enterprises and funders. However, it also showed a great need for indicators that can be used to compare social enterprises.

Having a smaller list of outcomes and impact indicators will make it easier to compare social enterprises but also have room for their diversity. It will make it easier to compare as there is a bigger change in social enterprises that have chosen the same KPIs or because formulas to compare between KPIs can be composed easier because the subset of KPIs is reduced. A recommendation is to incorporate a few standardized ways of measuring impact in the indicator list. This could be done similarly to SI units of physics. An example is that improving healthcare for a certain number of people equates to a certain amount of savings in healthcare expenditures for a comparable number of people. This must also be centrally organized to avoid impact-washing and misinterpretations between social enterprises and funders, such as the Global Impact Investing Network or EVPA. A risk with standardized indicators is that it can make it harder for a social enterprise to innovate and explore unknown areas (Straub et al., 2010). By offering a variety of indicators, an indicator that best aligns with the enterprise's mission can be chosen and mitigate that risk. However, it is best to keep in mind that even if funders do not require it, it is essential for social enterprises to internally report on specific impact indicators that best represent their mission. This is necessary to determine whether the impact that the social enterprises aim to achieve is actually being reached.

## 7.2 Limitations of Methodology

### 7.2.1 Limitations of Literature Review

From the literature, several databases have been identified that are used to assess organizations aiming to achieve SDG3. Companies frequently mention several of the same databases, such as the SDG sub-targets and the IRIS+ indicators. Additionally, several funders and social enterprises have their own indicators, which have been incorporated into this study. Although efforts were made to minimize omissions by using interviews and literature studies, there is still a significant likelihood that some indicators still need to be included in this research. This is partly because funders and organizations often do not make their indicators public or are reluctant to share them. As a result, the list of indicators might be partial. However, many relevant indicators that cover a large part of the social enterprise sector have been identified.

Moreover, a selection of these indicators was further examined in the survey. The selection aimed to include the most general indicators applicable to most SDG3 social enterprises, but it is possible that some essential indicators were still omitted. However, the feedback on this indicator selection suggested that no important indicators were missing, so the study can still provide a general overview since the indicators encompass various topics.

### 7.2.2 Limitations of Semi-structured Interviews

A crucial aspect to acknowledge is the potential for interviewer bias. The presence and behavior of the interviewer might influence participants' answers, resulting in unintentional biases in the structure of questions or the provision of follow-up feedback. There is also the potential for social desirability bias. Interviewees might modify their responses to present themselves favorably or following perceived societal expectations. In this research, funders may focus more on impact than they do in reality because they believe it is expected of them. This limitation would implicate an even more considerable emphasis on economic factors than has already been stated.

This research also focused solely on funders based in Europe. From the interviews with social enterprises and feedback from the survey, it has been noted that European funders place more emphasis on impact than their counterparts in Africa. Because funders in Africa do not focus on impact, social enterprises do not measure it, as it is not perceived as having commercial value. Therefore, the results of this research may only apply to some funders and social enterprises across different geographical regions.

Another limitation is that this research lacks interviews with actors who fund the funders, a key group in the funding system. Their absence results in a potential bias, as their insights, motivations, and objectives are crucial for understanding the dynamics and impacts of funding. Without their perspectives, the research may present an incomplete or skewed view of the decision-making processes, fund allocation, and the broader impact of funding. In order to overcome this limitation and gain a more comprehensive understanding, future research should

include these actors' views, uncovering additional strategic layers, decision-making criteria, and expectations that influence the funding decision arena.

### 7.2.3 Limitations of the Survey

A limitation of this study concerns the sample size of respondents who completed the survey. A more significant number of respondents would be desirable to generalize the results better. However, this small sample can still provide a useful indication, as the survey respondents did represent the target demographic well. The survey may also be prone to social desirability bias, with respondents likely answering statements in ways they perceive as socially acceptable or favorable. For instance, funders may feel compelled to assert that a back-of-the-envelope calculation is insufficient, even though it may be adequate. This could skew the results.

Another limitation could be the inaccurate reporting of indicator usage. Respondents might not recall correctly whether they have used an indicator and, if so, how. This could lead to inaccurate data regarding the actual usage of these indicators. Additionally, there is a risk of misinterpretation, where respondents might not understand what specific indicators mean, leading to their responses not accurately reflecting their actual behavior or opinions. This can result in incorrect conclusions about the usage of these indicators.

A further limitation is the classification of indicators into different categories according to the Theory of Change. While this classification was attempted as accurately as possible, others might categorize them differently, potentially affecting the results. Although the current classification can provide a good indication, more research is needed for precise categorization. This would entail validating the grouping of indicators by several experts. Moreover, it cannot be definitively stated whether the type of data used can be attributed to the category or if it is specific to the indicator. Therefore, additional research should be conducted with a more extensive survey, which might also explore why a particular type of data was or was not used.

## 7.3 Suggestions for Further Research

This research already explored the different perceptions of the various actors within the impact assessment system of social enterprises. In order to gain a deeper understanding of these perspectives and their impact on the strategic decision-making process, further research could use Comparative Cognitive Mapping and game theory. Comparative Cognitive Mapping would allow researchers to visualize and compare the mental models of various actors. Comparative cognitive mapping can determine how each group interprets and approaches the impact landscape by mapping these actors' ideas, assumptions, and perceived causal links. Areas of agreement or disagreement can be found through this comparative study, which is essential for developing strategies and coordinating actions. Game theory can then be used to describe the strategic interactions between these actors using the insights from Comparative Cognitive Mapping. Game theory can forecast potential outcomes based on the stakeholders' identified

perspectives and criteria for making decisions. Researchers can explore potential equilibria and dynamics by creating scenarios where actors follow different strategies based on their cognitive maps, such as cooperation, competition, and negotiation. This could reveal the conditions under which stakeholders might converge on shared strategies that maximize societal impact or, conversely, the situations that may lead to conflict or inefficient outcomes. As mentioned before, a limitation of this study is that the actors that fund the funders have not been included in this research. Interviews with those actors and bringing in their perspectives would be interesting to capture the whole system.

Another proposal for further research would be to use agent-based modeling to simulate the behavior and interactions of the various actors in the impact system. Agent-based modeling is suitable for modeling the complexity and heterogeneity of social systems. This research has shown that social enterprises operate within networks of different actors, each with their behaviors and interactions. Agent-based modeling enables the simulation of individual actions and strategies of these actors and observes how their interactions lead to outcomes of social impact. Follow-up research can focus on how different policy options affect funding allocation to social enterprises and the overall societal impact.

Another follow-up study could use System Dynamics to represent the effects of financing on the social impact of social enterprises. System dynamics is well suited for analyzing complex systems, especially because of its ability to model the dynamics of delays and feedback loops. This method allows researchers to simulate the Theory of Change of social enterprises in detail and thoroughly analyze the resulting societal impact. By modeling the causal relationships and timelines associated with investment flows and impact outcomes, system dynamics can provide insight into how and when funding leads to intended social change and how policy can respond. System dynamics could also be helpful to explore potential frameworks for integrating potential negative impacts into assessments. Looking at which operational areas are more likely to generate negative effects in other domains inadvertently could be part of this.

A further recommendation is to integrate the EMA workbench into future studies. This research indicates that allocating funding to companies is a complex process, particularly in measuring long-term impact. The EMA workbench is particularly suitable for uncertain future situations, and the relationships between various components are unclear. This tool can be invaluable in developing policies or making decisions with long-lasting effects, such as selecting social enterprises to receive funding to achieve maximum social impact. It also enables social enterprises to explore different strategic options, often facing uncertain markets or rapid technological changes. This allows them to understand the potential outcomes of these options better and make more informed strategic decisions regarding their investments.

As highlighted, the findings of this research are drawn from a relatively small sample size. Consequently, caution should be exercised in generalizing the results, and further investigation is

warranted. Future studies should examine these indicators more thoroughly, and it is prudent to first validate the survey indicators with input from various social enterprises and funding entities. Another promising avenue for research is delving deeper into the methodologies and formulas used to calculate outcomes and impact. Is it possible to reach a consensus on specific values, and how granular should this analysis be? The Delphi method could be used to arrive at this consensus. Exploring the criteria under which a funder can legitimately identify as an impact-first funder is also recommended. Establishing a certification or label could help deter so-called impact washing among funders.

# 8. Conclusion

This chapter aims to consolidate the findings and provide a comprehensive response to the main research question. The main research question for this study is: 'How are funders and social enterprises aligned in measuring social impact on SDG3?'. The following findings were obtained to answer the research question through a combination of information gathered from literature, semi-structured interviews, and a survey.

This research has shown that funders and social enterprises need comparable KPIs but prefer that social enterprises choose their own KPIs without compromising comparability. Currently, there are too many KPIs that social enterprises have to choose from, which creates a risk of miscommunication. There is a perception that there is no easy way to create a small standardized subset of KPIs that social enterprises can use to communicate their impact on SDG3. However, when looking at the actual use of indicators, a very limited set of indicators could be sufficient to express this social impact with precise data. It is noted that the Indicator Number of people reached with improved health care is used the most by both funders and social enterprises with quantitively precise data. The subset identified in this research consists of the following indicators:

- Hospitalization days avoided due to the intervention of social enterprise (# days),
- Sick days avoided due to the intervention of social enterprise (# days)
- Prevalence of other diseases increasing inversely to the target disease of social enterprise (#)
- Number of people reached with improved health care (#)
- Job losses in sectors impacted by the health intervention (e.g., decline in employment in tobacco industry after an effective anti-smoking campaign, nurses losing their jobs due to technological innovation)(#)
- Amount of the products/services sold by the social enterprise (#)
- Number of people served by intervention of social enterprise (#)

Another finding of this research is that quantifying impact is complex, and there is a dilemma between focusing on more easily measurable KPIs from Theory of Change categories (input, activity, and output) and more challenging to quantify categories (outcome and impact) that better represents the mission of a social enterprise. Literature showed that opinions differ on whether small to medium-sized enterprises should focus on short-term, easy-to-measure output or outcome indicators. Interviews initiated that simple calculations were enough for this stage of social enterprises. However, funders mentioned that social enterprises only receive credit for impact values they can demonstrate. Funders highlight that social enterprises should focus on

simple indicators. Unsure outcomes and impact indicators are written down, but they will not necessarily receive credit. The survey statements showed a slight disagreement between the funders and social enterprises regarding whether quantifying input, activity, and output indicators should be prioritized over quantifying outcome and impact indicators. Social enterprises somewhat agreed, while funders somewhat disagreed. When looking for the quantification of the outcome and impact indicators, a back-of-the-envelope calculation sufficed for most social enterprises rather than for funders. This implicates a mismatch between the perception of the funders and social enterprises and how impact could be miscalculated as the Theory of Change needs to be seen as a whole.

