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Navigating Performance: A New Paradigm of Transparency in Impact Investing

1st examiner: Prof. Dr. Judith Mayer
company contact: *Christina Smith, christina.smith@bonventure.de*
BonVenture GmbH

Author: Doreen Peßler (Enrolment number: 329332)

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Abstract

Impact investing, which combines financial returns with generating social and environmental related impacts, has gained traction among investors and venture capital firms (VCs). However, the practices for assessing and communicating impact remain varied and complex. To provide a basis for further developments in impact assessment and communication, this thesis explores two core research questions: (1) What are the prevailing practices among established impact VC firms for assessing impact performance? and (2) How do these firms communicate their impact performance to stakeholders? Through interviews with European and a Canadian VCs, the study identifies common practices, challenges, and opportunities in impact measurement and communication.

Findings highlight the reliance on scientific and quantitative impact assessments, tailored KPIs to the business model, and the alignment with frameworks like IRIS+, IMP, GRI and Theory of Change. Investors' communication practices primarily target limited partners (LPs), startups, and regulatory institutions, providing various levels of transparency for the different stakeholders. The study also identifies the need for standardized methodologies and improved comparability which may be achieved through collaboration among investors, institutions and researchers.

Practical recommendations include dedicating resources for impact-related roles both for assessment and communication practices, fostering dialogue among investors to harmonize practices, and leveraging combinatorial effects at the portfolio level. As the field matures and establishes a robust track record with market-rate returns, impact investing may prove to play a transformative role in achieving the UN Sustainable Development Goals (SDGs).

Key words: Impact Investing, Venture Capital, Impact Measurement, Impact Communication, Stakeholder Transparency

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List of Abbreviations

AUM	Assets Under Management
BIII	Bundesinitiative Impact Investing
CSR	Corporate Social Responsibility
ERP	Emissions Reduction Potential
ESG	Environmental, Social and Governance
EuSEF	European Social Entrepreneurship Fund
GHG	Greenhouse Gases
GIIN	The Global Impact Investing Network
GRI	Global Reporting Initiative
HCZ	Harlem Children's Zone
IBP	Institute for Building Physics
IMP	Impact Management Platform
IPCC	Intergovernmental Panel On Climate Change
KPI	Key Performance Indicators
LCA	Life Cycle Assessment
LCI	Life Cycle Inventory
LCIA	Life Cycle Impact Assessment
LP	Limited Partner
MDG	Millenium Development Goal
OECD	Organization for Economic Cooperation and Development
PAI	Principle Adverse Impacts
ROI	Return On Investment
SDG	Sustainable Development Goal
SFDR	Sustainable Finance Disclosure Regulation
SRI	Socially Responsible Investing
SROI	Social Return On Investment

ToC	Theory of Change
UNEP FI	UN Environment Programme Finance Initiative
USP	Unique Selling Point
US SIF	The Sustainable Investment Forum
VC	Venture Capital

List of Auxiliary Tools

ChatGPT	Translations, textual improvements, synonyms, idea generating
Otter.ai	English interview transcriptions
TurboScribe.ai	German interview transcriptions

1 Introduction

To begin, there has been a growing awareness of the urgent need to address climate change and its adverse impacts on the world. An increasing number of demands for action have accompanied this recognition. Green finance provides a means by which funds can be directed toward projects and investments that promote environmental sustainability, such as the development of sustainable infrastructure, clean technologies, and renewable sources of energy. (Mudalige, 2023, p. 14)

According to a report by McKinsey & Company, global assets under management (AUM) reached \$132 trillion in 2024 (Lai et al., 2024). This includes approximately \$40 trillion in sustainable financing strategies such as sustainable investing emphasizing specific environmental, social and governance (ESG) standards (Lykkesfeldt, 2022), active ownership engaging company boards to improve environmental or social strategies or actions (Intergovernmental Panel On Climate Change (IPCC), 2023), or divesting approaches, taking capital out of fossil fuel, weapon, or tobacco industries which are deemed harmful (Langley et al., 2021). Governments and financial institutions are under the pressure of global initiatives such as the Paris Agreement to align their strategies with climate objectives. Simultaneously, growing awareness among investors and consumers regarding the environmental impact of financial decisions has driven increased demand for environmentally sustainable investment products and services (Mudalige, 2023). Consequently, investors are consciously seeking opportunities that align with sustainable values and incorporate ESG criteria in their investment products (Norton, 2022). However, ESG ratings are under criticism for their lack of transparency (Ross, 2022) while divestment strategies focus exclusively on withdrawing financial support from harmful industries.

If we can create instruments — like social impact bonds — that can deliver a financial return [...], a high social return and limited downside risk, then we can meet two needs. We can provide reasonable returns that are uncorrelated with equity markets and attract capital to entrepreneurs who can develop innovative and effective ways of improving the fabric of our society. (Sahlman & Cohen, 2013)

The impact investing approach aims to address both investors' needs for market-rate returns and pressing environmental and social challenges. The Global Impact Investing Network (GIIN) defines impact investments as “investments made with the intention to generate positive, measurable social and/or environmental impact alongside a financial return.” (GIIN, n.d.-b) Thus, it represents a blended approach of traditional investing and philanthropy, emphasizing intentionality and impact measurement in order to be transparent and objective (GIIN, n.d.-b). Impact investors refer to the Sustainable Development Goals (SDGs) defined by the United Nations within the 2030 Agenda for

Sustainable Development which outline social, environmental and economic challenges that need to be addressed (United Nations General Assembly, 2015).

The 2030 target to achieve the SDGs is rapidly approaching, and capital allocation towards these goals remains woefully insufficient if the world hopes to avert the worst outcomes of climate change and continuing inequity. Impact investing is one of the most potent tools the world has at its disposal to build toward a just, inclusive, and sustainable future. The coming years present a unique opportunity to continue scaling the impact investing industry. By increasing the amount of capital allocated toward impact solutions, the market can ensure that impact investing fulfills its promise. (Hand et al., 2022, p. 7)

While capital is continually being shifted towards impact investments – from 1,340 organizations managing \$502 billion in 2019 (Mudaliar & Dithrich, 2019) to 3,907 organizations managing \$1.571 trillion in 2024 (Hand et al., 2024) as estimated by GIIN – the United Nations Department of Economic and Social Affairs estimates that the budget needed for achieving the SDGs amount to \$8.1-9 trillion (UN, 2024). Naturally, impact investors are not the only ones responsible for advancing SDGs because the goals were developed and adopted by all 193 UN member states who accordingly committed to financing and supporting SDG advancements through policies such as the Sustainable Finance Disclosure Regulation (SFDR) (Regulation (EU) 2019/2088 of the European Parliament and of the Council, 2019).

In a study with globally active impact investors, the GIIN has researched challenges and progresses that have been achieved within the sector (GIIN, n.d.-b). Four of the identified challenges shall be picked up within the scope of this thesis:

- *Comparing impact results to peers* is a challenge for 91% of respondents,
- *Fragmentation across impact measurement frameworks* is a challenge for 91% of respondents,
- *Lack of clarity on which impact measurement frameworks to use* is a challenge for 84% of respondents, and
- *Integrating impact management and financial management decisions* is a challenge for 74% of respondents (Hand et al., 2023a).

This thesis aims to analyze investors' practices to measuring and communicating impact by conducting interviews with ten Venture Capital investors. Based on the surplus of available impact measurement frameworks, this paper seeks to evaluate how impact investors are currently approaching measurement and validation of impact and subsequently how they communicate this impact and who they communicate it to. To comprehensively address this topic, the existing literature is analyzed to give an overview of impact investing by defining and delimitating it from other investing

approaches. Hereafter, the SFDR is addressed as the governmental framework regulating sustainability aspects of investments in the EU. Existing impact measurement frameworks are presented in relation to their application by the investors studied and stakeholder engagement is explored to examine the strategies investors employ in addressing and interacting with their stakeholders. Subsequently, the research design and methodology of conducting the interviews is explained. The interviews are analyzed in a content analysis applying inductive and deductive coding and discussed referring to the results as well as to the literature review.

To ensure the clear and consistent use of terminology, certain terms will be uniformly defined for the scope of this work because various terms are employed in literature and practice:

Investor: The term investor refers to a person or organization that places investments without necessarily providing their own capital such as Venture Capital (VC) firms.

Limited Partner (LP): When referring to persons or institutions providing capital such as LPs or banks, the term LP is used.

Startup: The term startup is used to refer to those companies which impact investors are invested in, also referred to as portfolio companies. As VCs, these investors are usually invested in companies in the startup phase, although it has not been researched specifically whether this pertains to all portfolio companies of the researched investors.

Responsible Investments/Investing: Because the topics of this paper are social as well as environmental investments, the term responsible investments or responsible investing is used to comprise all approaches related to social and/or environmental investments such as green investing, socially responsible investing (SRI), ESG investing, impact investing or others.

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Creas Impacto FESE, S.A.

FSN Capital Partners AS

Investir&+

Maze Impact SA.

Oltre Impact SGR S.p.A. – Gestore EuVECA

Planet A GmbH

Rally Assets Inc.

NBI Investors B.V.

Trill Impact AB

2 Literature Review

Impact Investors seek financial return on investment (ROI) as well as a social return on investment (SROI), thus intentionally creating positive impact (Clarkin & L. Cangioni, 2016). Since the emergence of impact investing in the early 2000s (Clarkin & L. Cangioni, 2016), various institutions have arisen that look to aid impact investors by accumulating knowledge, creating frameworks and management support, as well as providing network opportunities (such as GIIN, IMP, III, GSG, Impact Europe, BIII).

The GIIN states that “[...] [a] hallmark of impact investing is the commitment of the investor to measure and report the social and environmental performance and progress of underlying investments, ensuring transparency and accountability while informing the practice of impact investing and building the field” (GIIN, n.d.-b) For this reason, many of the aforementioned institutions have formulated a framework for managing and measuring impact such as *IRIS+* by GIIN (Global Impact Investing Network (GIIN), n.d.), the *Actions of impact management* by the Impact Management Platform (IMP) (Impact Management Platform, 2024), or *The IMM Guide* by Impact Europe (Hehenberger et al., 2015). However, achieving transparency and verifiability in these measurements for stakeholders presents a challenge, leading to concerns about greenwashing or purpose-washing as well as impact sustainability and effectiveness (Findlay & Moran, 2019; Reisman et al., 2018).

2.1 Impact Investing – An Overview

2.1.1 Definition

Every one of us is confronting the shared reality that regardless of who holds political office or what the latest social trend is, our social and environmental challenges are too vast and our financial resources too limited for our current approaches to work. We can no longer afford to waste capital and talent by organizing ourselves around the separate poles of financial return and social good. Blended value offers a new way to integrate our activities around the recognition that we do not seek either wealth or social justice: we seek both (Bugg-Levine & Emerson, 2011, p. 12).

According to the SDG Impact Standards the United Nations Development Programme defines impact in the context of impact management as

changes to aspects of wellbeing as experienced by people and/or planet caused by the organization through its decisions and actions in its own operations and through its supply and value chains and its business relationships. Impacts can be positive or negative, intended or unintended, direct or indirect (SDG Impact, 2023).

Similar definitions of impact are used by other institutions as well as researchers (Impact Management Platform, n.d.; Roche, 1999; Streatfield & Markless, 2009; Ebrahim & Rangan, 2014). Based on this impact definition, impact investing is a financial strategy that seeks to generate positive, measurable social and environmental impacts alongside financial returns (Cooper et al., 2016).

A variety of terms have emerged to describe the integration of finance with ESG objectives. “From a theoretical standpoint, despite their differences, these actors share the desire to combine economic and sustainability goals from their activities in the financial markets” (Bengo et al., 2022, p. 810). However, Bugg-Levine and Emerson (2011) explain the necessity of differentiating impact investing from other ESG approaches by highlighting that *socially responsible investing* (SRI) as well as *ethical investing* describes subjective negative screening to avoid unethical behaviors of companies while *sustainable finance* focuses solely on environmental concerns, ignoring social and development matters. The goal of impact investing, on the other hand, is to consciously create positive impact (Carè & Wendt, 2018; Rawhouser et al., 2019). Bengo et al. (2022) conclude that there may be a hierarchy of ESG approaches. Investors can consider ESG to divest from or exclude harmful or risky investments – low centrality of impact; they may seek to influence the ESG performance within the boards of their investment companies – middle centrality of impact; thirdly, investors choose investments which deliberately aim to improve ESG through their business actions – high centrality of impact, or more respectively the impact investing approach.

Aligning investment decisions with a person’s or organization’s values is not a modern concept. Examples reach from the Quakers in the 17th century investing in and supporting community businesses and concerns (Turnbull, 2014), over the divestment movements against the apartheid regime in South Africa in the 1980s (Wintle, 2016), to ESG and green financing movements we see within the past decades (Mudalige, 2023). The Sustainable Investment Forum (US SIF) reported that in 2010, professionally managed assets worth \$3.07 trillion were managed according to SRI principles (Social Investment Forum Foundation, 2010); in 2022 they grew to a worth of \$8.4 trillion (US SIF Foundation, 2022). Nonetheless, the term *impact investing* was created by a group of investors and industry pioneers in 2007 who had been investing in both social and environmental technologies and funds (Bugg-Levine & Emerson, 2011). To accurately capture the approach as well as the motivation of actively choosing and influencing investments to do good, they coined the term *impact investing*.

Impact investing is characterized by its emphasis on intentionality and measurement of impact (Cooper et al., 2016). The intentionality in impact investing describes that investors deliberately seek to create positive outcomes “by investing in organizations that generate both financial and social value” (Roundy et al., 2017, p. 493). This is not merely a byproduct of financial activity but a core objective. Furthermore, the measurement of impact is a critical component (Bugg-Levine & Emerson, 2011; Rawhouser et al., 2019). “[...]valuating a venture’s potential for producing SROI, are unique

to impact investment” (Roundy et al., 2017, 505). A multitude of measurement tools and methodologies have been developed, however, there is a lack of accompanying academic research and understanding (Bengo et al., 2022; Rawhouser et al., 2019). “However, social impact measurement is increasingly gaining momentum in non-financial disclosure mechanisms of financial actors” (Bengo et al., 2022, 810). This thesis thus contributes to shed light on the methodologies and tools used by current impact investors.

2.1.2 Conceptual Delimitation

Although impact investing can be carried out by various institutions, such as foundations, financial institutions, pension funds, or family offices (Hand et al., 2024) who may invest in the private or public equity sector it is most commonly seen in VC in the private equity sector, where investors can have the greatest influence by directly engaging with the companies they invest in (Bengo et al., 2022; Bugg-Levine & Emerson, 2011). “The focus of impact investing suggests that, conceptually, it is a phenomenon that is closer to other types of investors in early-stage for-profit and nonprofit organizations, such as angel investors, venture capitalists and in the nonprofit sector, philanthropists” (Roundy et al., 2017, p. 494).

Impact investing stands alone due to the investing approach on the one hand and the motivation of the approach on the other. As mentioned above, the motivation behind impact investing differs from the motivations of other ESG investment approaches. Additionally, most ESG investments are made by asset managers of major investment funds seeking value-alignment in well-established, typically publicly traded companies with no significant risk-adjustments in comparison to conventional funds (Cooper et al., 2016; Roundy et al., 2017). “Thus, in terms of the structure of the investments, [...] [ESG investment approaches] and impact investing differ in the same fundamental way that an institutional investment in an index fund differs from an angel investment in an early-stage venture” (Roundy et al., 2017, 493 f.).

Accordingly, while being strategically comparable to ESG investment approaches, impact investing is conceptually more comparable to early-stage capital venture or venture philanthropy (see Figure 1). Conventional VC seeks financial value (Bugg-Levine & Emerson, 2011; Roundy et al., 2017). ESG factors may be considered to implement social value-alignment in an investment, however, those factors do not influence the financial focus of the investment (Cooper et al., 2016). Venture philanthropy on the other hand seeks a social return on investment and can be described as “an altruistic approach to support others” (OECD, 2014). Philanthropists invest expecting no or close to

no financial return as they invest in companies or organizations which are either not self-sustaining or partly self-sustaining (Gianoncelli & Boiardi, 2018).

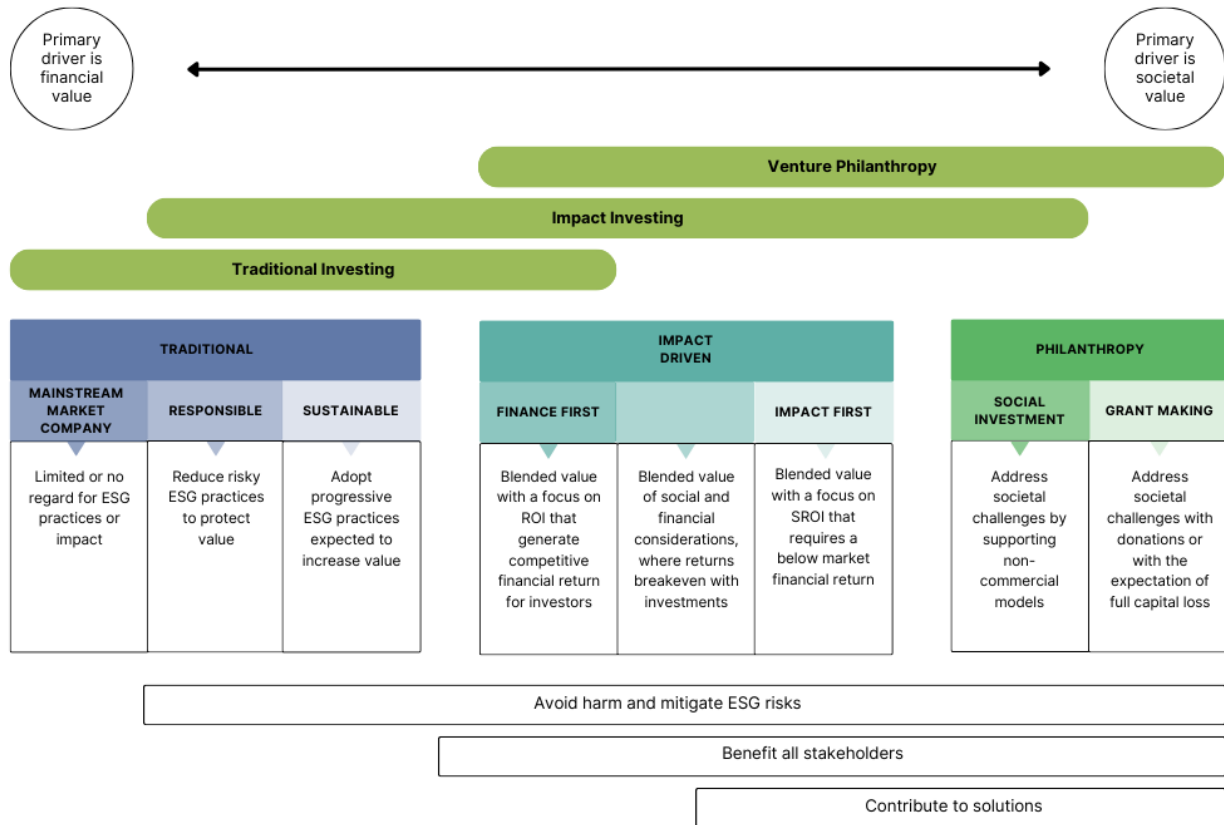


Figure 1: Own depiction of Investment Strategies based on Gianoncelli & Picón Martínez, 2020; OECD, 2014; The Bridges Spectrum of Capital. How We Define the Sustainable and Impact Investment Market., 2015

Impact investing combines both approaches by producing blended value, seeking not only financial or social value, but both (Bugg-Levine & Emerson, 2011; Roundy et al., 2017).

In an article in the Harvard Business Review, Sir Ronald Cohen – founder of Invest Europe – and Sahlman (2013) criticize the philanthropic approach by highlighting that “there are massive inefficiencies in capital allocation. Too often donors starve organizations and entrepreneurs by refusing to cover overhead. This makes it impossible for social organizations to scale.” Consequently, impact investors seek to generate impact in companies which have the prospect of being economically self-sufficient (Bengo et al., 2022; Roundy et al., 2017; Sahlman & Cohen, 2013).