This research has also found that there is a clear emphasis on the need for social enterprises to align their missions with the strategic goals of their funders. This alignment is not just a preference but often a requirement for funding. Companies 6, 7, and 8 demonstrate structured funding approaches prioritizing congruence with organizational themes and goals. With this, the Theory of Change is used as an external tool to showcase how mission and objectives align to funders. However, this could result in the Theory of Change not being used in the way it was initially intended.

Furthermore, a finding in line with this, interviews with funders and social enterprises, as well as survey results, reveal that both groups tend to focus more on a social enterprise's potential positive social impacts than the potentially negative ones. It is essential for social enterprises and funders to be aware of both potential positive and negative impacts of their activities and to integrate this into their social impact measurements. This is of great importance, as for some social enterprises, the seemingly positive impact on society may be less than expected or could even have negative consequences. This can slow down the process of achieving the SDG's.

This research also found that impact could mean many different things to other people; social impact is different for everyone. Everybody wants to claim they create impact, but it is all perceived differently. This is seen, for example, in the fact that conversations with social enterprises revealed that in discussions with impact funders, the importance of impact is often perceived as 'nice to have' rather than necessary. The impact is more of an additional check that has yet to define a minimum value clearly. Since negative impact is not always considered, this could even allow net-negative impact organizations to get funding if good financial returns are expected.

Recommendations for policymakers include the establishment of a central database. A central database should be created where the social impact results of social enterprises are publicly shared. A part of the funding budget should be reserved for tracking a social enterprise's long-term impact. Normal distributions can be established by collecting this extensive data in a central database. Analyzing the interventions with statistical data allows for assessing the likelihood of success of various similar interventions in achieving social impact. Therefore, other social

enterprises and funders could use this to evaluate potential funding possibilities. This database should inspire and inform other social enterprises and funders. They can learn from it which investments are most effective in realizing social impact. Making this data public allows for cross-checking, which reduces the risk of impact washing. Transparency about the challenges faced by social enterprises opens doors for internal and external dialogues about these challenges and potential innovative solutions. Another recommendation in line with this is to make the Theories of Change of portfolio social enterprises of funders public. Transparency and the risk of impact washing are achieved by sharing figures and providing insight into how these figures are calculated. Sharing the Theory of Change, as the Theory of Change is meant to showcase how impact is achieved, helps to do this. Once the KPIs are made public, further research is needed on measuring them correctly and establishing shared values. It is essential to understand how different long-term impact indicators relate to each other and how they can be compared. All these measures also enhance the transparency of how impact-focused funders are.

This database and the need for the publication of the Theories of Change should come from the government or the funders (e.g., family offices,  private investors) funding the funders as they have the power to influence the system. If they are interested in impact, they should press the funders to make more impact-focused decisions in the decision arena and push them to opt for more impact-driven social enterprises.

Future studies can add valuable perspectives using Comparative Cognitive mapping combined with game theory. This research started to map out the funders' and social enterprises' preferences and incentives. Adding the perspectives of the actor subjects and using game theory to explore the dynamics of cooperative and competitive interactions could result in more robust decision-making in the decision arena regarding allocating funding to social enterprises. Using Agent-Based Modelling or System Dynamics with the EMA workbench could show interesting results on how much social impact is achieved when applying specific policies. It nicely shows the interactions in a complex system under uncertainty.

This research highlights the intricate dynamics between funders and social enterprises in impact measurement. As the drive towards achieving SDG3 continues, adopting a transparent, comprehensive, and honest approach to measuring and reporting social impact and aligning the perspectives of social enterprises and funders becomes increasingly crucial. A few suggestions for a way forward have been given in the previous chapter. Such approaches will foster more effective and meaningful collaborations between funders and social enterprises and ensure a more impactful contribution toward achieving the SDGs.

# References


Abegunde, D., Orobaton, N., Shoretire, K., Ibrahim, M., Mohammed, Z., Abdulazeez, J., Gwamzhi, R., & Ganiyu, A. (2015). Monitoring maternal, newborn, and child health interventions using lot quality assurance sampling in Sokoto State of northern Nigeria. *Global Health Action*, *8*(1). https://doi.org/10.3402/gha.v8.27526

Abraham, F., Schmukler, S. L., & Abraham, F. (2017). *Addressing the SME Finance Problem* (SSRN Scholarly Paper 3249560). https://papers.ssrn.com/abstract=3249560

Aceituno, A. M., Stanhope, K. K., Rebolledo, P. A., Burke, R. M., Revollo, R., Iñiguez, V., Suchdev, P. S., & Leon, J. S. (2017). Using a monitoring and evaluation framework to improve study efficiency and quality during a prospective cohort study in infants receiving rotavirus vaccination in El Alto, Bolivia: The Infant Nutrition, Inflammation, and Diarrheal Illness (NIDI) study. *BMC Public Health*, *17*(1). https://doi.org/10.1186/s12889-017-4904-5

Adedeji, T., Fraser, H., & Scott, P. (2022). Implementing electronic health records in primary care using the theory of change: Nigerian case study. *Journal of Medical Internet Research*, *10*(8), 1–17. https://doi.org/10.2196/33491

Adler, M., & Ziglio, E. (1996). *Gazing Into the Oracle: The Delphi Method and Its Application to Social Policy and Public Health*. Jessica Kingsley Publishers.

Agrawal, A., & Hockerts, K. (2021). Impact investing: Review and research agenda. *Journal of Small Business & Entrepreneurship*, *33*(2), 153–181. https://doi.org/10.1080/08276331.2018.1551457

Aktar, B., Rajendra, K. L., Clark, E., Messier, K., Aissaoui, A., Elamurugan, K., Hasan, M. T., Farnaz, N., Kaiser, A., Awal, A., El Mowafi, I. M., & Kobeissi, L. (2022). Feasibility of establishing a core set of sexual, reproductive, maternal, newborn, child, and adolescent health indicators in humanitarian settings: Results from a multi-methods assessment in Bangladesh. *Reproductive Health*, *19*(1). https://doi.org/10.1186/s12978-022-01424-8

Altare, C., Weiss, W., Ramadan, M., Tappis, H., & Spiegel, P. B. (2022). Measuring results of humanitarian action: Adapting public health indicators to different contexts. *Conflict and Health*, *16*(1). https://doi.org/10.1186/s13031-022-00487-5

Amin, H., Scheepers, H., & Malik, M. (2022). Project monitoring and evaluation to engage stakeholders of international development projects for community impact. *International Journal of Managing Projects in Business*, *16*(2), 405–427. https://doi.org/10.1108/IJMPB-02-2022-0043

Bakibinga-Gaswaga, E. (2019). Something Old, Something New – Which Way to Go for Rule of Law Projects in the Agenda 2030 Era? *Law and Development Review*, *12*(2), 595–625. https://doi.org/10.1515/ldr-2019-0023

Bao, J., Rodriguez, D. C., Paina, L., Ozawa, S., & Bennett, S. (2015). Monitoring and evaluating the transition of large-scale programs in global health. *Global Health Science and Practice*, *3*(4), 591–605. https://doi.org/10.9745/GHSP-D-15-00221

Bari, S., Incorvia, J., Iverson, K. R., Bekele, A., Garringer, K., Ahearn, O., Drown, L., Emiru, A. A., Burssa, D., Workineh, S., Sheferaw, E. D., Meara, J. G., & Beyene, A. (2021). Surgical data

strengthening in Ethiopia: Results of a Kirkpatrick framework evaluation of a data quality intervention. *Global Health Action*, *14*(1). https://doi.org/10.1080/16549716.2020.1855808

Barreto, M. L. (2017). Health inequalities: A global perspective. *Ciencia & Saude Coletiva*, *22*(7), 2097–2108. https://doi.org/10.1590/1413-81232017227.02742017

Bassi, A., & Vincenti, G. (2019). Toward a New Metrics for the Evaluation of the Social Added Value of Social Enterprises. *CIRIEC-España, revista de economía pública, social y cooperativa*, *83*, 9–42. https://doi.org/10.7203/CIRIEC-E.83.13417

Block, J. H., Hirschmann, M., & Fisch, C. (2021). Which criteria matter when impact investors screen social enterprises? *Journal of Corporate Finance*, *66*, 101813. https://doi.org/10.1016/j.jcorpfin.2020.101813

Bodem-Schrötgens, J., & Becker, A. (2020). Do You Like What You See? How Nonprofit Campaigns With Output, Outcome, and Impact Effectiveness Indicators Influence Charitable Behavior. *Nonprofit and Voluntary Sector Quarterly*, *49*(2), 316–335. https://doi.org/10.1177/0899764019868843

Boerma, J. T., & Stansfield, S. K. (2007). Health statistics now: Are we making the right investments? *Lancet*, *369*(9563), 779–786. https://doi.org/10.1016/S0140-6736(07)60364-X

Breuer, E., Lee, L., De Silva, M., & Lund, C. (2016). Using theory of change to design and evaluate public health interventions: A systematic review. *Implementation Science*, *11*(1). https://doi.org/10.1186/s13012-016-0422-6

Brigham, M., & Hayes, N. (2013). Hybridity, consulting and e-development in the making: Inscribing new practices of impact assessment and value management. *Information Technology for Development*, *19*(2), 112–132. https://doi.org/10.1080/02681102.2012.690171

Bugg-Levine, A., Kogut, B., & Kulatilaka, N. (2012). A new approach to funding social enterprises. *Harvard Business Review*, *90*(1/2), 118–123.