At the other end of the spectrum, critics argue that impact investing can only generate below market-rate returns due to the constraints that the investing strategy entails (Jeffers et al., 2024). But impact investors can trade in returns on investment for social returns on investment (Bengo et al., 2022; GIIN, n.d.-b) when investing with an ‘impact first’ approach (see Figure 1). Studies argue that “most

investors [...] pursue competitive, market-rate returns” (GIIN, n.d.-b; Roundy et al., 2017). The GIIN illustrates that 74% of 307 globally analyzed impact investors generate risk-adjusted, market-rate returns, with 14% achieving below market-rate, but close to market-rate returns (Hand et al., 2023b). Only 12% of the studied impact investors generate below market-rate returns which are closer to capital preservation. Practicing impact investors highlight that “there is a business case – a financial case for running a business in a sustainable fashion, and so, if you do this, you actually will outperform the market over time” (Roundy et al., 2017, p. 507).

A movement that originates from philanthropy but conceptionally aligns with the focus of impact investors on intentionality and measurement (Cooper et al., 2016) is the concept of Effective Altruism. This philosophical approach to philanthropy focuses on the idea of doing good in the most effective way possible (Gabriel, 2017). It seeks to use evidence and reason to determine the best benefit for others, thus maximizing positive impact by focusing resources such as time, money, and skills on interventions that have been previously evaluated for their efficacy (Kassirer et al., 2023). MacAskill (2015) identifies the challenge that philanthropy faces and that Effective Altruism aims to solve by integrating evaluation mechanisms:

Invest in a bad company, and you lose money; but give money to a bad charity, and you probably won't hear about its failings. [...] Because we don't get useful feedback when we try to help others, we can't get a meaningful sense of whether we're really making a difference.

Key research tools include randomized controlled trials, cost-effectiveness analyses, and meta-reviews which provide frameworks for assessing the outcomes of various programs (Singer, 2020). Organizations like *GiveWell* and *Giving What We Can* focus on collecting and analyzing data to determine which charitable activities produce quantifiable improvements (*Giving What We Can*, n.d.). They calculate cost-effectiveness by estimating a 'cost per life saved' or 'cost per economic benefit' to favour and recommend charities based on the effectiveness per dollar spent (*Our Criteria* / *GiveWell*, n.d.).

There is diverse criticism about Effective Altruism, among others related to the funding of systemic change which, if successful, may have a tremendous impact on a society. However, the chance of each measure facilitating this change is comparatively low (Gabriel, 2017). Accordingly, the cost-effectiveness analysis might deem a measure invalid and thus not advisable (Gabriel, 2017). The *Center for Effective Altruism* (n.d.) states that “effective altruism started with a focus on approaches that are 'proven' to work, such as scaling up rigorously tested health treatments.” While referring to some Effective Altruist's shifting towards involving systemic change approaches, they also make a

case against it: “[...] [O]pinion is heavily divided on whether systems like trade globalization or market economies are net negative or net positive. It’s also not clear whether we can substantially change these systems in ways that won’t have very bad unintended consequences.” In this regard, Effective Altruism and impact investing are fundamentally different as impact investors make a case for the advantages of aligning market strategies with generating impact and frequently aim for systemic change (Yau, 2024). Nevertheless, the emphasis on validating impact through scientific evaluation and measurement creates a strong alignment between impact investing and the principles of Effective Altruism.

2.2 Regulatory Framework – SFDR

“[...] [S]cholars studying impact investing should consider the specific regional and socio-economic context – and the specific ecosystem of forces – in which investing is occurring” (Roundy, 2019, p. 477). Researchers highlight the relation between impact investing practices and the regulatory frameworks such as policies within which they act (Shi et al., 2022). Mudalige (2023) further highlights the role regulatory frameworks play in promoting green investing. In this context, it is essential for governments to provide green financing to support the shift from to a green economy (Mudalige, 2023). The research of this thesis relates mainly to impact investors working in the EU and therefore, a specific focus is put on the Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR) which was put in place in November 2019.

“This Regulation lays down harmonized rules for financial market participants and financial advisers on transparency with regard to the integration of sustainability risks and the consideration of adverse sustainability impacts in their processes” (Regulation (EU) 2019/2088 of the European Parliament and of the Council, 2019, p. 7). It regulates the obligation of all financial institutions adhering to EU law to classify their products according to SFDR and thus be accountable to investors. The objective of the regulation is to streamline and standardize sustainability disclosures of financial market participants to make them sustainably accountable and comparable (Bengo et al., 2022). Conclusively, it helps to limit greenwashing and protect end-investors such as LPs (Lykkesfeldt, 2022). Bengo et al. (2022) elaborate on the novelties the SFDR introduces as it formally defines previously vague concepts such as *Sustainability Factors*, *Sustainable Investment*, *Sustainability Risk* as well as providing a framework for disclosing sustainability practices.

The SFDR does not only apply to those financial organizations that aim specifically for sustainable investments resulting in a label, as the European social entrepreneurship fund (EuSEF) (*European Social Entrepreneurship Funds* | EUR-Lex, n.d.) does, but includes all participants in the finance sector. This obligates them to deal with sustainability issues and risks regardless of their pursued

alignment of the product or service with sustainability issues and also implies that the SFDR includes the disclosure of both positive and negative impacts (Regulation (EU) 2019/2088 of the European Parliament and of the Council, 2019). Lykkesfeldt (2022) refers to this as a “‘comply or explain’ approach”.

Articles three to five of the SFDR modulate the necessity to provide transparency on sustainability risk policies, adverse sustainability impacts at entity level, and information on the integration of sustainability risks on an organization’s website (Regulation (EU) 2019/2088 of the European Parliament and of the Council, 2019). These articles refer to the activities of an organization with respect to sustainability disclosures while articles six to nine concern sustainability disclosures for individual products such as funds or portfolios (Bengo et al., 2022). Accordingly, financial products can be classified in Article 6, Article 8 or Article 9.

Article 6 applies to all products that are constructed without environmental or social considerations. They require the least amount of disclosures and effort with respect to SFDR (see Figure 2). Article

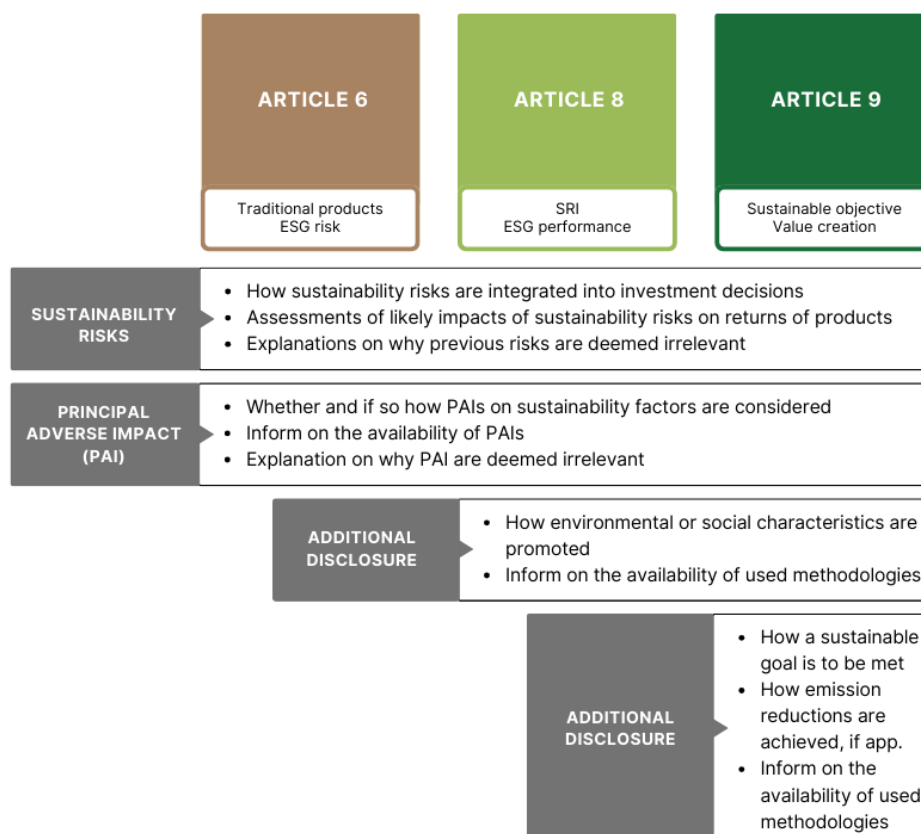


Figure 2: Own depiction based on Bengo et al. (2022), Lykkesfeldt (2022), and Regulation (EU) 2019/2088 of the European Parliament and of the Council (2019)

8 products must promote environmental or social characteristics such as choosing investment opportunities with higher ESG performances (Bengo et al., 2022), which for example SRI complies

with. Accordingly, they must demonstrate how these characteristics are promoted in addition to reporting on sustainability risks and Principal Adverse Impacts (PAIs). To classify a product as Article 9, an organization must abide by the general disclosure regulations as depicted for Article 6 and additionally substantiate how their investments will contribute to sustainability objectives. Conclusively, the amount of data that needs to be reported increases from Article 6 to Article 9, moreover, so does the complexity of that data (Bengo et al., 2022).

Scheitza and Busch (2024, p. 1) examined Article 9 funds and raised the question of “whether Article 9 products actually support the transition toward a sustainable economy [...] [and] whether funds with a sustainable investment objective fulfill an impact claim.” This hypothesis is based on the definition the European Parliament and Council (Regulation (EU) 2019/2088 of the European Parliament and of the Council, 2019, p. 8) created for sustainable investments in Article 2(17) which are named as the objective of Article 9 products: “‘sustainable investment’ means an investment in an economic activity that contributes to an environmental objective, [...] or an investment in an economic activity that contributes to a social objective”. They found that 60% of the examined Article 9 funds at least align with or generate impact while 40% comply with basic or advanced ESG strategies. With regard to their hypothesis they conclude that “the SFDR does not differentiate enough between ESG-related investments and impact-related investments” (Scheitza & Busch, 2024, p. 2). They advocate for more specific requirements for Article 8 as ESG-related investments and Article 9 as impact-related funds because “the notion of generating impact should also be explicitly reflected in the SFDR” (Scheitza & Busch, 2024, p. 6).

Scheitza & Busch’s research (2024) aligns with the requests from practitioners as represented by the #UnitedforImpact Initiative (2024), which consists of 55 European impact investors calling for clearer definitions of Article 8 and 9 as they “are used as labels by the markets, and their vagueness tend to accentuate risks of greenwashing and impact-washing. Especially, article 9 products are often mistaken for impact funds” (UnitedforImpact Initiative, 2024, p. 3). Consequently, they support the notion as also proposed by the European Commission to distinctly categorize and define impact funds within the SFDR.

2.3 Impact Measurement – Existing Approaches

“Performance measurement [...] plays a critical and highly politicized role in mediating the relationship between operating organizations and their funders, and in building capital markets that reward performance” (Ebrahim & Rangan, 2014, 130).

Due to the multitude of existing frameworks related to impact assessment and reporting, this chapter will focus on measurement approaches mentioned within the interviews conducted for this thesis. This list of frameworks is not exhaustive. The Operating Principles for Impact Management for example are not included and there exist numerous tools which relate to very specific topics such as the Emissions Reduction Potential (ERP) which focuses solely on measuring climate change mitigation (Net Zero Insights, n.d.). However, this tool does not cover social impacts which may be a focus of impact investors as well. The difficulty for creating one overarching framework thus lies in the “diversity of causes or needs being addressed. These diverse needs arise endogenously from each country’s socioeconomic, political, historical and cultural contexts” (Lam & Tan, 2021, p.78).

In order to tackle the diversity of yet unmet needs with regard to “peace and prosperity for people and planet” (*THE 17 GOALS | Sustainable Development*, n.d.), the United Nations (UN) created 17 sustainable development goals (SDGs) which accumulatively contain 169 specific targets to be reached by 2030. They were created in 2015 as a successor to the Millennium Development Goals (MDGs) which were set in 2000 to be reached by 2015. The United Nations pledged to complete unachieved MDGs and defined SDGs to be “integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental. The Goals and targets will stimulate action over the next 15 years in areas of critical importance for humanity and the planet” (United Nations General Assembly, 2015, p. 1). While the MDGs were directed at solving extreme poverty, the SDGs target both developed and developing countries (Lam & Tan, 2021). Many of the frameworks below specifically outline their alignment with the UN SDGs (*About the Impact Management Platform*, n.d.; Global Impact Investing Network (GIIN), n.d.). The IMP (n.d.) explicitly connects impact investing to the SDGs:

This process, known as impact management, enables businesses, investors and financial institutions to reduce negative impacts, increase positive impacts, and ultimately achieve sustainability and increase well-being in line with international policy agreements such as the SDGs, the Paris Agreements, and others.

Theory of Change (ToC)

Researchers make a case for using ToC as a tool for constructing and evaluating impact (Colby et al., 2004; Jackson, 2013). “A theory of change is a method that explains how a given intervention, or set of interventions, are expected to lead to a specific development change, drawing on a causal analysis based on available evidence” (UNDG, n.d., p. 3). Rather than being an impact measurement framework or tool, the ToC is a logic model which defines the necessary process and steps to reach a specific long-term goal or social change (Wendt, 2021). To achieve this, the ToC is created by

identifying the long-term goal and then setting interim goals and defining necessary activities and conditions in order to reach the main objective (“What Is Theory of Change?,” n.d.). Wendt (2021) elaborates that a logic model links a program's activities to its expected outcomes in a clear and structured way, ensuring that outcomes are explicit, measurable, and aligned with the program theory. Generally, a ToC contains five key elements which causally link the inputs of an organization to the impact it aims to generate (see Figure 3). When measuring these elements, Ebrahim and Rangan (2014) outline the difficulties along the process. They describe that inputs, activities and outputs are comparably easy to measure due to the causal linkage between them.

Outcome measurement, on the other hand, requires answers to a more complex causal question: Are the activities and outputs leading to sustained improvements in the lives of affected people? Outcome measurement is less common and more difficult to do, given that organizations have the most control over their immediate activities and outputs, whereas outcomes are often moderated by events beyond their organizational boundaries. For example the emergency relief organization that has done excellent work during and after a natural disaster might still fall short on outcomes of rehabilitating and resettling those displaced from their homes and livelihoods [...]. Connecting outcomes to societal impacts, such as a sustained drop in poverty in the region, is even more complex due to the number of additional factors at play involving the larger political, social, cultural, and economic systems—that are beyond the control of any one entity. In short, outputs don't necessarily translate to outcomes, and outcomes don't necessarily translate to impact. (Ebrahim & Rangan, 2014, p. 123)

Ebrahim and Rangan (2014) elaborate that measuring outcomes is only possible when the causality between outputs and outcomes can be plausibly verified or when the external circumstances of affected stakeholders can be controlled by the acting organization. This was possible in two cases outlined in Figure 3: Aravind Eye Hospital in India and Harlem Children's Zone (HCZ) in the U.S. While impact is set as the final objective of a ToC and organizations would ideally assess results as deeply along the logic chain as possible, Ebrahim and Rangan (2014) argue that it is not possible for any one organization to create change on the impact level. They propose that “it thus makes more sense for funders rather than operating organizations to take on the challenge of measuring those impacts” (Ebrahim & Rangan, 2014, p. 136) because they can channel a set of individual approaches intentionally to facilitate systemic change (Hofstetter, 2020). Still, as a study of the Asian impact investing sector shows, 40% of impact investors report at output level, a quarter reports outcomes while the number of investors reporting on impact level is insignificant (Lam & Tan, 2021).

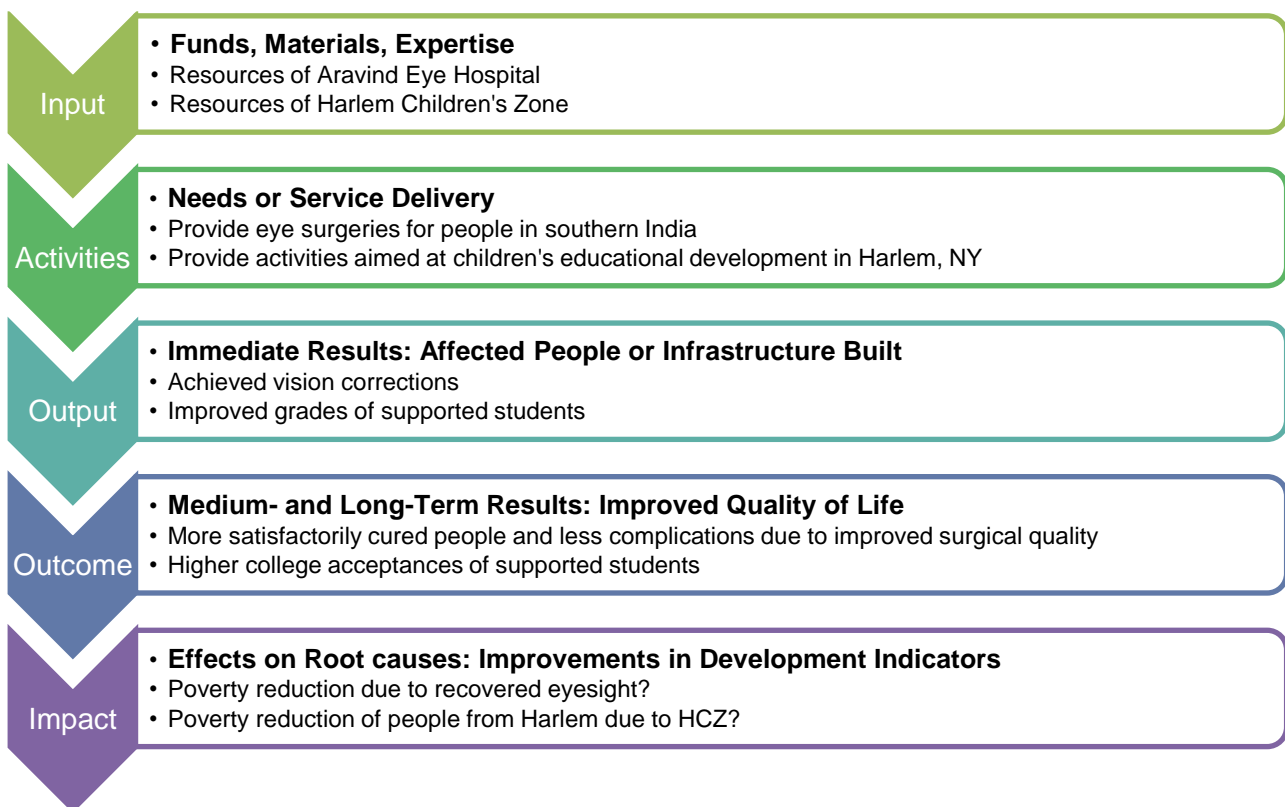


Figure 3: Theory of Change. Own depiction based on Ebrahim and Rangan (2014)

Life Cycle Assessment (LCA)

The Fraunhofer Institute for Building Physics (IBP) (n.d.) defines LCA as “a systematic analysis of the ecological impact of a product, process, or service over its entire life journey »from the cradle to the grave.«”, from raw material extraction to disposal. It considers the environmental effects of production, use, and end-of-life stages, as well as the associated upstream and downstream processes, such as resource extraction and energy use. LCA is a tool used for environmentally conscious decision-making, product development and improvement and is standardized in DIN EN ISO 14040/44 since 1996 (Bouchery et al., 2024). However, according to Bouchery et al. (2024), due to disagreement on the interpretation of the ISO standards, several LCA approaches have been developed. The basic process of an LCA comprises four key elements:

1. *Definition of scope and goal:* The research object, goal and stakeholders are defined and inform the remaining LCA process.
2. *Life Cycle Inventory (LCI):* All incoming and outgoing resources are quantitatively collected in a database which relate to the entire life cycle such as materials needed, transport and emissions released.

3. *Life Cycle Impact Assessment (LCIA)*: Based on the LCI, the (potential) ecological impact is being assessed regarding its magnitude and significance. This depends on the category indicator which defines the end of a causal chain describing specific impact, for example greenhouse gases (GHG) can lead to atmospheric changes, can lead to temperature changes, can lead to ecosystem changes and so on.
4. *Interpretation*: The LCI and LCIA are interpreted in relation to the defined scope and goal. This shall inform the context in which a product or service exists such as comparison with similar providers as well as decision-making based on data reduction to point to reliability or robustness of a product or service.
(Bouchery et al., 2024)

LCAs are meant to be iterative including uncertainty and sensitivity analyses. Uncertainty analyses can reveal deficiencies and allow the researcher to gather additional data while sensitivity analyses may highlight important decisions that enable the researcher to gather data specifically for this decision. Both analyses improve the LCA and enable objective decision-making (Bouchery et al., 2024).

Impact Management Platform (IMP)

The IMP was founded by the Organization for Economic Cooperation and Development (OECD) and the UN Environment Programme Finance Initiative (UNEP FI) to provide sustainability standards and efforts to mainstream impact management practices (*About the Impact Management Platform*, n.d.). Together with Impact Frontiers, it was created by the Impact Management Project in 2021 (*Impact Management Platform | Invest Europe*, n.d.), which consisted of a network of over 3,000 businesses and investors working together to establish a global consensus on impact management (Impact Frontiers, 2022b). Within its *Actions of impact management*, the IMP aims to provide a set of actions which help to “systematically embed impact management into [...] [enterprises’] entire business practice, and points to the relevant resources that can be used to perform each action” (Impact Management Project, 2023, p. 11). Seven key characteristics are formulated for impact management which are:

1. *Taking action to operate sustainably*: Focusing on negative impacts while promoting positive impacts as a core objective
2. *Holistic consideration of impacts*: Evaluating all effects on people, society, nature and climate
3. *Consideration and engagement of stakeholders and affected parties*: This supports identifying impacts, assessing their significance, determining measurement approaches, and shaping appropriate strategies

4. *Consideration of context*: Considering needs and goals as contextual in place and time
5. Integration across strategy, governance and activities
6. *An iterative and evidence-based process*: Incorporating regular monitoring and assessments into organizational processes
7. *Transparency on practice and performance*: Communicating to all relevant stakeholders (IMP, 2023)

Impact Frontiers

The fundamentals of Impact Frontiers were built by Root Capital, a nonprofit organization (NGO) focusing on generating impact in poor rural areas of Africa, Latin America and Southeast Asia (*Root Capital*, 2024), in 2015. The objective was to integrate impact into the *efficient frontier* framework which focuses on financial risk and return (Impact Frontiers, 2022a) and was incorporated by the Impact Management Project. The Impact Frontiers Collaboration identified the issue that impact and financial management had not been interoperable and they suggest that

[...][i]ntegrating impact with financial management enables investors to consider the financial, social, and environmental dimensions of their investments in a comprehensive way; to optimize investment performance across those dimensions; and to communicate all dimensions of their investments' performance clearly and transparently. (Impact Frontiers Collaboration, 2020)

According to the Impact Frontiers, impact management entails five dimensions for businesses plus one dimension when managing impact as an investor:

1. *What*: What are the outcomes of a business' operations, are they positive or negative, and what is the significance for stakeholders?
2. *Who*: Who are the affected stakeholders? How are the business' outcomes related to under-service experienced prior to engaging with the business? What are stakeholder's demographic characteristics?
3. *How much*: What is the scale, depth and duration of the business' outcomes?
4. *Contribution*: What would the outcome have been without the business' interference? What would have happened anyway?
5. *Risk*: What is the risk of having a different impact than expected? What would the consequences of the alternate impact be? How can this risk be mitigated?
6. *Investor Contribution*: What influences does the investor have: strategically highlight the importance of impact, engaging actively, supporting new markets, showing flexibility regarding risk adjusted financial returns?
(Impact Frontiers, 2022c)

The IMP consensus outlined more detailed data categories that businesses and investors can leverage to assess their impact on people and the environment across the five, or respectively six dimensions (Impact Frontiers, 2022c).

IRIS+

The GIIN, established in 2009, is a global organization focused on advancing impact investing. It works to build the infrastructure and provides resources and research to support the growth of a cohesive impact investing industry by collaborating with members and partners (GIIN, n.d.-a). IRIS+ was developed as an improved version of IRIS in 2019 to help investors manage impact performance by building on three challenges which investors faced according to their research: a lack of instructions on how to implement conventions, values and principles; a lack of standardized metrics allowing for comparison and benchmarking; a surplus of impact analysis tools and methods, complicating the informed adoption of methods (GIIN, n.d.). IRIS+ contains three key features:

1. An *impact accounting system (IRIS+ system)* which incorporates standards and frameworks from over 50 organizations who informed the approach to measuring, managing, and optimizing impact performance, among others the Impact Management Project, OECD and Principles for Responsible Investing (PRI).
2. A *thematic taxonomy* which aims to harmonize definitions of impact related terms and themes to facilitate communication between investors and eventually enabling the comparison of impact performance.
3. *Core metrics sets* which offer key impact performance indicators to help investors understand and compare outcomes. Due to the standardization of the metrics used, these indicators allow investors to compare the impact performances across similar investments and goals by consistently measuring and reporting impact.

(McCarthy et al., 2019; *Standards Development Process & Principles | IRIS+ System*, n.d.)

Emissions Reduction Potential (ERP)

The concept of ERP refers to “the capacity of technologies, processes, and innovations to mitigate GHG emissions and contribute to the global effort to combat climate change” (Net Zero Insights, n.d.). It refers to the effectiveness that sustainable businesses or technologies can have by identifying sectors with high GHG emissions such as energy, agriculture or real estate and calculating the impact that innovations may have on them. This allows researchers to determine the potential of

alternative technologies (such as Baumeister et al., 2024; Sillman et al., 2024) and investors to allocate financial resources to technologies with a high potential for reducing emissions and thus higher impacts rather than minor improvements. Net Zero Insights (n.d.) refers to four frameworks or tools to assess ERP: GHG Protocol for Project Accounting, Avoided Emissions Framework, Emerging Climate Technology Framework and the ERP Framework.

Global Reporting Initiative (GRI)

While the approaches above relate to impact management and reporting, the GRI focuses solely on impact reporting practices. It was founded in 1997 by the NGOs CERES and the Tellus Institute, involved with the UN Environment Programme (*GRI - Mission & History*, n.d.) as a result of oil spills in 1989 in the U.S. which had led to immense negative impacts on wildlife and the environment still requiring restoration activities (NOAA, 2020). Thus, the goal of GRI was to make businesses accountable and adhere to ESG conduct principles. In 2016, the GRI Standards were developed as a global standard for sustainability reporting and disclaiming the impacts of a business' activities. It contains five sections to explain and specify the concepts and requirements for reporting according to the Standards and involve nine steps. The reporting principles are supposed to guide enterprises through the reporting process and help them align their reporting process by applying three kinds of standards:

1. **Universal Standards:** All three following standards need to be applied
 - a. *GRI 1: Foundation 2021.* GRI 1 includes the requirements and principles enterprises must comply with to use the GRI Standards.
 - b. *GRI 2: General Disclosures 2021.* The enterprise discloses general organizational information and information about its reporting practices.
 - c. *GRI 3: Material Topics 2021.* GRI 3 guides the enterprise in defining material topics. Enterprises need to disclose their process of identifying and managing such topics.
2. *Sector Standards* offer guidance to enterprises by identifying topics presumably material for their operations. By referring to the Sector standards relevant to their sectors, organizations can determine their material topics and how to report on each of them. Enterprises can choose among the four sectors oil and gas, coal, agriculture aquaculture and fishing, and mining, if applicable.
3. *Topic Standards* refer to specific material topics that relate to the impacts enterprises create. They help to identify actual and potential impacts resulting from the sector standards and how to assess their significance. Enterprises can choose among 33 material topics to guide

them through disclosing related impacts such as biodiversity, indirect economic impacts, or security practices. (GSSB, 2022)

Common Approach to Impact Measurement

Common Approach is an initiative which resulted from actions the Government of Ontario took in 2015 to develop a recommendation for measuring impact: the Common Approach to Impact Measurement, which focuses on the needs of organizations on the operating level rather than on those on the investing level (Common Approach, n.d.). The key elements of the Common Approach to Impact Measurement consist of four standards:

1. *Common Foundations*: Organizations must fulfill five requirements to align with the Foundations: They describe how and why they create change; They use indicators to measure change; They collect information that is useful for proving progress; They measure their impact performance; They communicate and explain their impact. (“Common Foundations,” n.d.)
2. The *Common Impact Data Standard* is a database developed on the basis of the five dimensions of Impact Frontiers which allows for a standardized representation and comparison of impact data. (“Common Impact Data Standard,” n.d.)
3. The *Common Form* is a complementary tool to standardize and represent organizational financial and descriptive information of an organization, facilitating the interpretation of impact data in the *Common Impact Data Standard*. (“Common Form,” n.d.)
4. *Common Framework*: This framework is still in development but aims to be a flexible but unifying approach which guides organizations in choosing and applying indicators. (Adri-aanse, 2022)

2.4 Communication of Impact

Businesses that genuinely commit to sustainability strive to integrate societal concerns into their core approach to decision-making and value creation (Dyllick & Muff, 2016) which by extension may include directly involving stakeholders. Greenwood (2007) emphasizes the importance of engaging stakeholders in corporate decision-making, arguing that this fulfills corporate responsibilities and exemplifies accountability. Stakeholders can be referred to as individuals or groups that influence a corporation’s success or are impacted by its actions and goals (Freeman, 2010). These stakeholders include internal contributors, such as employees, executives, and board members, as well as external groups with an economic interest, such as customers, shareholders, competitors and creditors

(Chandler, 2023). Beyond these organizational and economic stakeholders, broader societal groups, including NGOs, governments, communities and the media also play significant roles.

For VCs, stakeholder relationships primarily revolve around LPs and the startups within their investment portfolios (Salgado-Criado et al., 2024), each of which presents distinct expectations. Stakeholders can be prioritized based on their ability to influence the corporation, their legitimacy and the urgency of their interests, as articulated in the stakeholder salience model proposed by Mitchell et al. (1997). Within this framework, VCs occupy a definitive stakeholder role due to their financial contributions, embodying power, legitimacy and urgency, which illustrates their critical economic role. This dependency can be argued, as the "supply schedule for venture capital is likely to be nearly flat. Investors [in this case LPs] choose to place money in financial assets because of the expected monetary returns." (Gompers & Lerner, 2004, p. 35). Startups, by contrast, demonstrate legitimacy and urgency but lack power, making them dependent stakeholders reliant on VC resources and influence (Mitchell et al., 1997).

The relationship between LPs and VCs highlights the role of financial returns and asset allocation in investment decisions (Janeway et al., 2021) which underscores the reliance of VCs on LPs for funding. In the impact investing sector, this is complemented with a focus on impact. However, Heeb et al. (2022, p. 4) show that the average LP is signified through a "warm glow", the emotional reward of doing good, rather than a consequentialist approach to optimizing impact. On the other hand, the financial focus can clash with the sustainability goals of portfolio companies. Early VC involvement can shape corporate social responsibility (CSR) strategies, potentially limiting broader stakeholder perspectives and reducing opportunities for societal engagement (Alakent et al., 2020). Morsing and Schultz (2006) describe three stakeholder strategies related to CSR communication: the information strategy (focused on one-way communication), the response strategy (involving two-way but unequal communication) and the involvement strategy (emphasizing reciprocal, balanced communication). These strategies reflect differing levels of inclusivity in stakeholder engagement, with the involvement strategy prioritizing collaborative interaction.

Building on these concepts, Stocker et al. (2020) analyze sustainability reports aligned with the GRI framework, revealing varying levels of stakeholder engagement across Morsing and Schultz's (2006) strategies. They propose a stakeholder engagement matrix that categorizes corporations based on their engagement strategies and the number of stakeholders involved (see Figure 4). While most enterprises comply with the information or response strategy, only few align with an involvement strategy.

		INFORMATION STRATEGY	RESPONSE STRATEGY	INVOLVEMENT STRATEGY
Number of involved stakeholders	HIGH	Show-off	Investigator	Generous
	MODERATE	Trumpeter	Curious	Malleable
	LOW	Insulated	Prudent	Focused

Figure 4: Level of stakeholder engagement based on Stocker et al. (2020) after Morsing and Schultz (2006)

At the lowest level, “Insulated” corporations engage few stakeholders with minimal involvement, while “Prudent” corporations operate at the response phase but involve similarly few stakeholders. By contrast, “Focused” corporations prioritize reciprocal involvement but still engage limited stakeholders. Corporations engaging moderate numbers of stakeholders fall into categories such as “Trumpeter” (information phase), “Curious” (response phase), or “Malleable” (involvement phase). Meanwhile, corporations with high stakeholder engagement levels range from “Show-off” (information phase) to “Investigator” (response phase) and ideally “Generous”, involving many stakeholders in reciprocal communication. (Stocker et al., 2020)

Engaging stakeholders ensures that sustainability metrics reflect both corporate objectives and stakeholder expectations, enabling more comprehensive sustainability reporting (Bellantuono et al., 2016). However, the methods for measuring impact vary. Sustainability reports based on the ToC may place greater emphasis on management perspectives than those of primary stakeholders (Ruff, 2021). Consequently, corporations may develop their stakeholder engagement strategies when reporting on sustainability to balance and address diverse stakeholder perceptions and “reduce resource dependence uncertainty through their relationships with stakeholders” (Herremans et al., 2016, p. 433).

2.5 Research Gap and Research Question

The research questions guiding this thesis are:

1. What are the prevailing practices among established impact VC firms for assessing impact performance?
2. How do these firms communicate their impact performance to stakeholders?

A growing body of literature refers to the benefits and growing prevalence of impact investing (Clarkin & L. Cangioni, 2016; Mudalige, 2023) and numerous frameworks, methodologies and guidelines exist for measuring impact (Kah & Akenroye, 2020; Lam & Tan, 2021). These tools offer diverse approaches to assess impact. However, the abundance of such frameworks has also led to challenges in achieving consistency and comparability across investments (Rizzello et al., 2021). Despite the wealth of theoretical resources, there is limited understanding of how practicing impact investors currently implement these frameworks and methodologies in real-world contexts (Rizzello et al., 2021). This represents a significant research gap, as practical adherence to measurement frameworks is crucial for ensuring accountability and fostering credibility within the impact investing sector as well as enabling economic stakeholders to compare investments and make confident and informed decisions.

Moreover, impact investing remains a relatively young discipline (Cooper et al., 2016). As such, it must establish robust, evidence-based practices to substantiate its claims of delivering both financial returns and measurable impact (Hand et al., 2023b; Jeffers et al., 2024). Within this context, the communication of impact performance to stakeholders plays a pivotal role. Stakeholders, including investors, investees, and potential investors require transparent and consistent information to evaluate the legitimacy and effectiveness of impact investments. Therefore, evaluating impact investors' communication practices can inform on stakeholders' needs and help to identify potential communicative gaps and devise strategies for improvement.

An additional layer of complexity in the impact investing field is introduced by regulatory frameworks such as the Sustainable Finance Disclosure Regulation (SFDR). While the SFDR has contributed to differentiating between levels of sustainable investment by requiring standardized disclosures, it does not offer specific guidance on how to measure impact (Regulation (EU) 2019/2088 of the European Parliament and of the Council, 2019). Moreover, Article 9, focused on products with a sustainable investment objective, does not distinctly delineate the boundary between ESG integration and impact investing (Scheitza & Busch, 2024). This regulatory ambiguity underlines the call for alignment in regulatory and methodological guidance.

This research regarding impact measurement and communication seeks to provide academically relevant insights as well as practically valuable insights for stakeholders and regulatory authorities. Understanding current practices among established impact VC firms may aid to inform the development of more unified and actionable frameworks. It aims to provide insights into how the sector can enhance transparency and accountability, ultimately supporting the growth and advancement of impact investing as a credible investment approach.

3 Methodology

Qualitative thematic interviews based on the descriptions of Lehmann (2022) were conducted with representatives from nine impact investors and one private equity investor with a special focus on ESG to explore their approaches to measuring and communicating impact, as well as the relevance they attribute to these processes. The open, problem-focused interviews followed a semi-structured format which was guided by predetermined questions including both primary and secondary questions. The interviews were transcribed and analyzed using a combination of Mayring's (2021) inductive and deductive category formation to implement a content analysis. The detailed research design, the process of conducting and analyzing the interviews as well as limitations in the research are outlined within the following chapters.

3.1 Research Design

Interview Guideline

The interview guideline is based on the research of the literature review (see chapter 2) to answer the research questions at hand and thus relate to the topics of impact definitions, impact assessment and communication practices as well as underlying values. The guideline (see appendix 9.1) contains primary questions which strongly relate to the research objective while several secondary questions were asked to complement and deepen the answers for the primary questions. Ebrahim and Rangan (2014) suggest that funders are better able to measure impacts than individual organizations because they can contribute on more than one core business model. Therefore, questions were asked about the reason for impact assessment as well as for the definition investors have of impact. Due to the multitude of tools, frameworks and methodologies for planning, evaluating and communicating impact (see chapter 2.4.1), questions regarding methodologies were included in the guide. Additionally, based on the definition of impact investing as blended value (Bugg-Levine & Emerson, 2011), a question regarding the preferential treatment of impact over financial performances or vice versa was included. Heeb et al. (2022) studied the motivation of LPs for impact investing which induced the question whether investors experience reporting preferences of their LPs either directly or indirectly or whether they had learned to in- or exclude certain information in order to better reach their LPs. Secondary questions helped to further clarify or expand upon the primary questions, offering deeper insight into specific aspects of impact measurement and communication such as the differentiation from other impact investors which helped to understand a possibly unique approach of each investor allowing conclusions about an investor's strategy. Based on the study of Heeb et

al. (2022) and building on the findings of Roundy et al. (2017, p. 504) who had interviewed an investor cautioning “about over-reliance on such [quantitative] measures [...] [and instead emphasizing] evaluating the extent to which the founders of the venture seem to be aligned with the venture’s social mission”, emotional considerations and values underlying impact measurement were questioned as well. Two questions (11 and 14) are considered complementary questions to include personal reflections and additions to allow for expert input that may not have been previously considered by the researcher. Additional complementary questions were used spontaneously in the interviews to clarify or elaborate on responses given by the participants.

Pretest

The pretest is an essential step in refining research instruments, such as interview guides, to ensure their effectiveness before they are employed in the actual study to ensure reliability and validity of the collected data (Lehmann, 2022). According to Lehmann (2022), the pretest serves to both enhance the structure of the interview guide and evaluate its ability to collect meaningful and accurate data. In the context of this research, the pretest was conducted in two distinct stages to optimize the interview process. Both pretests were structured around ten guiding questions as proposed by Lehmann (2022), which serve as a framework for evaluating the effectiveness of interview guides. These guiding questions are designed to ensure that the interview process is clear, relevant and methodologically sound. In this study, the pretests with the two participants focused on different aspects of these guiding questions based on their backgrounds and roles.

First, the initial pretest was carried out with a co-researcher who has expertise in impact measurement and is experienced in conducting interviews. This individual provided valuable feedback on the content, flow and clarity of the interview questions, which helped in identifying potential ambiguities or difficulties that interviewees might face during the actual study. Such pretests offer an opportunity to critically assess the interview guide from the perspective of someone familiar with the research topic and methodologies without being directly involved in the study (Lehmann, 2022). This first pretest primarily concentrated on the technical and structural aspects of the interview guide. Based on this evaluation, one question was taken out of the guideline due to thematic irrelevance. Additionally, minor changes were made to the phrasing of questions to improve clarity and unambiguity.

In addition to this, a second pretest was conducted with one of the actual participants whose interview was scheduled first. The feedback from this pretest was instrumental in further refining the guide, as it allowed for the identification of any unforeseen issues that might not have been evident during the initial pretest. The second pretest focused on the practical application of the interview guide, as this person would represent the target sample for the full study. Here, guiding questions

related to the participant's experience during the interview were most relevant. Additionally, feedback was gathered on the duration of the interview to ensure that the interview was not too burdensome. This pretest also provided insights into whether instructions were clear and effective, making sure that the interviewee could easily follow along.

By using this first interview as a pilot, the wording was improved by exchanging the term *social venture capital* with *impact venture capital*, thus using the customary term, as well as adding a question regarding the funds' placement within the SFDR. The guide was fine-tuned for subsequent interviews, ensuring that it would better serve the purpose of collecting relevant data from the participants (Lehmann, 2022).

Employing Lehmann's guiding questions as a structured evaluation tool, each pretest participant was able to provide feedback that aligned with their specific perspective; one from a methodological and theoretical standpoint, and the other from a practical, participant-focused viewpoint. This ensured that both the technical quality and participant experience of the interview guide were thoroughly assessed.