Burnier, D., Balsiger, P., & Kabouche, N. (2022). Dépeindre la finance comme une « force pour le bien »: Analyse de discours du Global Impact Investing Network (GIIN). *Natures Sciences Sociétés*, *30*(3–4), 226–237. https://doi.org/10.1051/nss/2023004

Camoletto, M., Ferri, G., Pedercini, C., Ingaramo, L., & Sabatino, S. (2017). Social Housing and measurement of social impacts: Steps towards a common toolkit. *Valori e Valutazioni*, *19*, 11–39.

Carman, J. G. (2010). The Accountability Movement: What's Wrong With This Theory of Change? *Nonprofit and Voluntary Sector Quarterly*, *39*(2), 256–274. https://doi.org/10.1177/0899764008330622

Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*, *41*(5), 545–547. https://doi.org/10.1188/14.ONF.545-547

Casasnovas, G., & Jones, J. (2022). Who Has a Seat at the Table in Impact Investing? Addressing Inequality by Giving Voice. *Journal of Business Ethics*, *179*(4), 951–969. https://doi.org/10.1007/s10551-022-05154-6

Cattaneo, A., Amani, A., Charpak, N., De Leon-Mendoza, S., Moxon, S., Nimbalkar, S., Tamburlini, G., Villegas, J., & Bergh, A.-M. (2018). Report on an international workshop on kangaroo mother care: Lessons learned and a vision for the future. *BMC Pregnancy and Childbirth*, *18*(1). https://doi.org/10.1186/s12884-018-1819-9

Cetindamar, D., & Ozkazanc-Pan, B. (2017). Assessing mission drift at venture capital impact investors. *Business Ethics: A European Review*, *26*(3), 257–270. https://doi.org/10.1111/beer.12149

Chapman, S., Boodhoo, A., Duffy, C., Goodman, S., & Michalopoulou, M. (2023). Theory of Change in Complex Research for Development Programmes: Challenges and Solutions from the Global Challenges Research Fund. *European Journal of Development Research*, *35*(2), 298–322. https://doi.org/10.1057/s41287-023-00574-0

Cleland, J. A. (2017). The qualitative orientation in medical education research. *Korean Journal of Medical Education*, *29*(2), 61–71. https://doi.org/10.3946/kjme.2017.53

Cole, D. C., Boyd, A., Aslanyan, G., & Bates, I. (2014). Indicators for tracking programmes to strengthen health research capacity in lower- and middle-income countries: A qualitative synthesis. *Health Research Policy and Systems*, *12*(1), 17. https://doi.org/10.1186/1478-4505-12-17

Di Domenico, M., Haugh, H., & Tracey, P. (2010). Social Bricolage: Theorizing Social Value Creation in Social Enterprises. *Entrepreneurship Theory and Practice*, *34*(4), 681–703. https://doi.org/10.1111/j.1540-6520.2010.00370.x

Doherty, B., Haugh, H., & Lyon, F. (2014). Social Enterprises as Hybrid Organizations: A Review and Research Agenda. *International Journal of Management Reviews*, *16*(4), 417–436. https://doi.org/10.1111/ijmr.12028

Dufour, B. (2019). Social impact measurement: What can impact investment practices and the policy evaluation paradigm learn from each other? *Research in International Business and Finance*, *47*, 18–30. https://doi.org/10.1016/j.ribaf.2018.02.003

Ebrahim, A., Battilana, J., & Mair, J. (2014). The governance of social enterprises: Mission drift and accountability challenges in hybrid organizations. *Research in Organizational Behavior*, *34*, 81–100. https://doi.org/10.1016/j.riob.2014.09.001

Ebrahim, A., & Rangan, V. K. (2014). What impact? A framework for measuring the scale and scope of social performance. *California Management Review*, *56*(3), 118–141.

Endalamaw, A., Gilks, C. F., Ambaw, F., & Assefa, Y. (2022). Universality of universal health coverage: A scoping review. *PLoS ONE*, *17*(8 August). https://doi.org/10.1371/journal.pone.0269507

Enserink, B., Bots, P., Daalen, E. van, Hermans, L., Kortmann, R., Koppenjan, J., Kwakkel, J., Ruijgh, T., Thissen, W., & Slinger, J. (2022). *Policy Analysis of Multi-Actor Systems—2nd edition*. TU Delft OPEN Textbooks. https://textbooks.open.tudelft.nl/textbooks/catalog/book/50

Esponda, G. M., Ryan, G. K., Estrin, G. L., Usmani, S., Lee, L., Murphy, J., Qureshi, O., Endale, T., Regan, M., Eaton, J., & De Silva, M. (2021). Lessons from a theory of change-driven

evaluation of a global mental health funding portfolio. *International Journal of Mental Health Systems*, *15*(1), 18. https://doi.org/10.1186/s13033-021-00442-6

Fernandez, R. M. (2020). SDG3 Good Health and Well-Being: Integration and Connection with Other SDGs. In W. Leal Filho, T. Wall, A. M. Azul, L. Brandli, & P. G. Özuyar (Eds.), *Good Health and Well-Being* (pp. 629–636). Springer International Publishing. https://doi.org/10.1007/978-3-319-95681-7_64

Foster, S., Doksum, T., & Dwyer, C. (2021). Shifting Power in Maine: Findings From a Six-Year Community-Based Health Initiative. *The Foundation Review*, *13*(2). https://doi.org/10.9707/1944-5660.1561

Frankfurter, C., Le, J., & Cuervo, L. G. (2019). Assessing progress of the Pan American Health Organization's Policy Research for Health in member states. *Gaceta Sanitaria*, *33*(3), 283–288. https://doi.org/10.1016/j.gaceta.2018.04.015

Fretheim, A., Oxman, A. D., Lavis, J. N., & Lewin, S. (2009). SUPPORT tools for Evidence-informed policymaking in health 18: Planning monitoring and evaluation of policies. *Health Research Policy and Systems*, *7*(SUPPL. 1). https://doi.org/10.1186/1478-4505-7-S1-S18

Frey, E. (2021). Reflections on philanthropy and organizing in the United States. *Journal of Community Psychology*, *49*(8), 3215–3231. https://doi.org/10.1002/jcop.22715

*GIIRS | GIIRS Company Assessment Structure*. (n.d.). Retrieved 21 October 2023, from https://giirs.org/about-giirs/how-giirs-works/164

Grieco, C. (2015). *Assessing social impact of social enterprises: Does one size really fit all?* Springer.

Guo, B., & Peng, S. (2020). Do Nonprofit and For-Profit Social Enterprises Differ in Financing? *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *31*(3), 521–532. https://doi.org/10.1007/s11266-020-00218-5

Hammad, M., Foster, A. M., Aissaoui, A., Clark, E., Elamurugan, K., Rajendra, K. L., El Mowafi, I. M., & Kobeissi, L. (2023). Exploring the feasibility of establishing a core set of sexual, reproductive, maternal, newborn, child, and adolescent health indicators in humanitarian settings: Results from a multi-methods assessment in Jordan. *Reproductive Health*, *20*(1). https://doi.org/10.1186/s12978-023-01589-w

*Harmonized Indicators for Private Sector Operations (HIPSO) | Health*. (n.d.). Retrieved 29 November 2023, from https://indicators.ifipartnership.org/health/

*Health Outcomes and Impact—MEASURE Evaluation*. (n.d.). [Collection]. Retrieved 29 November 2023, from https://www.measureevaluation.org/rbf/indicator-collections/health-outcome-impact-indicators.html

Hermans, L. M., & Cunningham, S. W. (2018). *Actor and Strategy Models: Practical Applications and Step-Wise Approaches*. John Wiley & Sons, Incorporated. http://ebookcentral.proquest.com/lib/delft/detail.action?docID=5219468

Hodson, E., Vainio, T., Sayún, M. N., Tomitsch, M., Jones, A., Jalonen, M., Börütecene, A., Hasan, M. T., Paraschivoiu, I., Wolff, A., Yavo-Ayalon, S., Yli-Kauhaluoma, S., & Young, G. W. (2023). Evaluating Social Impact of Smart City Technologies and Services: Methods, Challenges, Future Directions. *Multimodal Technologies and Interaction*, *7*(3), 33. https://doi.org/10.3390/mti7030033

Holvoet, N., & Inberg, L. (2014). Taking stock of monitoring and evaluation systems in the health sector: Findings from Rwanda and Uganda. *Health Policy and Planning*, *29*(4), 506–516. https://doi.org/10.1093/heapol/czt038

Hynes, B. (2009). Growing the social enterprise – issues and challenges. *Social Enterprise Journal*, *5*(2), 114–125. https://doi.org/10.1108/17508610910981707

Impouma, B., Wolfe, C. M., Mboussou, F., Farham, B., Saturday, T., Pervilhac, C., Bishikwabo, N., Mlanda, T., Muhammad, A. B., Moussana, F., Talisuna, A., Karamagi, H., Keiser, O., Flahault, A., Cabore, J., & Moeti, M. (2021). Monitoring and evaluation of COVID-19 response in the WHO African region: Challenges and lessons learned. *Epidemiology and Infection*, *149*. https://doi.org/10.1017/S0950268821000807