3.2 Conduction and Sample

The process of conducting the interviews followed a structured approach to capture a wide range of perspectives by selecting impact VCs without imposing geographical limitations.

The interviews for this study were conducted over video calls using the Zoom web conference tool which is provided by the University of Applied Sciences Neu-Ulm, to accommodate geographical constraints and ensure participant comfort. Zoom's recording feature was utilized to capture the interviews for later analysis. Prior to each interview, participants were provided with a brief overview of the research topic and its objectives, along with assurances regarding the confidentiality of their responses. Consent was obtained orally from each participant (see appendix 9.2). The duration of the interviews was between 25 to 45 minutes, individually allowing sufficient time to cover all relevant topics while minimizing participant fatigue. English was the primary language used during the interviews; however, for German firms, interviews were conducted in German to ensure clarity and avoid potential misunderstandings caused by language barriers. This bilingual approach was used because participants as well as the researcher fluently understand and speak English. However, not every participant's native language could be accommodated by the researcher except for German. Interviews were transcribed using the platforms otter.ai (*Otter.Ai*, n.d.) for English interviews and

turboscribe.ai (*TurboScribe*, n.d.) for German interviews and were manually revised and edited by the researcher.

Participants for the study who possessed relevant expertise in the subject matter and whose insights would thus contribute directly to addressing the research objective were identified through professional networks, relevant organizations and referrals. Efforts were made to ensure diversity within the sample, including variations in participants' roles, impact focus and geographics, to capture a broad range of perspectives. The process of selecting interview participants was systematic and multi-faceted to ensure a representative sample. First, impact VCs deemed relevant by BonVenture based on their impact reporting practices were identified and considered for inclusion. Additionally, firms with B-Corp certifications were identified through the B-Corp website, using the search term "impact Venture Capital." The existence of a B-Corp certification is considered an indicator of a firm's commitment to social and environmental impact performance (Paeleman et al., 2024), making these firms valuable contributors to the research. Websites of these firms were also analyzed, and those that included publicly available impact reports were prioritized for interviews, as their transparency indicated a robust engagement with impact reporting.

Furthermore, an employee from BonVenture assisted in distributing the interview request through a mailing list used for European impact VCs. This mailing list serves as a platform for distributing information, facilitating networking and discussing impact-related topics within the sector. By leveraging this network, the study was able to reach additional relevant firms that might not have been identified through the initial search. Thirdly, Susanne Bregy, the CEO of the Bundesinitiative Impact Investing (BIII), was consulted to further broaden the pool of potential interview partners. She reached out to an additional four VCs, encouraging them to contribute to the research. None of these firms responded to the invitation.

Participants were contacted through a variety of channels including email, LinkedIn and contact forms on the firms' websites. The initial contact included a brief explanation of the research, the expected time commitment, the assurance that participation was voluntary and that collected data would later be anonymized. Follow-up communication ensured that participants fully understood the purpose of the study and their role within it, while also addressing any questions or concerns they might have had and providing them with a Zoom invitation after an appointment was scheduled. The interviews were planned based on participant availability.

The combination of methods, targeting firms with established impact reporting practices, leveraging the B-Corp network, the BIII association and using professional mailing lists, helped to create the sample of firms for the study. In total, 104 impact experts from 64 impact VCs across 23 countries were contacted to participate in the study. The majority of these VCs are based in Europe, with a

smaller number located in North America and one firm in Africa. The final sample consists of ten participants from the nine countries Canada, France, Germany, Italy, the Netherlands, Norway, Portugal, Spain and Sweden, with eight investors operating in the EU. These firms, while mostly working internationally, primarily operate within specific regional boundaries, often focusing on neighboring countries. This geographical spread provided a broad range of perspectives. Interviews were conducted between July and October 2024.

3.3 Data Analysis – Anonymization and Categories

In order to protect the privacy and confidentiality of the participants, an anonymization process was applied to all interview transcripts. The names of the participating VCs were replaced with labels ranging from Investor A to Investor K, with the assignment of these labels done randomly to avoid any identifiable patterns. Additionally, the names of the interview partners were replaced with fictional names alternating between female and male names without regard to the actual gender of the participants. The names begin with the same letter as the investor; Annette works for Investor A and so on.

For the data analysis, the categories and codes were developed using a mix of Mayring's (2021) deductive and inductive content analysis method. This approach involves deriving codes and categories both from literature as well as directly from the content of the transcripts. According to Mayring (2021), the advantage of this method is that it allows for an objective analysis of the material by building on existing research while also minimizing the influence of the researcher's preconceptions. The inductive approach ensures that the findings emerge from the data itself, providing an authentic understanding of the practices and perspectives shared by the interview participants.

Before conducting the analysis, the transcripts were reduced in accordance with the Z1 rules according to Mayring (2022), which focus on condensing the text while retaining its essential content. According to Z1.1, all parts of the text that do not (or sparsely) carry content will be removed. This includes embellishing, repetitive or illustrative phrasing. Rule Z1.2 requires translating the content-relevant sections into a uniform stylistic language. However, this step was not necessary in the current study as all participants spoke in a professional manner, using a similar choice of words and phrases throughout the interviews. Finally, under Z1.3, the remaining text was transformed into a more concise grammatical form. The goal is to streamline the transcripts for clearer and more focused analysis. An example from one of the interviews is provided, where parts of the transcript that have been deleted according to Z1 are highlighted in grey for clarity.

Also, because some of our companies are under one, not agreement, but it's a label, like B Corp, but it's not B-Corp, it's something else. And I'm trying, I don't know, if you know, is this, it's a French one, is it's for, it's a label on, which is called enterprise, social enterprise with a social utility. So ESUS. And it's really, really from the government. So it's French, super French.

Citations from the interview partners in this thesis were extracted from the reduced transcripts as the content has not been changed, however, the quotes will be more precise and comprehensible.

4 Cases

The experts who participated in this study represent a diverse group of impact investors. These firms are generally comparable in terms of fund size, employee count and their general focus on environmental and/or social issues. Most notably, all of the firms, with the exception of Investor D, operate within the European Union (EU) and its regulatory framework. While Norway is not a member of the EU, it aligns with EU regulations (*Offentliggjøringsforordningen*, 2018). Three firms stand out for their unique characteristics. Investor D is based in Canada, offering a valuable comparison to assess whether certain tools or approaches to impact assessment and communication are specific to the EU context. Additionally, Investor F is a Private Equity Fund with a strong focus on ESG criteria, rather than an impact investor. This distinction could provide an interesting contrast in terms of methodologies and the emphasis on sustainability within portfolio companies. Another outlier is Investor E which operates on a larger scale than the other firms. This difference in size could present opportunities for exploring how greater financial and human resources impact the ability to measure and communicate impact.

The firms also vary in terms of their founding years, spanning from 1999 to 2013. Given the continuous evolution of the impact investing and green finance sectors (Mudalige, 2023), this variation may provide valuable insights into how firms perceive their role, position themselves in the market and adapt to emerging trends. By examining these variations, this study aims to uncover both commonalities and differences in how these firms approach impact measurement and communication. Table 1 provides basic organizational information about the participating VCs. All data is collected from each VC's homepage and thus represents self-identifying information. If information about a criterion was not provided, the corresponding space in the table was left blank.

Table 1: Overview of Interviewed Investors

VC	Investment Approach	Year of Origin	Origin	Investment Stage	Funds	Fund Volume (€)	Start-ups	AUM (€)	Employees	Certificates	Report online
Investor A	Impact Investing	2010	Europe	Pre-Seed to Series A	5	0,25-5m	65		21		✓
Investor B	Impact Investing	2003	Europe	Series A	4		23	83,9m	13		No
Investor C	Impact Investing	2003	Europe	Seed Series A	1	0,25-2,5m	30	95m	5	B-Corp 155,9	✓
Investor D	Impact Investing Asset Manager Philanthropy	2010	Canada		2	\$0,25-2m		\$83m (2022)	24	B-Corp 116,4	✓
Investor E	Impact Investing	2019	Europe	Series A			14	107m	50		✓
Investor F	Impact Investing	2001	Europe	Pre-Seed to Series A		0,5-4m	23	160m (2022)	17		✓
Investor G	Impact Investing	2013	Europe	pre-seed Seed	1	0,1-1m	64	45m	23	B-Corp 84,5	✓
Investor H	Impact Investing	2008	Europe	Late stage growth stage	2	1-3m	26	30m	8	B-Corp 109,2	✓
Investor J	Impact Investing	2006	Europe	Series A Growth	3	2-30m	45+	123m	10		No
Investor K	Private Equity	1999	Europe	Small/Mid Cap Buyout	7		57	4b	90+		✓

5 Results

In this chapter, the results from the conducted interviews are presented. Full interview transcripts are included in Appendix 9.3. Based on the analysis of the underlying literature and subsequently of the interviews, seven categories with four to eight codes each were developed through deductive and inductive content analysis (see Figure 5). They serve to answer the research questions at hand, referring either to the measurement or to the communication of impact performance. The categories associated with impact measurement include *Measurement and Methodology*, *Impact Verification and Due Diligence*, and *Key Performance Indicators*. In contrast, *Stakeholder Engagement*, and *Communication and Transparency* specifically address the communication of impact performance. The two categories *Values and Alignment* and *Challenges and Opportunities* highlight the fundamental criteria for measuring and communicating impact. These criteria include definitions and values integral to decision-making processes, and the challenges that affect both measurement and communication.

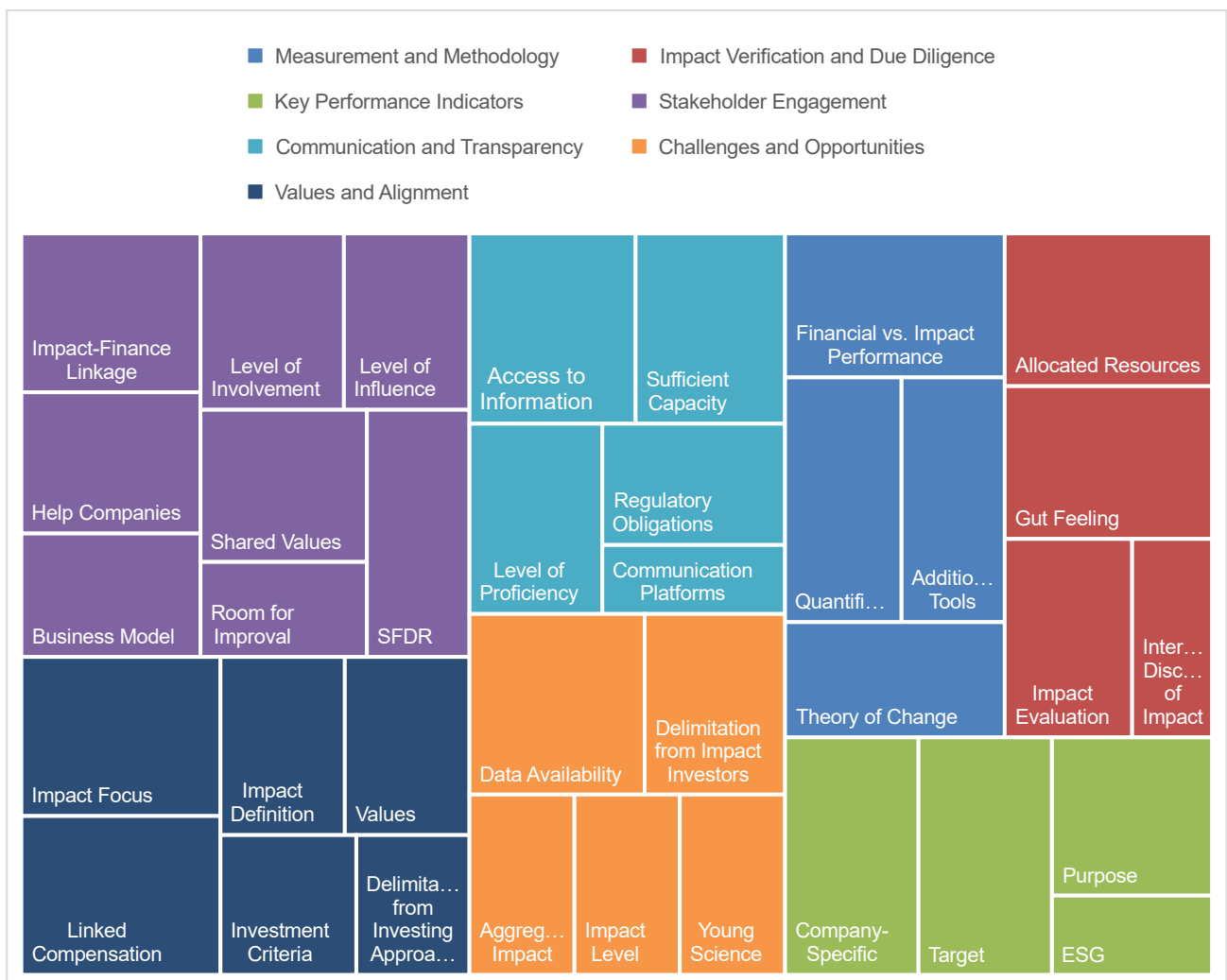


Figure 5: Categories and Subsequent Codes

5.1 Category 1: Measurement and Methodology

Table 2: Distribution of Codes within the Category Measurement and Methodology

Code	Total Amount	Interviews mentioned in
Financial vs. Impact Performance	18	10
Quantification	20	9
Additional Tools	31	8
ToC	22	8

The category *Measurement and Methodology* entails codes that relate to the approaches used to assess impact. These include above all the tools and how they are being used.

Table 3: Frequency of Financial vs. Impact Evaluations

Investor	Financial Evaluation	Impact Evaluation
Investor A	Quarterly	Annual
Investor B	Monthly	Monthly
Investor C	Same frequency	
Investor D	Quarterly	Quarterly
Investor E		Quarterly
Investor F	Same frequency	
Investor G	Quarterly	Quarterly
Investor H	Monthly	Monthly
Investor J	Monthly	Semi-Annual
Investor K	Monthly	Every two months

The code *Financial vs. Impact Performance* refers to the frequency with which the impact and financial performance are assessed and whether one is prioritized over the other. There is a range within the responses both relating to the general frequency of measurement as well as to the prioritization of performances (see Table 3). Four investors assess performance on a monthly basis while three do so on a quarterly basis. Investor A, which invests at pre-seed to Series A level reasons for quarterly assessments as Annette explains: “[...] they're startups, and they have very limited time and resources. They're very busy trying to set up a functioning company. So we also don't want to overburden them with this if it's not necessary.” On the other hand, Hugo who hints at the same issue says that they do different assessments on a monthly and on a quarterly basis, referring to the latter as “quarterly big reporting”, implying that the monthly assessments are smaller and thus not as big a burden to the startups. Five interviewees report measuring impact as regularly as financial criteria either quarterly or monthly while three respondents put more emphasis on the financial assessments. Investor K has monthly financial assessments and ESG assessments every two months, Investor J measures the financial performance every month or quarter and the impact performance

twice a year, and Investor A tracks financials on a quarterly and impact on an annual basis. Annette outlines that “things don't change that quickly or that much on a quarterly basis from an impact perspective, and at least if they do, it's something you'll find reflected in the financials anyway.” Fred mentions that they track impact and financial performance equally but individually for each startup based on a risk logic. If there was a market risk for a startup, greater attention would be paid to financial aspects and vice versa.

Generally, as shown in the code *Quantification*, most investors put an emphasis on the quantitative quality of their impact assessment methodology irrespective of the amount of tools or approaches used. Only Christiane specifies that they consciously refer to “more qualitative appreciation more than the quantitative one” and Knut does not explicitly refer to the quantitative quality of their assessment. Ben, Doug, Erica, Fred, Greta and Hugo put a strong emphasis on the scientific and quantitative approaches in their assessment as exemplified by Erica: “We are very quantitative and very methodical.” Doug comments on the importance of a “robust methodology”, because “we want to make sure that we are showcasing our impact right, each and every impact investor”. Objectivity is an explicit focus for Ben, Erica and Greta. Erica for example stresses that the “assessment framework enables us to then carry out screening, where if done by five different people without talking to each other, they'd reach the same score.” Julia refers to Investor J's history by narrating how they began with a subjective and philosophical investing approach, then included a more objective methodology and now aim to improve objectivity by including external parties to challenge and substantiate their impact theses.

When looking at the methodologies that investors apply, there is a big range of tools that are not universally used by all investors. Those are combined in the code *Additional Tools*. There is also a range in the amount of tools that are being used. Christiane mentions that they “don't have really anything like specific tools. It will be more qualitative appreciation more than the quantitative one.” Doug, Greta and Hugo apply the actions of impact management from the IMP. Greta refers to the IMP framework “because we think it's the more standardized we have in the market as of now” using it for both assessing and reporting on impact. She explains its communicative advantage by saying: “We have seen more funds doing investment thesis around the whole investment, but our communication is centered on impact in that case.” Other tools referred to are LCA (Annette, Christiane, Fred), the IRIS+ taxonomy (Doug, Erica, Hugo), Impact Frontiers (Doug and Erica), UN SDGs (Doug and Erica), ERP (Annette), GRI (Doug) and Common Approach (Doug). While investors A, F, G and H focus on a few specific tools, Doug and Erica use different tools for different aspects, leading to a multitude of frameworks and methodologies. Both Doug and Erica have capacities within their impact team who strategically build “tools and templates to kind of further professionalize the approach”

(Erica) “for the rest of the team to use” (Doug). As Knut explains, Investor K approaches measurements by including various service providers who bring in their own methodologies and thus add value to Investor K’s measurement. Fred and Knut explain using proprietary tools. Investor F uses such for biodiversity cases and Investor K has developed a framework for screening purposes.

A tool that is worth mentioning in its own code is the *Theory of Change (ToC)* because it is used by eight of the ten interviewees, being the only framework that is applied by more than three investors. However, the way it is being used by the investors varies. Christiane mentions using the principle of the ToC, “but not formally”. Most use it as one of the tools that they apply and Ben, Hugo and Julia report using it as the basis of their assessments as exemplified by Hugo: “We build a very deep Theory of Change plan for the next five years with the company. We plan to work with founders that are aligned with that.”

5.2 Category 2: Impact Verification and Due Diligence

Table 4: Distribution of Codes within the Category Impact Verification and Due Diligence

Code	Total Amount	Interviews mentioned in
Allocated Resources	22	10
Gut Feeling	21	10
Impact Evaluation	23	8
Internal Discussion of Impact	9	5

The category *Impact Verification and Due Diligence* developed through inductive analysis because no specific regard was put on the due diligence process that investors go through prior to investing in a company and thus it was not explicitly targeted. Impact Verification refers to the steps investors take to ensure that the impact they have defined or measured for a company is relevant and verifiable. Codes within this category have been developed through both inductive and deductive analysis.

Table 5: Allocated Resources Towards Measuring Impact

Code	Allocated Budget	Allocated Staff	Allocated Time of the remaining team
Investor A		Head of Impact	
Investor B	4,000-10,000€		60% per investment
Investor C			10% per week 30% per investment
Investor D		Impact team of 6	
Investor E	5-10% of whole DD	Impact team of 7	
Investor F		Impact team of 2	

Investor G			
Investor H			35-50% per investment
Investor J		Head of Impact	
Investor K	50,000-70,000€	ESG team of 4	5% per week

The code *Allocated Resources* is mentioned by all interviewees as it was specifically asked about and was thus created as a deductive code. It refers to the resources that investors spend on evaluating the impact of their portfolio companies prior to and during investing. These resources can refer to the budget, staff or time that is spent on the evaluation. In Table 5 the resources allocated to impact evaluation are presented as mentioned by the participants. Additionally, participants refer to details that they pay specific attention to such as Ben who explains that the less obvious an impact case of a startup is, the deeper they go into the analysis. Christiane also refers to additionally examining start-ups according to Effective Altruism:

because if you put one Euro in your company, and then it will help one person to be fed better, compared to another company where you have to invest ten Euros to feed one person, then some are more interesting than others.

Greta talks about the whole team's involvement and challenging of each investment by saying that

the final step before we do the investment is all the team meets with the founders, and all the team ask questions directly to the founders, so that we don't make a decision based on one person or two people' gut feelings. It needs to be backed by everyone's opinions and the investment lead.