Jackson, E. T. (2013). Interrogating the theory of change: Evaluating impact investing where it matters most. *Journal of Sustainable Finance & Investment*, *3*(2), 95–110. https://doi.org/10.1080/20430795.2013.776257

Jäger, U. P., & Rothe, M. D. (2013). Multidimensional Assessment of Poverty Alleviation in a Developing Country: A Case Study on Economic Interventions. *Nonprofit Management and Leadership*, *23*(4), 511–528. https://doi.org/10.1002/nml.21077

Jain, S., & Zorzi, N. (2017). Investing for Impact: The Global Fund Approach to Measurement of AIDS Response. *AIDS and Behavior*, *21*, 91–100. https://doi.org/10.1007/s10461-016-1620-6

Kickbusch, I., Krech, R., Franz, C., & Wells, N. (2018). Banking for health: Opportunities in cooperation between banking and health applying innovation from other sectors. *BMJ Global Health*, *3*. https://doi.org/10.1136/bmjgh-2017-000598

Knoblauch, A. M., De La Rosa, S., Sherman, J., Blauvelt, C., Matemba, C., Maxim, L., Defawe, O. D., Gueye, A., Robertson, J., McKinney, J., Brew, J., Paz, E., Small, P. M., Tanner, M., Rakotosamimanana, N., & Grandjean Lapierre, S. (2019). Bi-directional drones to strengthen healthcare provision: Experiences and lessons from Madagascar, Malawi and Senegal. *BMJ Global Health*, *4*(4). https://doi.org/10.1136/bmjgh-2019-001541

Korenromp, E. L. (2012). Lives saved from malaria prevention in Africa—Evidence to sustain cost-effective gains. *Malaria Journal*, *11*. https://doi.org/10.1186/1475-2875-11-94

Lall, S. A. (2019). From Legitimacy to Learning – How Impact Measurement Perceptions and Practices Evolve in Social Enterprise – Social Finance Organization Relationships. *SocArXiv*, Article 7z8nc. https://ideas.repec.org//p/osf/socarx/7z8nc.html

Lehner, O. M. (2016). *Routledge handbook of social and sustainable finance*. Routledge.

Lynch-Cerullo, K., & Cooney, K. (2011). Moving from Outputs to Outcomes: A Review of the Evolution of Performance Measurement in the Human Service Nonprofit Sector. *Administration in Social Work*, *35*(4), 364–388. https://doi.org/10.1080/03643107.2011.599305

Ma, L., & Agnew, R. (2022). Deconstructing impact: A framework for impact evaluation in grant applications. *Science and Public Policy*, *49*(2), 289–301. https://doi.org/10.1093/scipol/scab080

Macassa, G. (2021). Social Enterprise, Population Health and Sustainable Development Goal 3: A Public Health Viewpoint. *Annals of Global Health*, *87*(1), 52. https://doi.org/10.5334/aogh.3231

Maleka, E. N. (2017). Monitoring and evaluation of sport-based HIV/AIDS awareness programmes: Strengthening outcome indicators. *Sahara J*, *14*(1), 1–21. https://doi.org/10.1080/17290376.2016.1266506

McEvoy, P., Brady, M., & Munck, R. (2016). Capacity development through international projects: A complex adaptive systems perspective. *International Journal of Managing Projects in Business*, *9*(3), 528–545. https://doi.org/10.1108/IJMPB-08-2015-0072

Meurs, S. (2017, October 6). *Talking About Ethics in Impact Investing (SSIR)*. https://ssir.org/articles/entry/talking_about_ethics_in_impact_investing

Mokdad, A. H., Colson, K. E., Zúñiga-Brenes, P., Ríos-Zertuche, D., Palmisano, E. B., Alfaro-Porras, E., Anderson, B. W., Borgo, M., Desai, S., Gagnier, M. C., Gillespie, C. W., Giron, S. L., Haakenstad, A., Romero, S. L., Mateus, J., McKay, A., Mokdad, A. A., Murphy, T., Naghavi, P., … Regalia, F. (2015). Salud Mesoamérica 2015 Initiative: Design, implementation, and baseline findings. *Population Health Metrics*, *13*(1). https://doi.org/10.1186/s12963-015-0034-4

Molecke, G., & Pinkse, J. (2017). Accountability for social impact: A bricolage perspective on impact measurement in social enterprises. *Journal of Business Venturing*, *32*(5), 550–568. https://doi.org/10.1016/j.jbusvent.2017.05.003

Monitor Institute. (2009). *Investing for Social and Environmental Impact: A Design for Catalyzing an Emerging Industry, Executive Summary*. https://search.issuelab.org/resource/investing-for-social-and-environmental-impact-a-design-for-catalyzing-an-emerging-industry-executive-summary.html

Murray, C. J. L., & Frenk, J. (2008). Health metrics and evaluation: Strengthening the science. *Lancet (London, England)*, *371*(9619), 1191–1199. https://doi.org/10.1016/S0140-6736(08)60526-7

Ndomondo-Sigonda, M., Miot, J., Naidoo, S., Ng'Andu, B., Ngum, N., Masot, N. E., & Kaale, E. (2020). National medicines regulatory authorities financial sustainability in the East African Community. *PLoS ONE*, *15*. https://doi.org/10.1371/journal.pone.0236332

Nemser, B., & Addofoh, N. (2022). Contextual factors associated with contraceptive utilization and unmet need among sexually active unmarried women in Kenya: A multilevel regression analysis. *PLoS ONE*, *17*. https://doi.org/10.1371/journal.pone.0270516

Nguyen, L., Szkudlarek, B., & Seymour, R. G. (2015). Social impact measurement in social enterprises: An interdependence perspective. *Canadian Journal of Administrative Sciences / Revue Canadienne des Sciences de l'Administration*, *32*(4), 224–237. https://doi.org/10.1002/cjas.1359

Nicholls, A. (2009). *Capturing the performance of the Socially Entrepreneurial Organization (SEO): An organizational legitimacy approach*.

Njah, J., Hansoti, B., Adeyami, A., Bruce, K., O'Malley, G., Gugerty, M. K., Chi, B. H., Lubimbi, N., Steen, E., Stampfly, S., Berman, E., & Kimball, A. M. (n.d.). Measuring for Success:

Evaluating Leadership Training Programs for Sustainable Impact. *Annals of Global Health*, *87*(1), 63. https://doi.org/10.5334/aogh.3221

Nove, A., Ajuebor, O., Diallo, K., Campbell, J., & Cometto, G. (2023). The roles and involvement of global health partners in the health workforce: An exploratory analysis. *Human Resources for Health*, *21*(1). https://doi.org/10.1186/s12960-023-00825-5

Obare, V., Brolan, C. E., & Hill, P. S. (2014). Indicators for Universal Health Coverage: Can Kenya comply with the proposed post-2015 monitoring recommendations? *International Journal for Equity in Health*, *13*(1). https://doi.org/10.1186/s12939-014-0123-1

OECD, D. (2010). *Evaluating development co-operation. Summary of key norms and standards*. Paris: OECD.

Peterson, G., Yawson, R., JK, E., Nicholls, J., Peterson, G., Yawson, R., JK, E., & Nicholls, J. (2020). Big Finance, Big Technology, Wicked Problems, and the World's Poor. *Navigating Big Finance and Big Technology for Global Change: The Impact of Social Finance on the World's Poor*, 1–31.

Prinsen, G., & Nijhof, S. (2015). Between logframes and theory of change: Reviewing debates and a practical experience. *Development in Practice*, *25*(2), 234–246.

Rahdari, A., Sepasi, S., & Moradi, M. (2016). Achieving sustainability through Schumpeterian social entrepreneurship: The role of social enterprises. *Journal of Cleaner Production*, *137*, 347–360. https://doi.org/10.1016/j.jclepro.2016.06.159

Rey-Garcia, M., Sanzo-Perez, M. J., & Álvarez-González, L. I. (2018). To found or to fund? Comparing the performance of corporate and noncorporate foundations. *Nonprofit and Voluntary Sector Quarterly*, *47*(3), 514–536.

Reynolds, H. W., & Sutherland, E. G. (2013). A systematic approach to the planning, implementation, monitoring, and evaluation of integrated health services. *BMC Health Services Research*, *13*(1). https://doi.org/10.1186/1472-6963-13-168

Ringhofer, L., & Kohlweg, K. (2019). Has the Theory of Change established itself as the better alternative to the Logical Framework Approach in development cooperation programmes? *Progress in Development Studies*, *19*(2), 112–122.

Roberton, T., & Sawadogo-Lewis, T. (2022). Building coherent monitoring and evaluation plans with the Evaluation Planning Tool for global health. *Global Health Action*, *15*(sup1), 2067396. https://doi.org/10.1080/16549716.2022.2067396

Rommelmann, V., Setel, P. W., Hemed, Y., Angeles, G., Mponezya, H., Whiting, D., & Boerma, T. (2005). Cost and results of information systems for health and poverty indicators in the United Republic of Tanzania. *Bulletin of the World Health Organization*, *83*(8), 569–577.