Fred discusses the need for allocating resources as he explains that because the growth of startups is not perfectly predictable, there is always an uncertainty about the amount of impact that will eventually be created by each startup. Therefore, the impact analysis should be done deliberately and carefully.

When asked about using *Gut Feelings* when first evaluating an investment opportunity, interviewees responded dissimilarly. The answers range from definitely using gut feeling as described by Christiane:

Yeah, absolutely. Because when we are doing the first calls with the entrepreneurs, we don't have a particular evaluation or notation, whether it's enough impact, but it will be on all view and all experience of sectors and what we want as impact figures and market and systemic impact. [...] Usually, we have the answer within the 31st minutes of the call with an entrepreneur, three fourths of the companies that we see in deal flow 30 minute calls will be rejected. Because they don't have enough impact. [...] We have only 20 millions to invest. I think we can make better use of our money.

Annette highlights the importance of making sense of the startup's founders and whether they will stay aligned with their mission. "To an extent, you can cover that with what the company says themselves, but you will, to a certain extent, have to rely on gut feel to determine whether you think it's true." Like Annette, Doug, Fred, Greta and Knut assign needing gut feelings when evaluating the founders. Erica, Greta, Hugo and Julia explain that although there may be gut feelings involved, these need to be reinforced through research and the opinions of others in the investing team. Erica describes that "we listen to gut feelings, but you have to bottom out from where they emanate." Hugo undermines the potential of gut feelings influencing investment decisions because "the investment process is typically very long. In my experience, that gets a lot of iterations going back and forth, and the investment committee is more than one person, so it's like five people that can speak and vote." Ben negates the influence of gut feelings and stresses that they will only invest if there is a strong and obvious impact case, which will solely be based on scientific analysis.

Complementary to the resources allocated to the analysis of impact, the code *Impact Evaluation* was created to examine the way impact is evaluated before making an investment decision. There are two ways mentioned in the interviews that this may occur. Firstly, through committees or boards or secondly, through independent reviews by external parties. Annette, Ben, Greta and Hugo report having boards or committees which evaluate the impact analysis and key performance indicators (KPIs) that the investment team has created. In the case of Ben this party consists only of LPs while in the case of Annette this party includes both external advisors and LPs. The boards that Greta and Hugo work with consist entirely of external advisors and/or impact experts. Additionally, Annette and Ben engage external service providers to review impact analyses. Erica and Knut commission several external parties or consultants to both help with analyses as well as review the evaluations done by the investor. Knut refers to them as a "sparring-partner", saying that they do not do the analysis for Investor K, but using their analysis to challenge internal evaluations. Investor J which has not been working with external evaluations yet, plans to include them in their coming fund.

Additionally to evaluating impact with external parties or boards, five of the ten interviewees describe that they have *Internal Discussion of Impact*. This code includes whether the impact of each startup is discussed prior to investing as well as internal discussions regarding impact evaluation in general. Erica explains the need for investment discussions related to the individuality of impact:

When you track ESG matters, it's kind of standardized, and it's how businesses operate. And it looks quite similar from one industry to the next [...]. With impact it's very tailored to each company, and to each product and service provided. And therefore, it's always discussed at the time of investment and agreed, as far as you get to during the due diligence with a target of what the impact KPIs should be.

Greta narrates that to be able to test each other, the entire team meets and evaluates a startup's founder and discuss the investment decision internally to avoid individual opinions. The assessment process at Investor G and J generally includes two people "challenging both on the impact and the business part" (Julia). Julia also mentions the necessity of discussing the impact thesis internally due to disagreement "because sometimes [it] could be a bit subjective, the definition of the impact." Greta further indicates that there are frequent discussions on impact evaluation and reporting as a whole:

We've been having a lot of discussions on how that's going to evolve [...], if we should change the way that we are reporting impact [...]. For now, there's not a standardized way to report impact. So for now, we've been keeping it with the IMP framework, because we think it's the more standardized we have in the market as of now.

5.3 Category 3: Key Performance Indicators

Table 6: Distribution of Codes within the Category Key Performance Indicators

Code	Total Amount	Interviews mentioned in
Company-Specific	39	10
Target	15	10
Purpose	12	8
ESG	11	4

Various questions were directed at the *Key Performance Indicators* that investors use to assess impact. Therefore, the category and subcodes *Company-Specific* and *Target* were created through deductive analysis, resulting from the research prior to developing the interview guide.

The code *Company-Specific* relates to the coverage of KPIs and whether they can be standardized and used for various cases or whether they are unique and specific for each startup. This code slightly overlaps with the code *Aggregated Impact* (Chapter 5.6). Eight of the ten participants report that they tailor the KPIs to the startup. Erica explains that they tie the KPIs as closely to each business model as possible "because that A) tells the story much better about what the company actually does, you understand it intuitively, investors, the company and ourselves alike understand it much better. Second, the KPIs are operationally meaningful and decision useful." Ben also talks about using company-specific KPIs which, however, should be broad enough to represent new business approaches of a startup. There is a variance in the number of KPIs that are set for each startup, ranging from one impact KPI per startup at Investor G to three to five KPIs per startup at investor H and K. Some interviewees suggest that while the KPIs are very specific to each business model, the

questions startups that are asked or the assessment methods may be standardized. Julia for example says that “we measure through the survey the satisfaction of our stakeholders in terms of impacts. So this is something that can kind of standardize, but the KPI themselves are different from any investments from the other one.” Erica and Doug respond similarly by using a standardized set of questions. Four of the ten participants report using standardized concurrent to specific KPIs for impact measurement. Christiane differentiates between ESG KPIs which contain the same metrics for all startups and “core business KPIs” which are distinctive per startup. Fred explains similarly that they have both standardized and specific impact KPIs. However, the standardized set are those KPIs which are linked to the carry of the fund. Doug and Knut whose investors are not VC investors but are a fund of funds and a private equity investor make more use of standardized KPIs. As the focus of Investor K is put on ESG metrics, they use these as a standard set for all companies they invest in like board diversity, employee satisfaction or CO₂-emissions. However, Knut states that each company will have their own tailored ESG strategy focusing on three to five metrics per year which will be tracked during the year. Doug reports that they use two sections within their measurement which are impact returns, focusing on emissions or investment strategies, and risk mitigation, focusing on the duration, depth and stability of a fund’s impact if the fund were to dissolve.

Participants were also asked whether they use their KPIs for measuring impact performance or for setting impact *Targets* for their startups to achieve. All said that they use the KPIs for both measuring performance and setting goals. They do this with varied intensity. Erica explains this as one of their unique selling points (USPs):

So we start out already from day one, when we look at a target, we screen out and screen in more impactful portfolio companies. And we work with them harder to make sure that we get to more impact with them. And then we report on it.

Greta points out that using KPIs as targets may be necessary in order to measure impact at all:

In some cases, it might make sense to have one metric for the initial two years, which is not as impact related, but it's more the path to getting to that impact metric that we want, and then in the next years, we will be reporting impact.

Only Doug limits the use of KPIs as targets by remarking that unless they are provided directly by the funds, Investor D is not able to develop targets for the underlying startups as they are too distant from them. “We usually use them to assess the impact performance. If there is a target disclosed to us by the fund, we use that to assess [...] and we use that to compare the annual progress.”

The code *Purpose* was developed to explore the rationale behind using KPIs, the criteria that define them and their intended objectives. All eight respondents who contributed to the code reflect that the KPIs are used “to make sure that the way that we manage the portfolio companies, takes impact into

account” (Annette) and that “impact is our goal. That's what we want to measure. That's what we try to reflect in the KPIs that we keep track for each company” (Greta). Hugo refers to two purposes that the KPIs need to reflect: “They're that we're adding something good to what there is out there already, and second one, that we are using resources effectively, like the amount that we invest is translated in a big impact.” Similarly, Doug emphasizes the importance of comparison, aiming to use KPIs to evaluate the scale and depth of impact in relation to other external companies. Additionally, Ben, Christiane, Erica and Knut talk about the defining criteria of KPIs. Christiane and Knut stress that the KPIs are evaluated at every board meeting together with the financial reporting “some way really clear that you can directly compare the financial KPIs and the impact KPIs really easy. And it also shows as they are linked and not interdependent” (Christiane). Ben adds that they define KPIs that are directly measurable at an operational level without being dependent on forecastings or additional research which makes them easily evaluable.

Three interviewees directly refer to using *ESG* criteria in their KPIs. Investor K specifically focuses on *ESG* compliance instead of impact; therefore, they include *ESG* very strongly and thus require their companies to have a designated *ESG* officer. Investor C and E use *ESG* to address mainly governance risk “not in your business model, but in the way you do business” (Christiane). Ben comments critically that *ESG* criteria are frequently used by fund of funds resulting in an imbalanced distribution of capital because impactful funds do not necessarily apply *ESG* metrics.

5.4 Category 4: Stakeholder Engagement

Table 7: Distribution of Codes within the Category Stakeholder Engagement

Code	Stakeholders concerned	Total Amount	Interviews mentioned in
Shared Values	All	37	8
Room for Improvement	All	9	5
LP Level of Involvement	LP	19	8
LP Level of Influence	LP	19	7
SFDR	Institutional	22	8
Impact-Finance Linkage	Startup	22	9
Help Companies	Startup	21	8
Business Model	Startup	24	7

The category *Stakeholder Engagement* includes all codes that relate to various stakeholders mentioned by the interviewees. Those contain aspects which relate to the external stakeholders *LPs*,

Institutional parties and *startups*. These stakeholders were identified by the interviewees as relevant to the assessment and communication practices of the investor and thus call for explicit analysis.

The code *Shared Values* refers to the values of the investors and how these align with the founders and team of the startups as well as the LPs. When looking at shared values with LPs, eight interviewees respond similarly by expressing that “we gather shareholders through the impact mission” (Christiane) which shows that LPs invest in an impact investor because they share impact related values and in return the investor ensures investing according to those values (Ben) by continuously reporting on the impact that startups achieve. Erica reflects how LPs seek to ensure that their values are aligned with the investments:

The one thing that I think investors want to see, and a few of them have been very articulate on this is that they want to see not only the valuation increase created during the holding period, but also what's the impact difference that you make. They do expect and require impact to be measured and communicated. And especially, how much have you moved the needle, we can see the valuation and we can see the exit. What was the impact increase?

However, Christiane also hints at the importance of profitability aligning with impact by saying that “they also will look at profitability. Because they are old money people that are driven by impact, but they always have been in traditional sectors before either finance or entrepreneurs.” She adds that this is also an aligned value because if startups were not profitable, “then it will always be raising more money to continue your business, but then the financial resources of your investor will not be used in the best way. And also, that's not how we do impact.” When comparing values with the founders and team of a startup, responses differ. While investors G, H and J want the founders to be aligned with impact values from the beginning, Erica and Ben stress that startups can be impactful while the founders may have a commercial or technological focus, possibly not being aware of the environmental or social impact they are creating. Erica explains that

that's how we frame it with our portfolio companies that this is part of our value creation set. That we have a more restricted set of levers that we apply more carefully, because they also tick the impact box. And that's how their companies stand out. And we probably help them crystallize a little bit their impact thinking [...]. They're impactful from the start, they just haven't crystallized it properly into their KPIs and in their communication. And that's what we help them do.

Knut emphasizes this further by mentioning that while they as an investor aim to work at eye level with the startups to collaboratively enhance the startup's sustainability efforts, they also continuously track and verify that sufficient capacities are being invested in sustainability. Fred raises another aspect of needing to align the values of impact investing with people and corporations that are not

yet aligned resulting in a lot of capital invested in unsustainable funds. This is supported by Erica who further highlights the disadvantages of a strictly financial focus as being

completely misguided when not all drivers, all financial returns are yet codified and included in the pricing of assets. So if you think you're focusing on driving returns, you're actually not, you're focusing on a handful of the things that drive returns, but you're neglecting a lot of other things that have an impact on your returns in the long run.

Five interviewees mention *Room for Improvement* related to stakeholder engagement. Ben calls for standardizations which allow stakeholders to compare and evaluate investors more easily. Ben, Christiane, Erica and Fred also stress the importance of improving communication to convince more stakeholders of impact investing although Erica and Knut outline that this has already improved over the last years.

When focusing on the stakeholder group of LPs, two codes were developed during the interview analysis: *LP Level of Involvement* and *LP Level of Influence*. The first code, mentioned by eight investors, refers to the definition and eligibility criteria of LPs as well as the impact-related knowledge that they possess. Christiane defines their LPs as “mostly rich people that want to invest their money personally. We have family offices too but we also have people like you and me, but usually they are former entrepreneurs”. Investors A, D, G and K additionally work with institutional LPs who may have specific KPI requirements, impact focuses or push for linking carry to impact. Annette, Fred and Julia talk about the range of knowledge that LPs have, saying that “we have investors that are much further in impact, and others, investing in us is the only thing that they do on impact” (Annette) and Julia adds that

there's been a lot of education in the last 10 years. It's good. I see that also with the LPs, there is more discussion on the definition of the KPIs, the definition of the impact, the base of the research itself that we've done. So it's more commitment from them in order to understand [...].

The code *LP Level of Influence*, mentioned by seven investors, refers to the amount of influence that LPs have on the assessment and reporting practices of the investors which is distinctly disparate. Erica, Fred, Hugo and Julia report not being influenced by LPs as much because they say that “we're quite leading in a way” (Erica) and “they don't ask more than what actually we give. Actually we give more than what they ask” (Julia). Greta speaks of a medium level of influence because they seek further validation by commissioning external parties in order to give comfort to LPs. Annette and Ben talk about a higher level of influence that LPs have. Annette mentions that “we are able to then host roundtables with these partners, to bring them all together to discuss [...], and then it helps us also make better investments” thus asking for and implementing input, however, from institutional LPs

only. Ben narrates that several LPs have influence on the processes of Investor B because they share their analyses and investment decisions with a designated Investors Committee who can double-check and vote on investment proposals. Ben clarifies that they have this in place to ensure that they will invest according to idealistic notions of the LPs rather than their own. However, he also criticizes LPs' reporting demands as reports ought to be in the same frequency and detail as traditional VCs' reports while they as impact investors need to report the same amount of information in two topics, financial and impact.

One code refers to institutional stakeholders which is the European Commission with the *SFDR*. Since seven of the ten investors categorize their funds as Article Nine funds under the SFDR and one as Eight Plus, regulatory requirements must be met by the investors. Erica, Fred and Greta talk about the additionality of reporting on ESG criteria and PAIs which they previously have not done or done less. Greta elaborates by saying that "all of that that is linked to Article Nine reporting requirements we also track, but we see that as separate from the one metric that it's linked to the core impact of the company". Investor B categorizes as a Nine Plus fund and Ben explains that Article Nine is too imprecise to be comparable, naming the reporting frequency or the depth and scale of the assessments as examples which are not standardized by the SFDR. Investor C, which is not categorized under SFDR, instead refers to other labels to be better recognized by the state.

Because investors work closely with the startups, three codes relate to the stakeholder engagement with startups, namely *Impact-Finance Linkage*, *Help Companies* and *Business Model*. Eight of the ten interviewees respond that impact is directly linked to the business model and financial success of a startup as stated by Greta:

The first mission of the company [Investor G] is to prove that impact is the biggest economic opportunity of our time. So for us, proving that impact and revenues go hand in hand. [...] If our companies are successful, impact was the driving force for that success.

Erica further elaborates that „by applying this kind of approach, the impact is not a net negative to financial returns, it's not even neutral, it actually contributes to returns." This also implies that if a startup is unsuccessful, the impact will diminish as well, as exemplified by Christiane: "[...] If your company dies, then the impact is dead also. So there's no point in having impact with a unsafe business model." Christiane and Julia argue that financial and impact success are not always directly correlated. Julia says that "if you decide to have more profitability sometimes and often, you have less impact. So on the past, we actually also not invested in companies that prefer too much profitability in a certain way, because it was undermining the impact." This contradicts the opinions of the other eight participants. Notably, Christiane argues for both perspectives.

Working closely with startups, investors put effort into helping them in various ways as eight of the interviewees explain within the code *Help Companies*. The aspect mentioned most is helping to develop an impact strategy with specific impact KPIs and frameworks. Julia explains the advantage of this: “There are certain companies that are probably impact companies, but they didn't really measure the impact that they're having. And so we really built up together with them all the framework and all the KPIs.” Erica further implies the market advantage that results from the additional effort put in impact analysis and communication:

As it happens, that to a degree also coincides with pricing power [...]. This is part of our value creation set. That we have a more restricted set of levers that we apply more carefully, because they also tick the impact box. And that's how their companies stand out.

Other ways of helping startups include benchmarking and setting goals (Investor E, H), discussing risk factors (Investor B, G), a network platform with various experts in impact, investing or commercialization (Investor G) or branding and communication consulting (Investor F). Hugo, Julia and Knut also highlight their approach to helping companies at eye level by being as transparent as possible and discussing rather than instructing, as Hugo explains:

They decide, it's not a compulsory, we work with them. We say, like, we're looking for this kind of impact. Are you aligned with this? Do you want your employees to also work towards this? And that's a conversation that they must have. We're not managing their company, we're a minority shareholder.

When looking at the business model of startups, there are some identifying criteria that apply to impact companies as seven interviewees mention in the code *Business Model*. Ben, Christiane and Erica explain that the business model of the startups is closely linked to the impact that they generate because they are “companies who provide products and services that are closely linked to a problem. Usually an SDG gap, or an SDG” (Erica). As previously mentioned, Christiane highlights the importance of a safe business model as its failure directly correlates with the decline of a startup's impact. Ben further outlines that this also helps them as investor referring to the *Impact-Financial Linkage* when he indicates that the general business development should correlate with a general growth in impact and if it does not, this would indicate that the impact analysis was not developed close enough to the business model. Having impact-focused business models may entail employing personnel dedicated to sustainability or, as Fred highlights, specifically for conducting life cycle assessments.

5.5 Category 5: Communication and Transparency

Table 8: Distribution of Codes within the Category Communication and Transparency

Code	Total Amount	Interviews mentioned in
Access to Information	45	10
Sufficient Capacity	21	9
Level of Proficiency	26	8
Regulatory Obligations	22	7
Communication Platforms	7	4

Within the category *Communication and Transparency* there are six codes relating to the communication practices of the interviewed VCs. The code *Access to Information* refers to the matter of making impact information accessible for external stakeholders. There are two aspects within that code that are frequently interrelated. Firstly, participants talk about the level of detail within the information that is provided for stakeholders like Ben who explains that Investor B communicates its actions in more detail than what they are obligated to do by regulations. The second aspect refers to the stakeholders that are targeted which is exemplified by Hugo who says: “We provide investors with that metrics. They have access to that. But it’s not something that we put out to the rest of the world constantly [...]” The two aspects are interrelated because some investors differentiate the level of detail by the stakeholder they are communicating to. Both aspects, the level of detail and the targeted stakeholders, vary between the investors as well as the reasons for providing different details to different stakeholders. Julia states that the reasons for providing detailed information for LPs are regulatory obligations (Hugo and Julia) and Ben mentions that Investor B aims to maintain a high level of transparency with LPs, as they have entrusted the investor with their funds. Reasons for providing less detailed information for the public are data sensitivity (Annette, Ben, Christiane, Doug and Erica), the amount of effort necessary to create additional reports (Doug) and lower demand by the public (Greta). Two interviewees mention that all information related to impact is made transparent for both LPs and the public (Fred and Knut). While five of the ten respondents remark on the issue of data sensitivity, Christiane points out that

“[...]most of them are not confidential, because they are impact KPIs. The companies that we invest in are quite proud to have them and to display their impact and to speak about it to be more visible. So impact KPIs are not really secret.”

The participants differentiate between three target groups that they communicate to: LPs, the public, and the portfolio companies. Communication to the companies is not a strong focus within the interviews except for Julia pointing out that “first of all, [we try to be transparent] definitely [to] the company itself. This is really important in order to create an impact culture.”

The code *Sufficient Capacity*, mentioned by nine investors, refers to the internal capacity that investors have for communication practices or the capacity they make available for improving their communication practices. This code aims to elucidate whether investors are able to communicate as much as they need to. There are two main variables within this code, staff capacity and content capacity. Investors A, C, G, H and J do not have a designated person for communication or marketing purposes and for them, reports are “something we do on the side” (Greta). Investors B, D and K employ one person responsible for communication and/or marketing while investors E and F have two people responsible for it. Both Ben and Fred highlight that they used to have less capacities a few years ago and they further elucidate that although there are dedicated persons, their capacity for exclusively communicating impact might vary between 30-80%, depending on the time of year as there are other communication topics like events or consulting portfolio companies that take up time. Several interviewees point out that the responsibility for communicating impact within the reports lie with several persons in the team irrespective of whether there are communication staff or not like Knut, Fred, Hugo, or Erica who says: “We have a communications team of two people. That is not part of the impact team. Then on the other hand, they’re communications, they’re not sustainability or impact specialists. So when it comes to providing the data, it all comes from us.” Ben, Christiane, Hugo and Julia have identified the need for more communication capacities within their teams as exemplified by Hugo saying “we would communicate more. We do not have a marketing department, so we do not have the resources to actually say everything that we do, that would be a good thing to put out”.

Communication capacity slightly overlaps with the code *Level of Proficiency*. This code, mentioned by eight investors, relates to the amount that investors are able to communicate as well as communication proficiency. It could be assumed that the more capacity the investor has, the more work can be put into communication efforts. Christiane for example states that “we are working with an external agency. So we can better assess and be better identified on the market. We know that we are not the best at it. And we don’t have anyone internally to do the communication.” Erica, with two communication experts on the team on the other hand, remarks that they “manag[e] [...] the social community like social channel communication, the website, preparing for annual investor meetings, etc.” Fred, also having two communication employees at Investor F, additionally supports this hypothesis by explaining that their communication proficiency is their USPs because they spend a lot of time on communicating their thoughts and results so that more people get interested and involved in impact investing. He also points out that the different target groups pose a challenge due to their varying levels of expertise regarding impact investing, making translations necessary to present information on different levels of complexity. However, Greta and Hugo, who do not have designated communication experts on their team, refute the hypothesis. Greta mentions that “we’ve been having

a lot of discussions [...] if we should change the way that we are reporting impact [...]” She also highlights the need for communicating impact: “that has been our approach on regardless you agree or you don't agree with the impact of this company, we're going to communicate the way that we see it. So having a standardized way to communicate that, I think that's important.” Greta further discusses the network platform they have developed to support founders:

So we've been working for several years with impact experts, and we have that in our network that we give to founders when they need help setting up policies like understanding how to assess impact, how to make impact a driving force, even for fundraising, etc. So how they should communicate that in the decks of the following raises.

Hugo, who had remarked on a missing marketing department within his team, goes on to remark that “we're also working on a huge database with Investor Z to publish a set of impact KPIs per business model, that I think is going to be super helpful.”

Seven of the ten interview participants talk about having to meet communicative demands according to *Regulatory Obligations*. All investors except for investor C and D are categorized within the SFDR and thus must abide by its reporting requirements as noted by Greta and Erica: “In addition to that you also have mandatory regulatory reporting SFDR, for example, the PAIs.” Ben comments on the SFDR regulations as being imprecise in both its measuring and reporting requirements. Investor D as a non-European fund does not fall under EU regulations such as the SFDR and Doug remarks on this by saying that “if the investor doesn't have a robust methodology, they can just increase their numbers and bump it up because there is no regulation, or there is no rules that they need to follow.” Investor C does not fall under the SFDR due to their corporate buildup and thus Christiane explains that “we have reporting on extra financial criteria, we are free on it. But we can be audited on it. So we can't say the wrong things. But we can say them however we want.”

Within the code *Communication Platforms*, four interviewees mention specific communication platforms that they use. While all investors have a website that they use to both communicate on their impact as well as publish reports, reviews or fact sheets, if available, Christiane and Erica additionally mention social media channels such as LinkedIn while Fred refers to communication formats such as a newsletter. Erica also points to networking events such as annual investor meetings.

5.6 Category 6: Challenges and Opportunities

Table 9: Distribution of Codes within the Category Challenges and Opportunities

Code	Total Amount	Interviews mentioned in
Data Availability	33	10

Delimitation from Impact Investors	23	8
Aggregated Impact	14	6
Impact Level	12	6
Young Science	7	6

In the category *Challenges and Opportunities* all codes relate to challenges that interviewees mention or solutions that they propose which are not (yet) realized.

The biggest challenge that all participants highlight is summarized under *Data Availability*. This issue refers to all stakeholders involved with impact investing, starting with potential or existing LPs. Ben narrates experiences of asset managers he has spoken to who shy back from investing in impact funds due to missing standardizations allowing them to compare funds and making informed investing decisions. Additionally, he explains that there are not enough empirical values regarding returns on investment because only very few impact funds have exited yet. Doug from Investor D, which also works on a fund of funds level in Canada, mentions that funds often still report on output level, leading to missing data in order to measure impact. He adds that “if the fund is not having a target, that they're disclosing to us that is not something we do for them, because we don't have enough information“. Missing data is also mentioned regarding the outcome and impact level. Ben, Fred and Julia report that when measuring outcomes, there are uncertainties resulting in projections instead of measurements. Annette and Julia explain that using qualitative and quantitative customer research is how they circumvent this problem and how this problem could potentially be solved:

Often it's difficult to measure the actual outcome of the company, especially in a short time frame. So what we try to do is using certain tools [...], could be like surveys to the actual stakeholders of the impact, in order to measure if we are going to the right direction. But then what we have done in the past is that in the moment that we arrived to have enough data, at that point you could actually measure the outcome.

She also implies that having more time and monetary resources would allow “to go more in depth [...]. Certain research takes a lot of time and you have to wait.” Ben Annette, Greta and Fred refer to the lack of data on the impact level.

Impact is our goal. That's what we want to measure. That's what we try to reflect in the KPIs [...]. Sometimes that needs to be broken down in steps. Because early-stage companies are doing a growth path as well. So sometimes you cannot measure impact from day one in the companies, and we need to have a KPI to report at the end of year one. [...] You need to measure progress until you have that data. (Greta)

She later adds: “I think the biggest barrier to reporting impact or otherwise, we're talking about early stage companies who are figuring out processes.” Annette mentions another level that a lack of data and subsequent assumptions lead to:

It's often the case that the way that we assess the impact, or the results that we have for impact is even different from that of the other impact investor. [...] So it's problematic that impact investors between themselves, can't agree on what the impact of a company is [...]. You could solve that problem [...] to an extent with better data, so that you need to make less assumptions. But in an early stage, there are always assumptions you have to make [...].

Erica proposes an opportunity for making more data available: “The dream scenario would be to have a dynamic database or sets of databases where you would, in real time a very up to date view on investable opportunities, impact performance and potential and kind of linkages.” Knut summarizes that the issue of lacking data is one of the reasons why Investor K decided against categorizing as Article 9 Impact Funds. In order to prevent greenwashing or impact-washing they prefer sticking to clearly measurable data such as CO₂-emissions.

The code *Delimitation from Impact Investors* was created because all interviewees were asked about their differentiation from other impact investors and their USPs which would be opportunities to stand out in the impact investing sector. The given answers present both challenges and opportunities. Three participants respond that they differentiate themselves through their strong transparency practices. Other aspects of differentiation include longer experience and thus a representing track record, labels, digitalization practices, remuneration linked to carry, standardized impact communication, a proprietary method or strategically focusing on the startups' missions. Investor D and Investor K are differentiated by the other interviewed investors through their investment approach as Investor K is not an impact investor and Investor D is associated not only with private but also public investments. There are some aspects mentioned by the participants which present challenges when delimitating from other impact investors or what they deem problematic practices from other impact investors. Ben states that the SFDR Article 9 does not allow for proper delimitation due to its vagueness in impact measurement and reporting. Erica remarks on the impact focus of other investors: “All impact investors report on the impact that they have. They don't actively enhance impact in their portfolio companies.” Doug comments on the issue of pro rating impact, saying that impact reporting norms do not advice on pro rating results while green bond recommendations do, resulting in misleading communication.

They [impact reporting norms] are allowing investors to aggregate the impact of their holdings as a whole and saying this is the associated impact with our portfolio. In terms of narrative, it's not misleading, because it's not saying this is my impact. It's saying that this impact is

associated with my portfolio. [...] If I'm adding one more name to my fund next year, even if, say I invested 100 bucks into that, if I'm aggregating the 100% of impact, that will look like my portfolio is generating way more impact compared to last year, with a very small amount of investment, so the higher the number of underlying holdings, higher the impact. (Doug)

Another challenge for six of the ten participants is *Impact Aggregation*. They respond that it is difficult to aggregate impact because it is very tailored to the individual startups. Annette summarizes that

from a climate perspective, the market is now at a place where the very direct technologies [...] [are] already finished innovation wise, and now we have a lot more innovations that are more about enabling impact or deepening impact, [...] and those are much more complex and indirect technologies [...]. So I would say it's getting increasingly difficult to use standardized indicators for impact at this stage, which is a good thing. But also a bad thing. It's a good thing that we're beyond the basics in terms of impact, but it makes reporting impact and measuring impact much more difficult.

Furthermore, Ben remarks on the need for existing research to aggregate KPIs which is in place for CO₂ emissions but not for other topics such as biodiversity and in particular for social topics. Greta and Doug refer to the SDGs when reporting on an aggregate level. However, Erica deems them too unspecific and thus operationally meaningless.

When asked about the *Impact Level* six participants respond to this being challenging and instead referring more to output or outcome level metrics. The participants name different reasons for why measuring on impact level is difficult. Julia mentions time limitations for measuring impact which would need several years, making yearly reports impossible. Annette and Greta mention the stage startups are at “because early stage companies are doing a growth path as well. So sometimes you cannot measure impact from day one in the companies [...]” (Greta). Ben and Doug additionally mention the quality of data, preferring “to get higher quality output level data versus lower quality outcome level data” (Doug).

Six interviewees mention that one of the challenges that impact investing faces today is the fact that it is still a very *Young Science* and still needs time to develop further. Julia looks back at the past ten years of impact investing having changed a lot while Doug says that “financial reporting has a longer history. And even in financial reporting, we have lots of inconsistencies, lots of intransparency issues. Impact reporting just started. So it's in early days. And it makes sense that we are trying to learn.” Annette and Ben mention the challenge that this process implies which relates again to a lack of data and proof about both returns on investment as well as the impact. Annette uses the example of electric mobility to explain that

[...] that uncertainty is interpreted by the anti-sustainability movements as being a reason not to transition into electric mobility where we already know that from most perspectives, it's better than fossil but the uncertainty doesn't help bring more actors into the space.

Fred summarizes the problem by referring to money currently invested in VC, with only 9% being invested in impact funds (in 2022).

5.7 Category 7: Values and Alignment

Table 10: Distribution of Codes within the Category Values and Alignment

Code	Total Amount	Interviews mentioned in
Impact Focus	39	10
Linked Compensation	34	10
Impact Definition	16	7
Values	15	7
Investment Criteria	18	6
Delimitation from Investing Approaches	12	5

The *Values and Alignment* category encompasses codes reflecting the principles guiding impact investors, shaping their approaches to investment, measurement and reporting. All participants identified key aspects defining their investor's *Impact Focus* which in turn influences their decision-making processes. This refers, among others, to the areas in which impact is created by the investor. Ben reflects that the conceptual delimitation of impact is vague leading to individual evaluations of the existence and size of impact. However, he explains that they put a focus on choosing startups which do not create significant negative impact alongside their business model. Doug, Greta and Hugo refer to their focus on creating environmental and social impact while Investor A creates environmental impact, focusing on energy, industry, food and agriculture, and mobility. Christiane further elaborates on the impact scale: "We don't invest in local projects, [...] it will be too limited compared to the money invested in it." Investor D on the other hand, being a Canadian investor, has a specific focus on indigenous reconciliation. Three interviewees explicitly highlight their adoption of the 'impact first' approach as exemplified by Christiane: "For us impact criteria are at the heart of the project." Several interviewees in turn elaborate on their aspirations as impact investors, wanting to contribute positive additionality to the society and environment. Hugo says that

everything that we do at the end of the day is because of two things we want to make sure. They're that we're adding something good to what there is out there already, and second one, that we are using resources effectively [...].

Erica further stresses their focus on “critical solutions”. Knut, the only non-impact investor, explains their focus on ESG rather than on impact as necessary in terms of the measurable data being scientifically proven, not being reliant on assumptions and projections. Another focus that investors point out is the need for safe business models because “we want sustainable business and if the company doesn't have a good business flows [...] its impact will be lost” (Christiane).

To embed impact values in the approaches of all team members, nine of the ten participating investors and all impact investors have *Linked Compensation* of the investor's manager to impact goals. They have linked the carry of their funds to specific impact KPIs which need to be reached in order to distribute bonuses among managers, thus focusing their attention on reaching these goals. However, the way that the carry remuneration is linked to the impact threshold varies, ranging from linking 50-100% of the carry to impact. While Investor K does not tie carry within their team to ESG-related KPIs, they require startup CEOs to link their bonuses to such KPIs, embedding ESG criteria into their decision-making process and ensuring its significance is upheld alongside financial considerations.

The difficulty of defining impact is clustered in the code *Impact Definition* and is explicitly mentioned by seven participants as Greta for example points out: “It's difficult to have a consensus on impact, on what is impact. I think that's a very philosophical question that will always be a philosophical question”. Ben underlines this by explaining that due to that reason, investors use individual definitions, and Annette even elaborates on impact definitions being company specific. Investor B thus refers to impact as a positive change for specific stakeholders which can be either societal or environmental. Christiane and Hugo each define it more specifically as either “radicality, systemic and accessible” or “a systemic change that has to access scalability and depth”. Doug however ties impact to the achievement of UN SDGs. The discrepancy between impact definitions may lead to problems as Ben explains because it undermines the credibility and plausibility of impact investing, making it difficult for external investors to make informed investments in the impact investing sector.

Regardless of the specific definition, seven interviewees talk about precise *Values* that they align with their investments which are different between the investors. Ben refers to their aspiration to trust in scientific processes and be objective while Julia more loosely ties their values to the internal impact culture: “We have an inner sense that we're trying to do this.” Christiane emphasizes accessibility in mentioning that products or services of their startups have to be accessible in financial and social regard in that funds and awareness or knowledge have to be predominant in all demographic segments. Erica, on the other hand, stresses two values that they apply at Investor E. Firstly, they employ an impact focus which “is completely non-controversial.” Secondly, she refers to the Euro-

pean market need for impact startups: “But we don't have to go to the poorest and most undersupplied markets in the world, we can start with those that are undersupplied in Europe. And we will still make something good.”

Resulting from the various impact definitions of the investors and based on the values mentioned above, six investors follow various *Investment Criteria* for choosing an investment. Thus, the criteria for Investor C is that the solution the startup creates is systemic, radical and accessible. Additionally, Christiane mentions a condition for foreign investments to cap the salary of startup executives. Investor E has accumulated its investment criteria in a framework containing ten main questions based on the impact frontiers' framework containing questions regarding the problem to be solved, the criticality, scale, depth and duration of the solution and the manageability of the impact. Hugo infers that the main criterion for investing is the impact and the market. Doug refers to the defining criteria of impact as having to be intentional, measurable, positive environmental and social outcomes. One investment criterion that is specifically mentioned by five of the six respondents refers to the significance of the solution and Christiane explains that because their capital is limited, they will only proceed with an investment if they perceive sufficient impact potential.

Five interviewees mention several differentiating aspects which delimitate them from other investing approaches, accumulated in the code *Delimitation from Investing Approaches*. Ben, Christiane and Doug differentiate impact investing from philanthropy by expressing that “we seek financial returns alongside positive impact. We are not grant providers” (Doug). Ben elaborates that while impact investors focus on economically healthy startups, philanthropists accept deficient business models which rely on continuous donations to survive. Christiane adds criticism directed at philanthropy by assessing that “[...] then it will always be raising more money to continue your business, but then the financial resources of your investor will not be used in the best way.” However, participants mainly talk about the differentiation from traditional VC. Investor C has compared the financial performance of their own funds with that of traditional VCs as Christiane remarks:

We are making financial returns, initially we are not pushing for super high financial return, but when we see the exits that we do, we are doing the performance that any VC fund is doing and sometimes even exceeding all the VC fund in terms of financial performance. So for us is also trying to have more credibility. So we are not just doing super nice things with smile and flowers but we are actually doing investments that have impact and are financially sustainable. That's [...] the vision that we want more people to understand.

Fred supports this argument by proposing a potential explanation for why traditional investors may be hesitant to engage in impact investments. He points out that many VCs fail to deliver consistent

profits for their investors, which leads them to perceive impact investing as an unaffordable or unfeasible option. Fred stresses that his team has proven these assumptions wrong. Nevertheless, he acknowledges the ongoing challenge of persuading others and breaking down entrenched skepticism about the financial viability of sustainable technologies, a process he describes as gradual and frustrating. On the other hand, Ben highlights the lack of empirical evidence regarding the financial return of exited impact funds which would be necessary to prove and substantiate the financial success of impact funds. As he, Doug, Erica and Fred imply, impact investing is younger than traditional VC and thus at this time needs more time to assert itself as a feasible alternative to traditional investing. Additionally, Ben remarks on the competitive disadvantage compared to traditional VCs because impact investors assess and report on financial as well as impact returns and thus must apply more resources which are not compensated. Then again, Erica somewhat ironically reflects on the advantage of investors not yet trusting impact investing entirely:

So you're going to get there, but there are a lot of non-clever people around and people who don't apply their brains means less competition for us. So I guess in the short term, that's good, but for the bigger picture, that's not a good thing.

6 Discussion

In this chapter, the findings from the interviews are discussed and put in relation to each other as well as to the literature review outlined in this thesis.

Measurement and Methodology

Approximately half of the interviewed participants have a dedicated individual or team, such as a Head of Impact, responsible for managing impact-related activities (see Table 5). Investors with dedicated teams not only have the capacity to utilize tools provided by organizations like GRI, IRIS+ or Impact Frontiers but can also develop customized toolboxes or proprietary methodologies. While this research does not establish a direct link between dedicated capacity and superior impact assessments, it is noteworthy that greater investment in impact-related resources enables investors to design assessment methodologies tailored to their specific needs. This highlights the limitations of existing tools, further elaborated by the fact that most investors incorporate multiple tools into their assessment frameworks. Notably, eight of the ten participants include the ToC in their methodology, although the extent of its use varies. This study aligns with the findings of Lam and Tan (2021), confirming that most impact investors report at output level, some at outcome level and almost none at impact level. Reasons for this are resource limitations in order to wait for and research a company's impact, the early investment stage, and bigger confidence in the accuracy of data on output and outcome level. These findings are similar to the conclusions of Ebrahim and Rangan (2014) who comment on the complexity of outcome and impact level measurement.

Based on the blended value approach of impact investing (Bugg-Levine & Emerson, 2011), the frequency of financial in relation to impact assessment was studied. One interviewee mentioned using an impact-first approach to assessing impact and financial criteria, six investors follow the blended approach by measuring impact and financial KPIs in the same frequency and three investors use a finance-first approach by measuring impact less often than financial KPIs. It is significant to point out that Investor K, despite not being an impact investor and prioritizing financial criteria over ESG criteria, still measures ESG criteria every two months; a frequency exceeding that of half the impact investors, who conduct measurements on a quarterly basis. Similar to the conclusions of researchers (Bengo et al., 2022; Bugg-Levine & Emerson, 2011; Rawhouser et al., 2019), this research also demonstrates that impact investors put a strong emphasis on the scientific and methodical approach to measuring impact. An exception can be observed in Investor C, whose qualitative approach to assessment suggests that, although in the minority, some impact investors lack a strong commitment to objective measurement.

Impact Verification and Due Diligence

While all interviewees acknowledge the role of gut feelings in decision-making, they emphasize efforts to validate these instincts through challenges by colleagues, boards, or auditors. Annette notes, however, that even with iterative evaluations and objective methods, other impact investors assessing the same startups often arrive at differing impact results. As previously discussed, impact investors use varying methodologies and frameworks to assess a startup's impact, but ultimately, that should lead to a comparable result. The question arises whether the cause for this discrepancy lies within the methodology itself, in the variable impact focus that investors have or whether assessments lack objectivity to enable universally comparable results across different impact investors. This question cannot be answered by the research conducted in this thesis, but the findings align with existing studies, as exemplified by Huang (2018), suggesting it remains a promising subject for further investigation.