Ruel, M. T. (2017). *Measuring infant and young child complementary feeding practices: Indicators, current practice, and research gaps* (Vol. 87). https://www.scopus.com/inward/record.uri?eid=2-s2.0-85016179688&doi=10.1159%2f000448939&partnerID=40&md5=9982b035bfa2335b3b4af81b92e4448c

Rugg, D., Marais, H., Carael, M., De Lay, P., & Warner-Smith, M. (2009). Are we on course for reporting on the Millennium Development Goals in 2015? *Journal of Acquired Immune Deficiency Syndromes*, *52*(SUPPL. 2), 69–76. https://doi.org/10.1097/QAI.0b013e3181baec7c

Scheirer, M. A. (2000). Getting more "bang" for your performance measures "buck". *The American Journal of Evaluation*, *21*(2), 139–149. https://doi.org/10.1016/S1098-2140(00)00075-8

Schneider, M., van de Water, T., Araya, R., Bonini, B. B., Pilowsky, D. J., Pratt, C., Price, L., Rojas, G., Seedat, S., Sharma, M., & Susser, E. (2016). Monitoring and evaluating capacity building activities in low and middle income countries: Challenges and opportunities. *Global Mental Health (Cambridge, England)*, *3*, 29. https://doi.org/10.1017/gmh.2016.24

*SDG 3 Impact Measurement Overview*. (2021). Sustainable Finance Platform.

*SDG Indicators—SDG Indicators*. (n.d.). Retrieved 3 April 2023, from https://unstats.un.org/sdgs/indicators/indicators-list/

Silva, H. P., Lehoux, P., & Sabio, R. P. (2023). Mobilizing capital for responsible innovation: The role of social finance in supporting innovative projects. *Journal of Responsible Innovation*, *10*(1). https://doi.org/10.1080/23299460.2023.2243122

Silva, M. E. C., Zarsuelo, M.-A. M., Naria-Maritana, M. J. N., Zordilla, Z. D., Lam, H. Y., Mendoza, M. A. F., Buan, A. K. G., Nuestro, F. K. A., Rosa, J. A. D., & Padilla, C. D. (2020). A call for an evidence-informed criteria selection to guide equitable health investments in the era of universal health care: Policy analysis. *Acta Medica Philippina*, *54*(6), 659–667. https://doi.org/10.47895/AMP.V54I6.2587

Situm, M., Plastun, A., Makarenko, I., Serpeninova, Y., & Sorrentino, G. (2021). SDG 3 and financing instruments in Austria and Ukraine: Challenges and perspectives. *Problems and Perspectives in Management*, *19*(3), 118–135. https://doi.org/10.21511/ppm.19(3).2021.11

Stenberg, K., Hanssen, O., Edejer, T. T.-T., Bertram, M., Brindley, C., Meshreky, A., Rosen, J. E., Stover, J., Verboom, P., Sanders, R., & Soucat, A. (2017). Financing transformative health systems towards achievement of the health Sustainable Development Goals: A model for projected resource needs in 67 low-income and middle-income countries. *The Lancet Global Health*, *5*(9), 875–887. https://doi.org/10.1016/S2214-109X(17)30263-2

Strachan, J. M. (2021). A commentary: Using a theory-based approach to guide a global programme of FGM/C research: What have we learned about creating actionable research findings? *Evaluation and Program Planning*, *88*. https://doi.org/10.1016/j.evalprogplan.2021.101968

Straub, A., Koopman, M., & van Mossel, H. (2010). Systems approach and performance measurement by social enterprises. *Facilities*, *28*(5/6), 321–331. https://doi.org/10.1108/02632771011031547

Taggart, L., Marriott, A., Cooper, M., Atkinson, D., Griffiths, L., Ward, C., & Mullhall, P. (2022). Developing curricular-content and systems-related impact indicators for intellectual disability awareness training for acute hospital settings: A modified International Delphi Survey. *Journal of Advanced Nursing*, *78*(7), 2055–2074. https://doi.org/10.1111/jan.15123

Tewari, S., Singh, H., Wadhwa, S., & Tandon, D. (2021). Scaling Impact Investment for Sustainable Development Goals: An Empirical Analysis. *Australasian Accounting, Business and Finance Journal*, *15*(5), 4–21. https://doi.org/10.14453/aabfj.v15i5.2

Thomas, J. C., Doherty, K., Watson-Grant, S., & Kumar, M. (2021). Advances in monitoring and evaluation in low- and middle-income countries. *Evaluation and Program Planning*, *89*. https://doi.org/10.1016/j.evalprogplan.2021.101994

Traynor, O., Martin, A., Johnstone, A., Chng, N. R., Kenny, J., & McCrorie, P. (2022). A Low-Cost Method for Understanding How Nature-Based Early Learning and Childcare Impacts Children's Health and Wellbeing. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.889828

UNCHR. (2018). *Theory of Change Key components*. UNCHR.

United Nations Departments of Economics and Social Affairs. (2020). *World social report 2020: Inequality in a rapidly changing world*. UN.

Valcárcel-Dueñas, M., & Solórzano-García, M. (2019). Digitalization, monitoring and evaluation of the social economy impact. Analysis of spanish third sector of social action. 'Juntos por el empleo' case study. *CIRIEC-Espana Revista de Economia Publica, Social y Cooperativa*, *95*, 143–159. https://doi.org/10.7203/CIRIEC-E.95.13128

Vörösmarty, C. J., Osuna, V. R., Koehler, D. A., Klop, P., Spengler, J. D., Buonocore, J. J., Cak, A. D., Tessler, Z. D., Corsi, F., Green, P. A., & Sánchez, R. (2018). Scientifically assess impacts of sustainable investments. *Science*, *359*(6375), 523–525. https://doi.org/10.1126/science.aao3895

*Werkgroep SDG-impactmeting*. (n.d.). Retrieved 18 October 2023, from https://www.dnb.nl/groene-economie/platform-voor-duurzame-financiering/werkgroep-sdg-impactmeting/

Wood, B., Attema, G., Ross, B., & Cameron, E. (2022). A conceptual framework to describe and evaluate a socially accountable learning health system: Development and application in a northern, rural, and remote setting. *The International Journal of Health Planning and Management*, *37*(S1), 59–78. https://doi.org/10.1002/hpm.3555

World Health Organization. (2018). *2018 Global reference list of 100 core health indicators (plus health-related SDGs)* (WHO/HIS/IER/GPM/2018.1). World Health Organization. https://apps.who.int/iris/handle/10665/259951

*World health statistics 2023: Monitoring health for the SDGs, sustainable development goals - World | ReliefWeb*. (2023, May 19). https://reliefweb.int/report/world/world-health-statistics-2023-monitoring-health-sdgs-sustainable-development-goals

Woschke, T., Haase, H., & Kratzer, J. (2017). Resource scarcity in SMEs: Effects on incremental and radical innovations. *Management Research Review*, *40*(2), 195–217. https://doi.org/10.1108/MRR-10-2015-0239

Zhao, J., Lama, M., Sarkar, S., & Atun, R. (2011). Indicators measuring the performance of malaria programs supported by the global Fund in Asia, progress and the way forward. *PLoS ONE*, *6*(12). https://doi.org/10.1371/journal.pone.0028932

# Appendix A. Actor Analysis

## 1. Actor Identification

### *1.1 Social enterprises*

In order to create and distribute social, cultural, and natural value, social enterprises use business as a mechanism of value generation and maintenance. In both wealthy and developing countries, they are generally acknowledged as essential forces for sustainable development (Nguyen et al., 2015). In order to receive funding, they often have to assess their economic and societal impact (Hynes, 2009). There are two types of social enterprises: for-profit and non-profit social enterprises. Nonprofit social enterprises are entities granted tax exemption that deliberately undertake business ventures to support their social objectives and to produce revenue for their societal goals. In comparison, for-profit social enterprises are established as for-profit legal bodies. While they aim to make profits, they also purposefully advance a social mission to different extents. Some for-profit social enterprises are predominantly profit-oriented companies that engage in activities yielding social benefits (Guo & Peng, 2020).

### *1.2 Foundations*

A foundation is a charity trust or nonprofit company established to provide financial support to other businesses or people for philanthropic causes. They achieve this by giving grants (Rey-Garcia et al., 2018). Foundations like the Philips Foundation, We Share Forward Foundation, Bayer Foundation, Open Value Foundation, and the Roddenberry Foundation are known to fund causes contributing to SDG3. These foundations often ask initiatives to assess their impact to receive funding.

### *1.3 Impact investors*

The area of impact investing shows encouraging development in capital expenditure. Investors' ability to achieve social and financial objectives simultaneously is the main factor stoking market and institutional interest in impact investing (Agrawal & Hockerts, 2021). Impact investing is presently practiced, but pertinent observational, critical, and theoretical knowledge is lacking. Surprisingly, the growth in the quantity of impact investing research has been prolonged (Agrawal & Hockerts, 2021). Since impact investing companies' success relies on their ability to create social and economic value, assessing results is a crucial point of contention in the field of study (Lehner, 2016). The impact investor group is diverse. The 'blended value' concept encapsulates this trade-off between social impact and financial returns. This is often described as social finance (H. P. Silva et al., 2023). There are mostly two streams in this social finance: impact first and finance first. "Impact first" investors prioritize producing benefits for society and the environment while maintaining a minimum level of financial returns; "finance first" investors prioritize maximizing financial profits while maintaining a minimum level of social or environmental effect (Monitor Institute, 2009).

### *1.4 Government*

Despite efforts to tackle health disparities, they persist as a significant public health issue in countries regardless of income levels (Barreto, 2017; United Nations Departments of Economics and Social Affairs, 2020). This is primarily because of the existing imbalances in social, economic, and environmental risks based on individuals' living conditions, educational settings, workplaces, recreational areas, healthcare-seeking behavior, and personal circumstances. Therefore, social enterprises can play a pivotal role in collaborating with local, regional, and national governments to ensure inclusivity, enhancing the likelihood of achieving SDG3 (Macassa, 2021). Also, to obtain government grants to social enterprises, social impact will need to be measured. Also, the ideas of social enterprises could be adapted by local governments, and thus, more societal impact can be achieved. In the process, governments also give money to impact investors to invest on their behalf. So they invest in the funds to also be able to generate a social return besides the financial return.

### *1.5 Banks*

Banks often overlook Social Enterprises when offering loans because the total value of these enterprises, including their positive societal impact, is not always monetarily quantified. For-profit enterprises have a better chance of obtaining traditional bank loans or venture capital because they generate more cash flow for investors (Doherty et al., 2014).

### *1.6 High-Net-Worth Individual Investors*

This is a group of people who want to invest in social enterprises. These usually accept reduced financial returns on their investments in social projects through donations (Bugg-Levine et al., 2012). They often have their money invested by impact investors (Casasnovas & Jones, 2022).

### *1.7 Impact organizations*

Organizations such as the Global Impact Investing Network, the OECD, the European Venture Philanthropy Association, TONIIC, and others. They have a vested interest in the development of this sector.

### *1.8 Philanthropists*

Impact assessment is greatly important for philanthropists. They purely focus on having a positive impact from their investments, rather than economical one. It is essential that they can measure their social impact accordingly.

### *1.9 Impacted communities*

It is essential for the impacted communities that the impact is measured correctly and the social enterprises get funding to carry out their operations. This is to ensure that good is done to the communities.

### *1.10 Family Offices*

Family offices frequently allocate capital to impact funds to manage and invest on their behalf (Casasnovas & Jones, 2022)

## 2. Power Interest Grid

Figure 13 shows the PI grid of the system. The actors, the government, high-net-worth individual investors, banks, and family offices, have high power and lower interest. These actors regularly provide resources to impact funds to oversee and make investments on their behalf. Different types of investors maintain these impact funds. These types differ in their interest in social impact, and they determine which social enterprises receive funding. The social enterprises have a high interest but no power. The impacted community, as do the impact organizations, also has a high interest but even lower power.

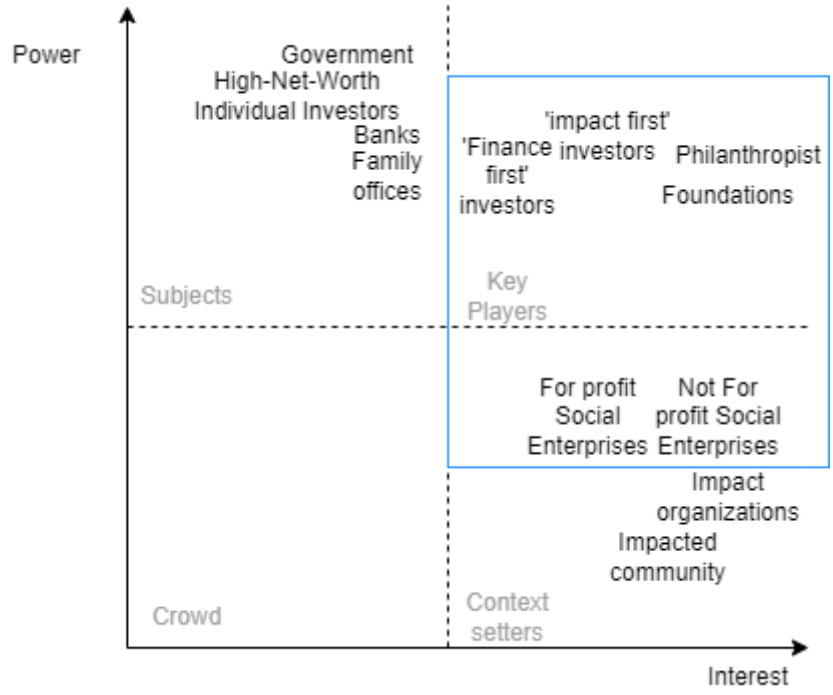



*Figure 11: Power/Interest Grid*

# Appendix B. Exploratory Interviews

### *Participants in first round of interviews*

The table below displays the details of the companies interviewed for the first round of interviews.

*Table 7: Overview interviewed companies round 1*

| Company | Job title | Company Type | Company description |
|---|---|---|---|
| **1** | Project Officer Social Impact | Impact assessment organization | Company 1 is a Dutch platform focused on measuring and promoting social impact. Social enterprises and non-profit organizations can measure and present their impact to stakeholders and investors through their websites. The platform also offers opportunities for knowledge sharing, collaboration, and funding. In short, Company 1 helps organizations provide transparency and insight into their social effectiveness. |
| **2** | Director | Donor and Impact investing fund | Company 2 invests through donations in Dutch impact-first companies and social enterprises with a primary social mission. These enterprises prioritize solving a societal problem above profit maximization and shareholder value. |
| **3** | Investor relations analyst | Impact investors | Company 3 is an impact investment firm focused on financial inclusion and inclusive growth in emerging markets. They aim to invest in scalable, sustainable businesses that provide goods, services, and income-generating opportunities to underserved communities. Company 3 primarily operates in the financial services, agriculture, and logistics sectors. They seek to generate financial returns and measurable social and environmental impact through their investments. Additionally, company 3 provides strategic support and expertise to their portfolio companies to help them achieve their goals. |
| **4** | Impact Investment Associate | Foundation | Company 4 is a Dutch charitable foundation that supports projects and initiatives focused on creating a green, socially inclusive, and creative society. It provides financial support, expertise, and a network of partners to individuals, NGOs, and |

| | | | |
|---|---|---|---|
| | | | social enterprises that tackle societal challenges and promote sustainable solutions. Company 4 aims to empower changemakers, foster innovation, and contribute to positive social and environmental change in sustainable development, social cohesion, culture, and the green economy. |
| **5** | Knowledge analyst | Impact investing network | Company 5 is an organization that supports and promotes venture philanthropy and social investment in Europe. It brings together a diverse community of stakeholders committed to creating positive social impact, including venture philanthropy organizations, impact investors, foundations, and social enterprises. They also brought out an article about standardizing impact measurement. |

### *Questions Exploratory Interviews*

*"I am an MSc student at TU Delft, conducting my master's thesis on the topic of measuring the social impact of social enterprises. Broadly, I am interested in how we make reporting and measuring impact more effective. It is a time-consuming exercise for many organizations, so I want to understand if it is possible to make this easier for companies just trying to do good. I am doing a master's thesis in collaboration with Unifix Care. They want to provide cheaper surgical instruments to African countries.*

1. Can you briefly introduce your company to me?
2. What is your role/responsibility within the company?
3. What frameworks or methodologies does your company use for impact measurement?

a) Theory of Change?
b) KPIs?
c) SROI?
d) SDG's?
e) IRIS+ indicators by Global Impact Investing Network?
f) Others?
g) None?

4. Could you explain why you use selected frameworks/methodologies?

5. In your experience, do companies struggle or have challenges in reporting impact using such frameworks? Why/why not?
6. Are there any specific metrics or indicators that are widely recognized and accepted in the impact investing community that you know of?
    a) Could you name the ones you can think of?
    b) Are these metrics domain-specific or general?
7. Do you think it is possible for one domain (in my project's case, organizations that support better healthcare) to have a standardized set of indicators to use for measuring impact?
    a) If yes, why? If not, why not?
    b) If yes, how do you suggest I find such indicators as a starting point?
8. Would you be willing to participate further in my research by completing a survey on the indicators used for impact measurement?

### *Participants in second round of interviews*

The table below displays the details of the companies interviewed for the second round of interviews.

*Table 8: Overview interviewed SDG3 funders and social enterprises round 2*

| Company | Job title | Company Type | Company Description |
|---|---|---|---|
| 6 | Director | Funder | Company 6 is a Dutch foundation. The company focuses on a niche market in the Sub-Saharan Countries of Africa by investing in projects that often do not have direct access to financial resources because of their innovative nature. They invest in organizations that offer vulnerable people a perspective in health and income focusing on agriculture and finance. |
| 7 | Program manager | Funder | Company 7 is a Dutch foundation primarily focusing on companies operating in SDG3. They believe innovation and collaboration can help solve some of the world's toughest healthcare challenges. They primarily focus on deploying technologies that enable access to quality healthcare, strengthening community and primary healthcare, and building financially sustainable health-care solutions. |
| 8 | Associate Director Social Impact | Funder | Company 8 is a foundation based in Germany that catalyzed advances in science and social innovation for a world with health for all and hunger for none—so focused on SDG2 and SDG3. |

| | | | |
|---|---|---|---|
| 9 | Associate | Funder | Company 9 is a venture capital fund that channels its investments into European digital tech enterprises. These ventures not only promise robust financial returns but also contribute positively to both the environment and society. They focus primarily on climate companies but also have a health department. |
| 10 | Team lead LifeSciences & Health | Funder | Company 10 operates as a Dutch impact investment firm. Their impact investments are targeted explicitly towards advancing a carbon-neutral and circular economy (SDGs 12 and 13), enhancing the affordability and accessibility of healthcare (SDG 3), and playing a role in driving employment, economic growth, and innovation (SDGs 8 and 9). |
| 11 | Co-Founder | Social Enterprise | Social Enterprise 11 is a Dutch company that produces reusable medical devices, initially for LMICs. They started three years ago and focus both on healthcare and durability. |
| 12 | CEO | Social Enterprise | Social Enterprise 12 is a company that created an automated microscope that provides quick, reliable, affordable, easy-to-use, and field-compatible point-of-care assisted diagnosis of malaria, Tuberculosis, and neglected Tropical Diseases. |
| 13 | Associate CEO | Social Enterprise | Social Enterprise 13 is a leading AI-assisted teleradiology platform in the regions of the Middle East and Africa. It helps healthcare facilities and hospitals diagnose and write radiology reports using a cloud-based AI assistant. |
| 14 | CEO | Social Enterprise | Social Enterprise 14 provides innovative solutions to educate the lay public with basic first aid and equip emergency professionals with access to the latest emergency medical service protocols. |

### *Questions in-depth interview funders*

This interview round aimed to delve into the significance of various indicators utilized in impact assessment. The funders were asked about the importance of the indicator categories in the table below. The funders were also asked about the importance of more economic indicators.