Interview participants highlight that they hold themselves to the standard of measuring objectively and iteratively by using a variety of strategies: discussing impact assessments in the team, being challenged by a partner responsible for the same investment, being challenged by a board or committee of investors and/or advisors, commissioning service providers to make assessments, and commissioning auditors to evaluate an impact assessment. Only Erica and Knut use service providers to validate internal evaluations, which may be attributed to the greater resources available to them given the size of their firms. On the other hand, Investors A and B are the only ones commissioning auditors, being mid-sized firms compared to other interviewed investors. However, according to Ben, the most resources are allocated to evaluating impact which takes up approximately 60% of the investment team's time. This may be attributed to the lack of a Head of Impact at Investor B or it suggests that in direct comparison, Investor B is either less effective in their impact evaluation process or that their evaluation is stronger and more elaborate.

Key Performance Indicators

While all impact investors rely on specific rather than aggregated KPIs, it is worth noting that they adopt varied approaches to establishing them. They not only employ varying numbers of core KPIs but also differ in how closely they align these KPIs with the business models. While some resort to standard questions which result in various KPIs, and others set KPIs loose enough to allow for subsequent developments in the business model, Investors E and J develop KPIs originating from the startups to tie them as closely as possible to the business model. Hofstetter (2020, p. 37) conversely advocates for "generating combinatorial effects that arise when a portfolio is constructed in a way

that generates strategic synergies amongst its assets.” While this does not contradict developing and enhancing company-specific KPIs, it underscores the need for aggregated KPIs at investor level to leverage potential synergies and create additional impact beyond individual investments.

Most investors also use KPIs to set development targets for the startups, Investors E and J, however, put a specific emphasis on this and elaborate on working collaboratively with the startups in order to enhance their respective impact as much as possible. In line with the levels of stakeholder engagement according to Stocker et al. (2020), this form of engagement represents the ideal generous strategy as they use a collaborative approach with all their startups working towards a common goal while Investor H for example adopts the investigator role by presenting startups with KPIs and inquiring whether they can meet them.

Stakeholder Engagement

The interview participants mainly elaborated on three stakeholder groups: LPs, startups and the SFDR as an institutional stakeholder. Some interviewees hinted at the need of an additional stakeholder group of externals, consisting of potential LPs, startups or the general public who are not involved in impact investing. Despite their knowledge of needing to convince more people of their investment strategy, investors define this stakeholder group as a potential within the code *Room for Improvement*. None of the interviewees report consciously dedicating resources to addressing these stakeholders, staying on an insulated or trumpeter level at most (Stocker et al., 2020) by publishing impact reviews and reports on their website which may be found by interested external stakeholders.

More emphasis is put on the engagement of LPs who investors are dependent on. Accordingly, investors employ various strategies to include them. All investors are obligated to the show-off level (Stocker et al., 2020) as they must report on financial and impact criteria to them. Additionally, some investors like Investor G act on LP's needs by incorporating additional evaluations to reassure LPs, thus behaving according to the response strategy (Morsing & Schultz, 2006). Only Investors A and B mention involving LPs to directly discuss and influence investment decisions and thus adhere to a focused or malleable strategy (depending on how many of their LPs they invite to be involved). Several investors however stick to adopting the show-off strategy as they indicate not being influenced much by LPs' opinions, needs or decisions and can thus inform LPs on what they deem necessary aspects. They mention LPs' happiness with what they report as long as they report both impact and financial developments. This finding aligns with the results of Heeb et al.'s study (2022) which suggests that LPs approach impact investments more emotionally and less analytically aiming towards a 'warm glow'.

Notably, this does not apply to institutional investors as interviewees indicate because they frequently demand specific criteria to be implemented or reported. Accordingly, Investor A strategically engages only institutional investors on a focused or malleable level while Investor B focuses on both types of LP.

When analyzing stakeholder engagement with startup founders, a different hierarchy can be observed. While investors strive to meet the reporting requirements of LPs, their interaction with founders is framed as offering support. This is due to the founders' reliance on VCs making them a dependent stakeholder (Mitchell et al., 1997). Some interviewees display this dynamic more than others. Hugo, Julia and Knut stand out because they emphasize their approach of being on eye level and discuss with rather than instruct founders, thus communicating with an involvement instead of a response strategy (Morsing & Schultz, 2006). Morsing and Schultz (2006) outline an involvement strategy as the superior strategy, thus it would be worth analyzing whether investors following this strategy are more successful in their communications with startups.

Another remarkable difference between investors' approach to engaging founders refers to the alignment of values. All investors remark on the linkage between their startups' business model and impact creation. However, some investors like Investors G, H and J evaluate founders prior to investing based on their personal alignment with impact values and emphasize that they would not invest if founders were not aligned. By contrast, Erica and Ben both comment on potential impact startups where the founders' interests may instead be focused on technological advancements while still creating impact. As investors, their role can involve distilling impact criteria from the business model and integrating them into their KPIs and communication strategy.

Four of the eight interviewed investors who must adhere to the SFDR comment on its additionality to their own reporting practices. Instead of being able to use their existing evaluations and reports, they mention having to also assess the given aspects. Interestingly, Christiane mentioned that although Investor C does not fall under the SFDR, they consciously choose other labels to be better identified on the market, thus highlighting the advantages that SFDR is intended to offer. Ben further criticizes Article 9 requirements by calling it imprecise and useless for comparing impact funds. This criticism aligns with the research of Scheitza and Busch (2024) who consequently advocate for refining SFDR Article definitions to differentiate between ESG and impact funds.

Communication and Transparency

In addition to analyzing relevant stakeholder groups, the general communication and transparency practices of investors were studied. Given the dependency on LPs, communication with LPs is a priority for investors. Several interview participants emphasize a strong level of transparency towards

LPs. In contrast, communication to external stakeholders is less transparent, mostly due to data sensitivity reasons. Notably, Christiane pointed out that impact KPIs are usually not sensitive. The question arises whether this refers to the impact KPIs of Investor C or whether this can be generalized. Hugo for example contributes to this hypothesis by describing that they work on a public database where sets of impact KPIs will be published. Additionally, Investors F and K report publishing the same amount of information that LPs have access to. It could therefore be hypothesized that in contrast to investors' concerns, impact KPIs are not data sensitive in that they would give a competitive disadvantage to startups or investors who publish them.

The studied investors with more resources for communication purposes regarding staff can communicate more proficiently than those with less resources. This includes social media communication, stakeholder specific communication and reporting practices. If these resources are missing, other opportunities become relevant as Hugo exemplifies with their database development. Collaborating with fellow investors allows for the consolidation of resources, enhancing communication and transparency practices. Currently, half of the investors employ a communication expert or team. However, many interviewees mention the need for more communication capacity, addressing not only communication to key stakeholders but also their own branding efforts as well as marketing purposes to convince external stakeholders of impact investing.

Challenges and Opportunities

Several challenges and/or opportunities can be identified based on the interviews. The interviewees could not clearly define their investors' USPs, often naming practices that are either common among others such as transparency practices or refer to strategies they adopted early on, which are now becoming or already have become market standards such as the use of audits, linked carry and labels.

There remains a gap in research, particularly regarding the aggregation of data related to social issues or environmental themes like biodiversity which are still underexplored. Therefore, a notable challenge mentioned by all interview participants is the availability of reliable data, which presents challenges in creating a full ToC, reliably forecasting a startup's development or predicting a startup's impact creation. However, it is notable that investors are conscious of this limitation and, as a result, focus on output or outcome levels. This approach helps mitigate the risk of greenwashing or purpose-washing; a concern Knut emphasized when explaining his investor's preference for ESG instead of impact due to the reliability of its data. It is reasonable to expect improvements in these areas as

impact investing becomes more established and as environmental and social effects are more thoroughly researched, as demonstrated in the case of greenhouse gas emissions (Mikhaylov et al., 2020).

Although only Doug referenced pro-rating results, this aspect is particularly relevant to impact investing and therefore merits further attention and research. *Pro rata*, a concept originating in traditional investing, refers to the proportional distribution of assets or returns based on the shareholder's ownership stake (Kenton, 2024). Transferred to impact investing, this refers to the approach of an investor calculating the impact of a portfolio company based on the shares they have instead of claiming the entirety of the company's impact. This becomes particularly relevant when several impact investors are invested in one startup, as the associated impact is then claimed several times by the startup itself as well as by each investor regardless of the shares each investor holds. Likewise, impact reports can become misleading when an investor holds small stakes in numerous startups compared to others with larger stakes in fewer ventures.

Values and Alignment

The category *Values and Alignment* signifies the variance in impact definitions, values and investment criteria. While all participating impact investors align with the general definition of impact investing as proposed by the GIIN (n.d.-b) and refer to UN SDGs as criteria for evaluating business models, the disunity in values and definitions is remarked as problematic with respect to comparability, credibility and plausibility (Ben). Some investors comply with the Effective Altruism approach in looking for scalability, radicality or depth in their investments, some focus on systemic change or critical solutions. Several interviewees however noted that they do not find discrepancies in impact definitions and values concerning. Instead, they describe impact investing as an emerging field with a philosophical foundation, characterized by ongoing discourse and a diversity of values. Despite these differences, a unifying aspect among impact investors is their internal emphasis on achieving impact goals alongside financial returns, as evidenced by their practice of linking carry remuneration to impact KPIs.

When delimitating impact investing from other investing approaches, interviewees refer mainly to traditional VC and philanthropy, as also illustrated in Figure 1. All interview participants who commented on the comparison between financial returns of impact investors and traditional investors emphasized the financial advantages of impact investing. In this regard, they align with or exceed the findings of the GIIN and other researchers (Cooper et al., 2016; Hand et al., 2023b; Roundy, 2019) and refute critical voices arguing on the basis of impact investing being a constrained approach (Jeffers et al., 2024). Only Julia argues having to trade in impact for financial success. In this

case it would be interesting to research the dependence of impact and business success and understand specific potential criteria linking them together. This would provide argumentative support for impact investing, making it socially acceptable to investors who prioritize financial returns.

6.1 Implications and Recommendations for Practice

This chapter draws upon the findings of this research to provide practical implications and recommendations for impact investors. By addressing challenges and opportunities identified in the study, it offers actionable insights to enhance measurement frameworks, stakeholder engagement and communication strategies, ultimately contributing to more effective and transparent impact investing practices. The ability to implement these recommendations depends on the resources available to each investor, acknowledging the varying capacities across the industry.

The study shows that employing dedicated persons responsible for impact-related aspects offers opportunities. They have the capacity to allocate resources towards continuously creating and evaluating toolboxes either by incorporating existing measurement tools or developing proprietary tools relevant to specific issues the investor seeks to address. Conversely, this finding also carries implications for institutions that have developed or are in the process of developing impact measurement methodologies. At this point, no framework is comprehensive enough to cover all needs investors have regarding impact assessment. A closer study of investors' needs could inform such institutions on improving their methodologies and release resources for investors.

Based on the current variety of impact assessments and Annette's suggestion, the question arises whether impact results vary between impact investors. While investor values to investments may differ between investors, impact measurements of one startup should come to similar conclusions. In order to enhance the objectivity and thus the credibility and comparability of funds, it may be advisable to take a closer look at fellow investors' analyses and discuss impact discrepancies. This exchange between investors could make assessment practices more objective and enhance the impact assessment process overall through collaboration. By sharing insights and methodologies, investors can align on best practices, reduce redundancies, and collectively address challenges such as data gaps and inconsistencies, ultimately driving more credible and effective impact measurement.

All investors emphasize aligning KPIs closely with each startup's business model. An additional focus should be placed on combinatorial effects investors can create through synergies amongst assets (Hofstetter, 2020). By strategically aligning investments with impact KPIs on investor level, more comprehensive impact effects are made possible which cannot usually be achieved at startup level.

Thus, investors can leverage their influence in creating impact beyond their investments and enable themselves to measure not only outcomes of their startups but impact as well.

When communicating their impact, investors primarily direct their efforts toward LPs. While there is a variety in the amount of influence LPs have on decisions and practices of the investors, generally investors report what they deem relevant for LPs. However, shifting toward an involvement strategy according to Morsing and Schultz (2006) may be advisable to better align common values and enhance communication through a more focused and clear approach, continuously evaluating and thus addressing the needs and motivations of their LPs, taking into account the ‘warm glow’ effect individual LPs experience.

The need for further capital allocation to impact investments further necessitates that external parties be addressed more directly. This refers to potential LPs, potential startup founders as well as the general public to raise awareness for impact investing as an approach to finance social and environmental challenges (Hand et al., 2022). While this communication was defined as necessary by several interview participants, the implementation is still lacking. This is partly also due to the additionality that this communication practice demands as interviewees comment on data sensitivity issues regarding reporting impact KPIs. But it is noteworthy that opinions differ in this regard. Accordingly, discussions with fellow investors as well as the respective startup founders might reveal that such KPIs may be communicated publicly more easily than currently assumed. If so, communication practices can be streamlined because the differentiation between LPs and the public diminishes and transparency practices can be enhanced.

6.2 Limitations of the Study

This study faces several limitations that may impact the generalizability of its findings. One of the primary limitations is the small number of interview partners. While the participants were carefully selected to provide relevant insights into impact management and reporting in the impact VC sector, a larger sample could have provided a broader range of perspectives. The study focuses exclusively on firms operating within the European Union and Canada. While these regions share certain regulatory and investment frameworks, they do not represent the global landscape of impact investing. Countries such as the United States operate under distinct regulatory environments, which shape their approaches to both investment strategies and impact reporting (Wood et al., 2013). Roundy (2019, p. 477) emphasizes the need to examine “impact investing within the context of a specific community and to consider if impact investment is occurring in a vibrant or non-vibrant ecosystem”. This approach leads to different measurement and reporting practices that fall outside the scope of this research and are therefore not analyzed.

Another limitation relates to the potential for bias due to the researcher's affiliation with BonVenture. Although BonVenture played a role in identifying relevant firms for participation, efforts were made to minimize any potential influence on the study's design and outcomes. The interview guideline was developed independently and was not subject to BonVenture's review or approval, ensuring that the questions and topics addressed in the interviews were free from external input. Moreover, the findings from the interviews were not shared with BonVenture, further reducing the risk of bias in the analysis.

The interviewed investors were chosen based on recommendations and B-Corp labels (see Chapter 3.2). This suggests that these investors are more proficient in their impact measurement and communication practices than a cross section of the global impact investing sector. Therefore, the outlined recommendations and results, especially for institutions seeking to support impact investors through methodologies and frameworks, should be verified by conducting this study with a broader sample size. On the other hand, the approach of evaluating impact measurement practices was kept broad in this study. To derive detailed recommendations for action, additional in-depth analyses would be necessary.

7 Conclusion

The research questions guiding this thesis are:

What are the prevailing practices among established impact VC firms for assessing impact performance?

How do these firms communicate their impact performance to stakeholders?

To address these questions, interviews were conducted with nine impact investors and one investor with a specific focus on ESG practices which are active in the EU and Canada. Analyzing the interview content through both inductive and deductive coding methods revealed seven key categories relevant to both research questions. These categories and their associated codes related to impact performance assessment include *Measurement and Methodology*, *Impact Verification and Due Diligence*, and *Key Performance Indicators*. For impact performance communication, the relevant categories are *Stakeholder Engagement* and *Communication and Transparency*. Additionally, two categories, *Challenges and Opportunities* and *Values and Alignment*, emerged as central to both research questions as they inform both practices.

So we are not just doing super nice things with smile and flowers but we are actually doing investments that have impact and are financially sustainable. That's the word that we see, finance and investment, that we want to spread and the vision that we want more people to understand. (Christiane)

This is how Christiane summarizes their practices, and other investors have similarly highlighted the same points. It entails the values and focus behind impact investments as “doing super nice things with smile and flowers [...]”, namely finding and investing in solutions which are critical, systemic and/or scalable to advance on social or environmental challenges as defined by the UN SDGs (GIIN, n.d.-b). While each investor does so with different impact definitions, focus or investment criteria, the underlying goal remains the same.

By saying “we are actually doing investments that have impact and are financially sustainable”, Christiane points at the emphasis of scientific impact measurement. Interviewees show that they value impact measurement differently in relation to financial assessments because some investors measure impact on a monthly, quarterly or even annual basis while financial criteria are commonly assessed monthly or quarterly. Nevertheless, they mostly emphasize the quantitative quality of their impact assessments referring to methodologies such as IRIS+, IMP, or Impact Frontiers which are specifically built for impact measurement and management. Notably, the ToC is used by most impact investors for both defining and evaluating a startup’s impact path. Due to the lack of available data,

some investors are more confident than others to assess output, outcome or impact level results as measuring impact requires a certain startup size, duration of its activities and research level.

In order to be operative and relevant, investors make use of KPIs which are closely tailored to the business model of their startups instead of using standardized KPIs such as ESG criteria as Investor K refers to. While aggregating impact results is not possible for most interviewed investors, respondents emphasize the advantage of company-specific KPIs as being operationally useful and understandable. However, there is a case to be made for Hofstetter's (2020) advocacy for additionally striving for impact creation on investor level.

Impact investing is still on a growth path and as such lacks a reliable track record of exited investments as Ben outlines, but several respondents as well as Christiane highlight that the "investments [...] have impact and are financially sustainable" (Christiane). Supported by the study of the GIIN (Hand et al., 2023b), interviewees report that they are not only generating impact but also have market-rate returns, making impact investments a feasible alternative to traditional investments for LPs.

Impact investors communicate their impact performance mainly to three stakeholders: LPs, startups, and governmental institutions. As they are dependent on LPs and startups are dependent on them, their communicative efforts are mostly directed at LPs. Investors recognize that the capital they receive comes with an obligation to uphold shared values. Consequently, they place a strong emphasis on transparency practices, regularly providing LPs with both financial and impact data. Most interviewees assume they understand their LPs' needs and, as a result, focus on informing rather than involving them in communication; a practice that may benefit from adopting a more reciprocal approach.

Investors' communication to startups is defined by its supportive quality as they strive to enhance a startup's success by consulting them on impact definition, development, goals, risks and communication as well as providing evaluations and networking opportunities with impact or entrepreneurial experts. The criteria for investing in a startup, as highlighted by interviewees, center on the integration of impact within the business model, aligning with the goal of addressing one or more SDGs as part of the company's objectives. Some respondents mention transparency toward startups, but it does not receive as much emphasis as transparency toward LPs. Investors predominantly adopt a response strategy; again, transitioning to an involvement strategy could prove to be more beneficial (Morsing & Schultz, 2006).

Both impact measurement and impact communication benefit by specifically allocating staff resources toward it. This is either demonstrated by the development of proprietary toolboxes or by more, broader and target group specific communication. Alternatively, external resources can be

used to compensate for a lack of resources, for example by collaborating with institutions or fellow investors to enhance methodologies or create databases.

Communication with governmental institutions refers to SFDR reporting in the EU. Although they recognize the advantages of the SFDR in creating sustainability labels and making investments comparable on the market, interview participants outline the additionality of having to report criteria that they do not use for their impact analyses. Additionally, the criticism of both practitioners and literature is directed at the lack of precise criteria for impact investments within the SFDR, making it useless to delimitate from ESG-related investments (Scheitza & Busch, 2024; UnitedforImpact Initiative, 2024).

Conclusively, the interviewed investors put a strong focus on their impact measurement practices, using a variety of tools and methodologies to ensure that the impact they achieve is scientifically sound and objective. They communicate their impact results mainly to LPs and their portfolio startups while mostly also publishing a shortened version on their websites, making it accessible to the public. All investors adhere to the SFDR although they criticize the Articles' vagueness.

Areas for Future Research

Based on this research, several areas emerge as relevant for further study. As initiated by Annette's statement, research could be directed at specific impact analyses from impact investors and compared to each other, ideally when assessing the same startup case. By comparing specific analyses, methodological discrepancies could be identified and addressed in guidelines to harmonize measurement practices and ultimately make impact measurements more comparable. Another topic mentioned by an interviewee is pro-rating impact results as outlined by Doug. Specific research could explore how impact investors calculate the amount of impact; specifically, whether they report only their share of the impact, or the total impact associated with their portfolio. Accordingly, impact results would become more comparable, not only in terms of the impact generated by an investor's startups but also with greater emphasis on the impact the investor actively contributes to. Another aspect of research on measurement practices relates to the approach of defining impact. In this regard, a study regarding the inclusion of Effective Altruism approaches may be relevant to evaluate distinct impact thresholds startups have to meet to be relevant for investors. This would help investors communicate their impact needs more clearly to startups while startups can more easily evaluate their potential of receiving funding. Based on Hofstetter's (2020) design, research regarding investor's improved impact strategies would be helpful to utilize the potential investors may hold exceeding the impact their startups generate. Simultaneously, further research on environmental and

social challenges is essential, as it forms the foundation that impact investors require for reliable impact measurement.