*Table 9: Overview of Round 1 questions: Indicator categories*

| **Indicators** |
|---|
| Mortality ratios (for a specified population group or the whole population of a given region) |
| Improvement of reproductive health |
| Incidence of infections (communicable diseases) |
| Prevalence of non-communicable diseases |
| Improving Data for Health Systems Policy and Decision-Making |
| Reducing Financial Barriers to Health Services |
| Improving Environmental Factors Influencing Health |
| Increased Supply of Essential Health Services and diagnostics |
| Increasing Access to Essential Medicines |
| Water, Sanitation and Hygiene (WASH) improvement |
| Improved Nutrition |

### *Questions in-depth interviews of social enterprises*

**Interview Questions:**

*"I am an MSc student at TU Delft conducting my master's thesis on measuring the social impact of social enterprises. Broadly, I am interested in how we make reporting and measuring impact more effective. It is a time-consuming exercise for many organizations, so I want to understand if making this easier for companies just trying to do good is possible. I am interested in both the views of the funders and the social enterprises to see if we can somewhat align these perspectives."*

1. Can you briefly introduce your company to me?
2. What is your role/responsibility within the company?
3. How frequently has your organization applied for funding to support its activities?
4. Are there recurring impact indicators that funders typically require you to report (e.g., numbers of lives reached, affordability improvements of medical care, indicators from the list)?
5. What do you think of the importance of those indicators?
6. Are there indicators you believe are overlooked but should be considered by funders?
7. From your perspective, what are the most critical impact indicators to track and why?

8. Do you often feel constrained by the specific categories or pillars a foundation or funder establishes? How does this affect your organization's approach to social impact?
9. Have there been instances where your organization's goals and the funders' expectations were not aligned?
10. Do you know some other persons I could contact?

# Appendix C. Survey

## *Survey Respondents*

The table below lists the number of survey respondents.

*Table 10: Overview of survey respondents*

| | **Contacted** | **Filled in** | **Partly filled in** | **Total** | **Response rate filled in** |
|---|---|---|---|---|---|
| **Funders** | 126 | 13 | 5 | 19 | 10,32% |
| **Social Enterprises** | 153 | 20 | 4 | 25 | 13,07% |

# Appendix D. Indicators

The table below lists the indicators found in literature and interviews.

*Table 11: Indicator longlist*

| Indicator Name | WHO | SDG | IRIS+ | Other sources |
|---|---|---|---|---|
| **Survey indicators** | | | | |
| **Quality-Adjusted Life Years** | | | | Company 10, (*SDG 3 Impact Measurement Overview*, 2021), (Tewari et al., 2021), Company 10 |
| **Increased life expectancy in area** | | | | (Tewari et al., 2021), Company 8 |
| **Number of people reached with improved health care.** | | | | (*SDG 3 Impact Measurement Overview*, 2021), Company 7, Company 8 |
| **Number of patients served** | | | | (*Harmonized Indicators for Private Sector Operations (HIPSO) | Health*, n.d.), Company 7 |
| **Number of lives saved** | | | | (*SDG 3 Impact Measurement Overview*, 2021), (Vörösmarty et al., 2018), (Korenromp, 2012), (Bao et al., 2015), Company 13 |
| **Number of sick days avoided** | | | | (*SDG 3 Impact Measurement Overview*, 2021), (Vörösmarty et al., 2018) |
| **Number of hospitalization days avoided** | | | | (*SDG 3 Impact Measurement Overview*, 2021), (Vörösmarty et al., 2018) |
| **Target population reached (% of total)** | | | | (Vörösmarty et al., 2018) |
| **# vulnerable populations reached by health program** | | | | (Bao et al., 2015), Company 8 |
| Demographics of the clients (female, rural, poor, no access before, etc.) (%) | | | x | (*Harmonized Indicators for Private Sector Operations (HIPSO) | Health*, n.d.), Company 8 |
| Cost reduction for standard treatments and medicines | | | | (*SDG 3 Impact Measurement Overview*, 2021; Tewari et al., 2021), Company 10 |
| Reduced healthcare spending | x | x | x | (Bao et al., 2015; Bari et al., 2021; Endalamaw et al., 2022; Vörösmarty et al., 2018), Company 10 |
| **Number of occupational injuries affected any full-time, part-time, and temporary employees of the organization during the reporting period.** | | | x | |
| **Number of Employees who received healthcare benefits through the organization's programs during the reporting period** | | | x | |
| **Ratio of medical staff to patients or participants in the program (%)** | | | x | |
| **Number of medical products or devices sourced with recognized environmental ethical certification (#)** | | | x | |
| **Mortality ratios (for specified population group or the whole population of given region)** | | | | |
| **Maternal mortality ratio** | x | x | | |
| **Under-five mortality rate** | x | x | | |
| **Neonatal mortality rate** | x | x | | (Tewari et al., 2021) |
| **Mortality rate due to homicide** | x | | | |
| **Road traffic mortality rate** | x | x | | (Obare et al., 2014) |

| | | | | |
|---|---|---|---|---|
| **Mortality rate from unintentional poisoning (per 100 000 population)** | x | x | | |
| **Suicide mortality rate** | x | x | | |
| **Perioperative mortality rate** | | | | (*Health Outcomes and Impact — MEASURE Evaluation*, n.d.) |
| **Improvement of reproductive health** | | | | |
| **Proportion of births attended by skilled health personnel** | x | x | | (Endalamaw et al., 2022; Mokdad et al., 2015; Obare et al., 2014; Tewari et al., 2021) |
| **Proportion of women of reproductive age who have their need for family planning satisfied with modern methods** | x | x | | (Mokdad et al., 2015; Nemser & Addofoh, 2022; Obare et al., 2014) |
| **Adolescent birth rate** | x | x | | |
| **Prevalence of anaemia in women of reproductive age (15–49 years)ab** | x | | | |
| **Adolescent fertility rate** | | | | (*Health Outcomes and Impact — MEASURE Evaluation*, n.d.) |
| **Incidence of low birth weight among newborns** | | | | (*Health Outcomes and Impact — MEASURE Evaluation*, n.d.) |
| **Institutional maternal mortality ratio** | | | | (*Health Outcomes and Impact — MEASURE Evaluation*, n.d.) |
| **Intrapartum or fresh stillbirth rate** | | | | (*Health Outcomes and Impact — MEASURE Evaluation*, n.d.) |
| **Percent of infants born to HIV-infected mothers who are infected** | | | | (*Health Outcomes and Impact — MEASURE Evaluation*, n.d.) |
| **Cesarean sections as a percent of all births** | | | | (*Health Outcomes and Impact — MEASURE Evaluation*, n.d.) |
| **Case fatality rate for diarrhoea** | | | | (*Health Outcomes and Impact — MEASURE Evaluation*, n.d.) |
| **Case fatality rate for pneumonia** | | | | (*Health Outcomes and Impact — MEASURE Evaluation*, n.d.) |
| **Facility neonatal mortality rate** | | | | (*Health Outcomes and Impact — MEASURE Evaluation*, n.d.) |
| **Fatality rate among hospitalized children <5 years of age** | | | | (*Health Outcomes and Impact — MEASURE Evaluation*, n.d.) |
| **Incidence of infections (communicable diseases)** | | | | |
| **New HIV infections** | x | x | | (Hammad et al., 2023) |
| **Tubercolosis incidence** | x | x | | (Endalamaw et al., 2022; Obare et al., 2014) |
| **Malaria Incidence** | x | x | | (Korenromp, 2012; Obare et al., 2014) |
| **Hepatitis B surface antigen (HBsAg) prevalence among children under 5 years** | x | x | | |
| **Reported number of people requiring interventions against NTDs** | x | x | | |
| **Number of cases of poliomyelitis caused by wild poliovirus (WPV)** | x | | | |
| **Prevalence of non-communicable diseases** | | | | |

| | | | | |
|---|---|---|---|---|
| **Age standardized prevalence of hypertension among adults aged 30–79 years (%)** | x | | | (Endalamaw et al., 2022; Obare et al., 2014) |
| **Probability of dying from any of CVD, cancer, diabetes, CRD between age 30 and exact age 70** | x | x | | (Endalamaw et al., 2022) |
| **Total alcohol per capita (≥ 15 years of age) consumption** | x | x | | |
| **Age-standardized prevalence of tobacco use among persons 15 years and older (%)** | x | x | | (Endalamaw et al., 2022; Obare et al., 2014) |
| **Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders** | | x | | |
| **Improving Data for Health Systems Policy and Decision-Making** | | | | |
| **Average of 15 International Health Regulations core capacity scores** | x | x | | |
| **UHC: Service coverage index** | x | x | | (Endalamaw et al., 2022; Obare et al., 2014) |
| **Score on the World Bank Governance Index** | | | | (Bao et al., 2015) |
| **Reducing Financial Barriers to Health Services** | | | | |
| **Population with household expenditures on health > 10% of total household expenditure or income** | x | x | x | |
| **Population with household expenditures on health > 25% of total household expenditure or income** | x | | | |
| **Proportion of population with large household expenditures on health as a share of total household expenditure or income** | | x | | |
| **Reduced healthcare spending** | x | x | x | (Bao et al., 2015; Bari et al., 2021; Endalamaw et al., 2022; Vörösmarty et al., 2018) |
| **Total net official development assistance to medical research and basic health sectors per capita (US$), by recipient country** | x | x | | |
| **Domestic general government health expenditure (GGHE-D) as a percentage of general government expenditure (GGE)z** | x | | | |
| **Amount of water and sanitation-related official development assistance that is part of a** | x | | | |

| | | | | |
|---|---|---|---|---|
| **government coordinated spending plan** | | | | |
| **Client Income** | | | x | |
| **Improving Environmental Factors Influencing Health** | | | | |
| **Age-standardized mortality rate attributed to household and ambient air pollution (per 100 000 population)** | x | x | | |
| **Proportion of population with primary reliance on clean fuels and technology (%)** | x | | | |
| **Annual mean concentrations of fine particulate matter (PM2.5) in urban areas** | x | | | |
| **Proportion of ever-partnered women and girls aged 15–49 years subjected to physical and/or sexual violence by a current or former intimate partner in the previous 12 months** | x | | | |
| **Proportion of ever-partnered women and girls aged 15–49 years subjected to physical and/or sexual violence by a current or former intimate partner in their lifetime** | x | | | |
| **Increased Supply of Essential Health Services and diagnostics** | | | | |
| **Density of medical doctors (per 10 000 population)** | x | | | |
| **Density of nursing and midwifery personnel (per 10 000 population)** | x | | | |
| **Density of dentists (per 10 000 population)** | x | | | |
| **Density of pharmacists (per 10 000 population)** | x | | | |
| **Health worker density and distribution** | | x | | (Endalamaw et al., 2022; Nove et al., 2023) |
| **Caregivers Employed: Professionals** | | | x | |
| **Caregivers Employed: Total** | | | x | |
| **Healthcare Facilities** | x | x | x | (Tewari et al., 2021) |
| **Proportion of health facilities with a core set of relevant essential medicines available and affordable on a sustainable basis (%)** | x | x | | (Endalamaw et al., 2022) |
| **Availability of Basic Services/Facilities** | | | x | |
| **Critical Equipment/Facility Utilization Rate** | | | x | |

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|---|---|---|---|---|
| **# health facilities providing service before, during, and after the transition** | | | | (Bao et al., 2015) |
| **Hospital admission rates** | | | | (*Health Outcomes and Impact — MEASURE Evaluation*, n.d.) |
| **Increasing Access to Essential Medicines** | | | | |
| **Diphtheria-tetanus-pertussis (DTP3) immunization coverage among 1-year-oldst (%)** | x | | | |
| **Measles-containing-vaccine second-dose (MCV2) immunization coverage by the nationally recommended age (%)** | x | | | |
| **Pneumococcal conjugate 3rd dose (PCV3) immunization coverage among 1-year oldst (%)** | x | | | |
| **Human papillomavirus (HPV) immunization coverage estimates among 15 year-old girlst (%)** | x | | | |
| **Proportion of the target population covered by all vaccines included in their national programme** | | x | | |
| **Percentage of bloodstream infections due to methicillinresistant Staphylococcus aureusy** | x | | | |
| **Percentage of bloodstream infections due to Escherichia coli resistant to 3rd-generation cephalosporiny** | x | | | |
| **Percentage of bloodstream infections due to selected antimicrobial-resistant organisms** | | x | | |
| **Percentage of total antibiotic consumption being from the AWaRe "Access" antibiotics category (%)** | x | | | |
| **Water, Sanitation and Hygiene (WASH) improvement** | | | | |
| **Proportion of population using safely-managed drinking-water services** | x | | | |
| **Proportion of population using safely-managed sanitation services** | x | | | |
| **Proportion of population using a handwashing facility with soap and water** | x | | | |
| **Proportion of safely treated domestic wastewater flows** | x | | | |

| | | | | |
|---|---|---|---|---|
| **Mortality rate attributed to exposure to unsafe WASH services (per 100 000 population)** | x | x | | |
| **Amount of water and sanitation-related official development assistance that is part of a government-coordinated spending plan** | x | | | |
| **Nutrition** | | | | |
| **Prevalence of obesity among children and adolescents (5–19 years) (%)** | x | | | (*Health Outcomes and Impact — MEASURE Evaluation*, n.d.) |
| **Age standardized prevalence of obesity among adults (18+ years)** | x | | | |
| **Prevalence of overweight in children under 5aa** | x | x | | (*Health Outcomes and Impact — MEASURE Evaluation*, n.d.; Mokdad et al., 2015) |
| **Prevalence of stunting in children under 5** | x | | x | (*Health Outcomes and Impact — MEASURE Evaluation*, n.d.; Mokdad et al., 2015) |
| **Prevalence of wasting in children under 5** | x | | | (*Health Outcomes and Impact — MEASURE Evaluation*, n.d.; Mokdad et al., 2015) |
| **Reach of Organization Indicators** | | | | |
| **Client Individuals: Total** | | | x | |
| **Client Individuals: Female** | | | x | |
| **Client Individuals: Poor** | | | x | |
| **Client Individuals: Very Poor** | | | x | |
| **Client Individuals: Low Income** | | | x | |
| **Client Individuals: Rural** | | | x | |
| **Client Individuals: Urban** | | | x | |
| **Client Individuals: Peri-urban** | | | x | |
| **Client Individuals: People with Disabilities** | | | x | |
| **Client Individuals: Historically Marginalized** | | | x | |
| **Client Individuals: Children/Adolescents** | | | x | |
| **Client Individuals: Active** | | | x | |
| **Client Individuals: New** | | | x | |
| **Client Individuals: Provided New Access** | | | x | |
| **Client Individuals: No Direct Payment** | | | x | |
| **Client Individuals: Receiving Free Products/Services** | | | x | |
| **Client Individuals: Referred** | | | x | |

| | | | | |
|---|---|---|---|---|
| **Client Individuals: Forcibly Displaced** | | | x | |
| **Communities Served** | | | x | |
| **Patients Completing Treatment** | | | x | |
| **Patients Screened** | | | x | (Tewari et al., 2021) |
| **Healthcare Effective Coverage** | | | x | |
| **Healthcare Crude Coverage** | | | x | |
| Target population reached (% of total) | | | | (Vörösmarty et al., 2018) |
| **Employee Benefit Indicators** | | | | |
| **Permanent Employee Wages: Female** | | | x | |
| **Permanent Employee Wages: Historically Marginalized** | | | x | |
| **Healthcare Benefits Premium Covered** | | | x | |
| **Employment Benefits** | | | x | |
| **Healthcare Benefits Participants** | | | x | |
| **Employees Trained** | | | x | |
| **Jobs Created at Directly Supported/Financed Enterprises: Total** | | | x | |
| **Jobs in Directly Supported/Financed Enterprises** | | | x | |
| **Worker Safety Policy** | | | x | |
| **Flexible Work Arrangements** | | | x | |
| **Employee Training Hours** | | | x | (Nove et al., 2023) |
| **facility worker health and safety** | | | | (Vörösmarty et al., 2018) |
| **Target Stakeholder & area Characteristics Indicators** | | | | |
| **Target Stakeholder Demographic** | | | x | |
| **Target Stakeholder Setting** | | | x | |
| **Target Stakeholder Geography** | | | x | |
| **Target Stakeholder Socioeconomics** | | | x | |
| **Stakeholder Engagement** | | | x | |
| **Poverty Assessment** | | | x | |
| **Target Area Ecoregion** | | | x | |
| **Target Area Protected Status** | | | x | |
| **% key stakeholders who have participated in transition planning events** | | | | (Bao et al., 2015) |

| | | | | |
|---|---|---|---|---|
| **Donor and program recipient have agreed on key stakeholders for transition, including communities/beneficiaries, civil society, etc.** | | | | (Bao et al., 2015) |
| **Transition team representing key stakeholders has been established** | | | | (Bao et al., 2015) |
| **Civil society engagement in health program** | | | | (Bao et al., 2015) |
| **Operation Indicators** | | | | |
| **Product/Service Description** | | | x | |
| **Units/Volume Sold: Total** | | | x | |
| **Units/Volume Produced** | | | x | |
| **Purchase Price of Product or Service Replaced** | | | x | |
| **Units/Volume Sold: Free** | | | x | |
| **Units/Volume Sold: No Direct Payment** | | | x | |
| **Product/Service Certifications** | | | x | |
| **Product/Service Type** | | | x | |
| **Product/Service Replaced Description** | | | x | |
| **Products Recalled** | | | x | |
| **Units/Volume Sold: Certified** | | | x | |
| **Purchase Price of Product or Service Sold** | | | x | |
| **Product/Service Warranty** | | | x | |
| **After-sale Client Support** | | | x | |
| **Cost Transparency** | | | x | |
| **Disease/Condition Addressed** | | | x | |
| **Business Innovation** | | | x | |
| **Quality Assurance Mechanism** | | | x | |
| **Service Level Type** | | | x | |
| **Records System** | | | x | |
| **Client Protection Policy** | | | x | |
| **Green Building Practices** | | | x | |
| **Operational Certifications** | | | x | |
| **Occupational Injuries** | | | x | |
| **Occupational Fatalities** | | | x | |
| **Individuals Trained: Total** | | | x | |

| | | | | |
|---|---|---|---|---|
| **Client Savings Premium** | | | x | |
| **Number of Insurance Policies** | | | x | |
| **Gross Written Premium** | | | x | |
| **% implementers with an audit of their financial records** | | | | (Bao et al., 2015) |
| **% donor contribution to health program versus government funding** | | | | (Bao et al., 2015) |
| **Market indicators** | | | | |
| **New Market Entered** | | | x | |
| **Market Share Increased** | | | x | |
| **Market Linkages Improved or Expanded** | | | x | |
| **New Firms Entered** | | | x | |
| **% geographic coverage of program** | | | | (Bao et al., 2015) |
| **Customer Satisfaction & Feedback** | | | | |
| **Target Stakeholder Satisfaction Ratio** | | | x | |
| **Client Complaint Tracking System** | | | x | |
| **Client Feedback System** | | | x | |
| **Client Dropout Reasons** | | | x | |
| **Importance of Outcome to Stakeholders** | | | x | |
| **Client Retention Rate** | | | x | |
| **% clients who are satisfied with the program's services** | | | | (Bao et al., 2015; Bari et al., 2021) |