In conclusion, it is anticipated that as impact investors achieve more exits and establish a reliable track record of market-rate returns, the appeal of impact investments will continue to grow. This development has the potential to further stimulate both academic and practical discourse, creating a stronger foundation for the field. Ultimately, such progress could drive greater capital allocation toward impact investments, contributing significantly to the funding required to achieve the SDGs. This alignment of financial and societal objectives underscores the transformative potential of impact investing.

8 References

- About the Impact Management Platform*. (n.d.). Impact Management Platform. Retrieved December 6, 2024, from <https://impactmanagementplatform.org/about/>
- Adriaanse, V. (2022, August 18). Case study summary: Impact Evaluation of a Portfolio of Private Investments. *Common Approach to Impact Measurement*. <https://www.commonapproach.org/case-study-summary-using-the-common-impact-data-standard-and-common-framework/>
- Alakent, E., Goktan, M. S., & Khoury, T. A. (2020). Is venture capital socially responsible? Exploring the imprinting effect of VC funding on CSR practices. *Journal of Business Venturing*, 35(3), 106005. <https://doi.org/10.1016/j.jbusvent.2020.106005>
- Baumeister, S., Krstić Simić, T., & Ganić, E. (2024). Emissions reduction potentials in business aviation with electric aircraft. *Transportation Research Part D: Transport and Environment*, 136, 104415. <https://doi.org/10.1016/j.trd.2024.104415>
- Bellantuono, N., Pontrandolfo, P., & Scozzi, B. (2016). Capturing the Stakeholders' View in Sustainability Reporting: A Novel Approach. *Sustainability*, 8(4), 379. <https://doi.org/10.3390/su8040379>
- Bengo, I., Boni, L., & Sancino, A. (2022). EU financial regulations and social impact measurement practices: A comprehensive framework on finance for sustainable development. *Corporate Social Responsibility and Environmental Management*, 29(4), 809–819. <https://doi.org/10.1002/csr.2235>
- Bouchery, Y., Corbett, C. J., Fransoo, J. C., & Tan, T. (Eds.). (2024). *Sustainable supply chains: A research-based textbook on operations and strategy* (Second edition). Springer. <https://doi.org/10.1007/978-3-031-45565-0>
- Bugg-Levine, A., & Emerson, J. (2011). Impact Investing: Transforming How We Make Money while Making a Difference. *Innovations: Technology, Governance, Globalization*, 6(3), 9–18. https://doi.org/10.1162/INOV_a_00077
- Carè, R., & Wendt, K. (2018). Investing with Impact: An Integrated Analysis Between Academics and Practitioners. In M. La Torre & M. Calderini (Eds.), *Social Impact Investing Beyond the SIB: Evidence from the Market* (pp. 5–45). Springer International Publishing. https://doi.org/10.1007/978-3-319-78322-2_2
- Center for Effective Altruism. (n.d.). *Frequently Asked Questions and Common Objections | Effective Altruism*. Effective Altruism. Retrieved December 11, 2024, from <https://www.effectivealtruism.org/faqs-criticism-objections#is-effective-altruism-the-same-as-utilitarianism-what-if-im-not-a-utilitarian>

- Chandler, D. (2023). *Strategic corporate social responsibility: Sustainable value creation* (Sixth edition). SAGE.
- Clarkin, J. E., & L. Cangioni, C. (2016). Impact Investing: A Primer and Review of the Literature. *Entrepreneurship Research Journal*, 6(2). <https://doi.org/10.1515/erj-2014-0011>
- Colby, S., Stone, N., & Carttar, P. (2004). *Zeroing in on Impact*. SSIR. https://ssir.org/articles/entry/zeroing_in_on_impact
- Common Approach. (n.d.). Our Story. *Common Approach to Impact Measurement*. Retrieved December 8, 2024, from <https://www.commonapproach.org/our-story/>
- Common Form. (n.d.). *Common Approach to Impact Measurement*. Retrieved December 8, 2024, from <https://www.commonapproach.org/common-form/>
- Common Foundations. (n.d.). *Common Approach to Impact Measurement*. Retrieved December 8, 2024, from <https://www.commonapproach.org/common-foundations/>
- Common Impact Data Standard. (n.d.). *Common Approach to Impact Measurement*. Retrieved December 8, 2024, from <https://www.commonapproach.org/common-impact-data-standard/>
- Cooper, L., Eynine, J., Finkelman, J., Huntington, K., & Lynch, D. (2016). Social Finance and the Postmodern Portfolio: Theory and Practice. *The Journal of Wealth Management*, 18(4), 9–21. <https://doi.org/10.3905/jwm.2016.18.4.009>
- Dyllick, T., & Muff, K. (2016). Clarifying the Meaning of Sustainable Business: Introducing a Typology From Business-as-Usual to True Business Sustainability. *Organization & Environment*, 29(2), 156–174. <https://doi.org/10.1177/1086026615575176>
- 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. <https://doi.org/10.1525/cm.2014.56.3.118>
- European social entrepreneurship funds | EUR-Lex*. (n.d.). Retrieved December 9, 2024, from <https://eur-lex.europa.eu/EN/legal-content/summary/european-social-entrepreneurship-funds.html>
- Findlay, S., & Moran, M. (2019). Purpose-washing of impact investing funds: Motivations, occurrence and prevention. *Social Responsibility Journal*, 15(7), 853–873. <https://doi.org/10.1108/SRJ-11-2017-0260>
- Fraunhofer IBP. (n.d.). *Life Cycle Assessment*. Fraunhofer Institute for Building Physics IBP. Retrieved December 7, 2024, from <https://www.ibp.fraunhofer.de/en/expertise/life-cycle-engineering/applied-methods/life-cycle-assessment.html>

- Freeman, R. E. (2010). *Strategic Management: A Stakeholder Approach* (1st ed.). Cambridge University Press. <https://doi.org/10.1017/CBO9781139192675>
- Gabriel, I. (2017). Effective Altruism and its Critics. *Journal of Applied Philosophy*, 34(4), 457–473. <https://doi.org/10.1111/japp.12176>
- Gianoncelli, A., & Boiardi, P. (2018). *Impact Strategies—How Investors Drive Social Impact*. EVPA. https://www.impacteurope.net/sites/www.evpa.ngo/files/publications/EVPA_Impact_Strategies_2018.pdf
- Gianoncelli, A., & Picón Martínez, A. (2020). *The Investing for Impact Toolkit*. https://www.impacteurope.net/sites/www.evpa.ngo/files/publications/EVPA_Investing_for_Impact_Toolkit_2020.pdf
- GIIN. (n.d.-a). *About the GIIN*. The GIIN. Retrieved December 6, 2024, from <https://thegiin.org/about/>
- GIIN. (n.d.-b). *What you need to know about impact investing*. The GIIN. Retrieved December 16, 2024, from <https://thegiin.org/publication/post/about-impact-investing/>
- Giving What We Can*. (n.d.). Retrieved December 10, 2024, from <https://www.givingwhatwecan.org>
- Global Impact Investing Network (GIIN). (n.d.). *About IRIS+*. Retrieved December 6, 2024, from https://s3.amazonaws.com/giin-web-assets/iris/assets/files/IRIS_2-Page.pdf
- Gompers, P. A., & Lerner, J. (2004). *The venture capital cycle* (2nd ed). MIT Press.
- Greenwood, M. (2007). Stakeholder Engagement: Beyond the Myth of Corporate Responsibility. *Journal of Business Ethics*, 74(4), 315–327. <https://doi.org/10.1007/s10551-007-9509-y>
- GRI - Mission & history*. (n.d.). Retrieved December 7, 2024, from <https://www.globalreporting.org/about-gri/mission-history/>
- GSSB. (2022, June 30). *Consolidated Set of the GRI Standards*.
- Hand, D., Ringel, B., & Danel, A. (2022). *GIINSIGHT. 2022. Sizing the Impact Investing Market*. Global Impact Investing Network (GIIN). <https://s3.amazonaws.com/giin-web-assets/giin/assets/publication/research/2022-market-sizing-report-final.pdf>
- Hand, D., sunderji, S., & Pardo, N. M. (2023a). *2023 GIINSIGHT. Emerging Trends in Impact Investing*. Global Impact Investing Network (GIIN). <https://s3.amazonaws.com/giin-web-assets/giin/assets/publication/research/vol-4-2023-giinsight-%E2%80%93-emerging-trends-in-impact-investing.pdf>
- Hand, D., sunderji, S., & Pardo, N. M. (2023b). *GIINSight 2023: Impact Investor Demographics*. The Global Impact Investing Network (GIIN). <https://s3.amazonaws.com/giin-web-assets/giin/assets/publication/research/2023-giinsight-impact-investor-demographics.pdf>

- Hand, D., Ulanow, M., Pan, H., & Xiao, K. (2024). *GIINSIGHT. Sizing the Impact Investing Market 2024*. The Global Impact Investing Network (GIIN). <https://s3.amazonaws.com/giin-web-assets/giin/assets/publication/giin-sizingtheimpactinvestingmarket-2024.pdf>
- Heeb, F., Kölbel, J. F., Paetzold, F., & Zeisberger, S. (2022). *Do Investors Care About Impact?* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3765659
- Hehenberger, L., Harling, A.-M., & Scholten, P. (2015, June). *A practical guide to measuring and managing impact*. EVPA. https://www.impacteurope.net/sites/www.evpa.ngo/files/publications/IMM_Guide_2015_EN.pdf
- Herremans, I. M., Nazari, J. A., & Mahmoudian, F. (2016). Stakeholder Relationships, Engagement, and Sustainability Reporting. *Journal of Business Ethics*, 138(3), 417–435. <https://doi.org/10.1007/s10551-015-2634-0>
- Hofstetter, D. (2020, August). *Transformation Capital—Systemic Investing for Sustainability*. European Institute of Innovation and Technology (EIT). https://www.transformation.capital/assets/uploads/Transformation-Capital-Systemic-Investing-for-Sustainability-1-1_2021-06-25-114435.pdf
- Huang, L. (2018). The Role of Investor Gut Feel in Managing Complexity and Extreme Risk. *Academy of Management Journal*, 61(5), 1821–1847. <https://doi.org/10.5465/amj.2016.1009>
- Impact Frontiers. (2022a, February 24). *History of Impact Innovation & Collaboration | Impact Frontiers*. <https://impactfrontiers.org/history/>
- Impact Frontiers. (2022b, February 24). *Impact Management Norms | Impact Frontiers*. <https://impactfrontiers.org/norms/>
- Impact Frontiers. (2022c, March 10). *Five Dimensions of Impact | Impact Frontiers*. <https://impactfrontiers.org/norms/five-dimensions-of-impact/>
- Impact Frontiers Collaboration. (2020). *How Investors Can Integrate Social Impact With Financial Performance to Improve Both*. <https://doi.org/10.48558/Z1KZ-7V76>
- Impact Management Platform. (n.d.). *Impact and the impact pathway*. Impact Management Platform. Retrieved May 26, 2024, from <https://impactmanagementplatform.org/impact/>
- Impact Management Platform (Ed.). (2023, June). *The Imperative for Impact Management. Clarifying the relationship between impacts, system-wide risk and materiality*.
- Impact Management Platform. (2024, March 13). *Actions of impact management*. Impact Management Platform. <https://impactmanagementplatform.org/actions/%user-type%/>
- Impact Management Platform | Invest Europe*. (n.d.). Retrieved December 6, 2024, from <https://www.investeurope.eu/invest-europe-esg-reporting-guidelines/who-is-who/impact-management-platform/>

- Intergovernmental Panel On Climate Change (IPCC). (2023). *Climate Change 2022 – Impacts, Adaptation and Vulnerability: Working Group II Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (1st ed.). Cambridge University Press. <https://doi.org/10.1017/9781009325844>
- 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>
- Janeway, W. H., Nanda, R., & Rhodes-Kropf, M. (2021). Venture Capital Booms and Start-Up Financing. *Annual Review of Financial Economics*, 13(1), 111–127. <https://doi.org/10.1146/annurev-financial-010621-115801>
- Jeffers, J., Lyu, T., & Posenau, K. (2024). The risk and return of impact investing funds. *Journal of Financial Economics*, 161, 103928. <https://doi.org/10.1016/j.jfineco.2024.103928>
- Kah, S., & Akenroye, T. (2020). Evaluation of social impact measurement tools and techniques: A systematic review of the literature. *Social Enterprise Journal*, 16(4), 381–402. <https://doi.org/10.1108/SEJ-05-2020-0027>
- Kassirer, S., Levine, E., & Kouchaki, M. (2023). A Call to Maximize the Social Impact of Our Research: An Effective Altruism Approach. *Academy of Management Perspectives*, 37, 371–382. <https://doi.org/10.5465/amp.2022.0045>
- Kenton, W. (2024, July 4). *Pro Rata: What It Means and the Formula to Calculate It*. Investopedia. <https://www.investopedia.com/terms/p/pro-rata.asp>
- Lai, J., Kwek, J.-H., Torbey, H., & Banani, F. (2024). *Beyond the balance sheet: North American asset management 2024*. McKinsey & Company. <https://www.mckinsey.com/industries/financial-services/our-insights/beyond-the-balance-sheet-north-american-asset-management-2024#/>
- Lam, S.-S., & Tan, X. R. A. (2021). Towards a Unifying Framework of Impact Assessment in Impact Investing. In K. Wendt (Ed.), *Theories of Change: Change Leadership Tools, Models and Applications for Investing in Sustainable Development* (pp. 77–101). Springer International Publishing. https://doi.org/10.1007/978-3-030-52275-9_6
- Langley, P., Bridge, G., Bulkeley, H., & Van Veelen, B. (2021). Decarbonizing capital: Investment, divestment and the qualification of carbon assets. *Economy and Society*, 50(3), 494–516. <https://doi.org/10.1080/03085147.2021.1860335>
- Lehmann, G. (2022). *Die effektive Befragung: Ein Ratgeber für die Datenerhebung in der beruflichen und wissenschaftlichen Arbeit* (3., überarbeitete und erweiterte Auflage). expert Verlag.

- Lykkesfeldt, P. (with Kjaergaard, L. L.). (2022). *Investor Relations and ESG Reporting in a Regulatory Perspective: A Practical Guide for Financial Market Participants* (1st ed). Springer International Publishing AG.
- MacAskill, W. (2015). *Doing Good Better: Effective Altruism and a Radical New Way to Make a Difference*. Guardian Faber Publishing.
- Mayring, P. (2021). *Qualitative content analysis: A step-by-step guide*. SAGE Publications.
- Mayring, P. (2022). *Qualitative Inhaltsanalyse: Grundlagen und Techniken* (13. Auflage). Beltz.
- McCarthy, K., Emme, L., & Glasgo, L. (2019). *IRIS+ Core Metrics Sets*.
- Mikhaylov, A., Moiseev, N., Aleshin, K., & Burkhardt, T. (2020). Global climate change and greenhouse effect. *Entrepreneurship and Sustainability Issues*, 7(4), 2897–2913. [https://doi.org/10.9770/jesi.2020.7.4\(21\)](https://doi.org/10.9770/jesi.2020.7.4(21))
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts. *The Academy of Management Review*, 22(4), 853. <https://doi.org/10.2307/259247>
- Morsing, M., & Schultz, M. (2006). Corporate social responsibility communication: Stakeholder information, response and involvement strategies. *Business Ethics: A European Review*, 15(4), 323–338. <https://doi.org/10.1111/j.1467-8608.2006.00460.x>
- Mudaliar, A., & Dithrich, H. (2019). *Sizing the Impact Investing Market*. Global Impact Investing Network (GIIN). <https://s3.amazonaws.com/giin-web-assets/giin/assets/publication/research/sizing-the-impact-investing-market-webfile.pdf>
- Mudalige, H. M. N. K. (2023). Emerging new themes in green finance: A systematic literature review. *Future Business Journal*, 9(1), 108. <https://doi.org/10.1186/s43093-023-00287-0>
- Net Zero Insights. (n.d.). *Emissions Reduction Potential. Unlocking High-Impact Investment Opportunities*. Retrieved December 6, 2024, from <https://netzeroinsights.com/wp-content/uploads/2024/06/ERP.pdf>
- NOAA. (2020, August 17). *Exxon Valdez*. NOAA. <https://darrp.noaa.gov/oil-spills/exxon-valdez>
- Norton, L. P. (2022, June 30). *Pension Funds Forge Ahead With Sustainable Investing, Despite Politicization in U.S.* Morningstar, Inc. <https://www.morningstar.com/sustainable-investing/pension-funds-forge-ahead-with-sustainable-investing-despite-politicization-us>
- OECD. (2014). *Venture Philanthropy in Development. Executive Summary*. https://www.oecd.org/site/net-fwd/MINI_Brochure_Venture%20Philanthropy%20in%20Development-web.pdf

- Offentliggjøringsforordningen*. (2018, September 28). [EOSnotat]. Regjeringen.no; regjeringen.no. <https://www.regjeringen.no/no/sub/eos-notatbasen/notatene/2018/sep/barekraftig-finans-offentligjoring-om-investeringer-og-risiko/id2619878/>
- Otter.ai*. (n.d.). Retrieved December 8, 2024, from <https://otter.ai/>
- Our Criteria | GiveWell*. (n.d.). Retrieved December 10, 2024, from <https://www.givewell.org/how-we-work/criteria>
- Paeleman, I., Guenster, N., Vanacker, T., & Siqueira, A. C. O. (2024). The Consequences of Financial Leverage: Certified B Corporations' Advantages Compared to Common Commercial Firms. *Journal of Business Ethics: JBE*, 189(3), 507–523. <https://doi.org/10.1007/s10551-023-05349-5>
- Rawhouser, H., Cummings, M., & Newbert, S. (2019). Social Impact Measurement: Current Approaches and Future Directions for Social Entrepreneurship Research. *Entrepreneurship: Theory and Practice*, 43, 82–115. <https://doi.org/10.1177/1042258717727718>
- Regulation (EU) 2019/2088 of the European Parliament and of the Council, 317 OJ L (2019). <http://data.europa.eu/eli/reg/2019/2088/oj/eng>
- Reisman, J., Olazabal, V., & Hoffman, S. (2018). Putting the “Impact” in Impact Investing: The Rising Demand for Data and Evidence of Social Outcomes. *American Journal of Evaluation*, 39(3), 389–395. <https://doi.org/10.1177/1098214018779141>
- Rizzello, A., Scognamiglio, E., Testa, L., & Liotta, L. (2021). Evaluating Impact Investments: Frameworks and Applications for Social Ventures. In T. Walker, J. McGaughey, S. Goubran, & N. Wagdy (Eds.), *Innovations in Social Finance: Transitioning Beyond Economic Value* (pp. 437–461). Springer International Publishing. https://doi.org/10.1007/978-3-030-72535-8_20
- Roche, C. J. R. (1999). *Impact Assessment for Development Agencies: Learning to Value Change*. Oxfam.
- Root Capital*. (2024, August 28). Root Capital. <https://rootcapital.org/>
- Ross, V. (2022, June 24). *Outcome of ESMA Call for Evidence on Market Characteristics of ESG Rating and Data Providers in the EU* [Open Letter]. https://www.esma.europa.eu/sites/default/files/library/esma80-416-347_letter_on_esg_ratings_call_for_evidence_june_2022.pdf
- Roundy, P. (2019). Regional differences in impact investment: A theory of impact investing ecosystems. *Social Responsibility Journal*, 16(4), 467–485. <https://doi.org/10.1108/SRJ-11-2018-0302>
- Roundy, P., Holzhauer, H., & Dai, Y. (2017). Finance or philanthropy? Exploring the motivations and criteria of impact investors. *Social Responsibility Journal*, 13(3), 491–512. <https://doi.org/10.1108/SRJ-08-2016-0135>

- Ruff, K. (2021). How impact measurement devices act: The performativity of theory of change, SROI and dashboards. *Qualitative Research in Accounting & Management*, 18(3), 332–360. <https://doi.org/10.1108/QRAM-02-2019-0041>
- Sahlman, W. A., & Cohen, R. (2013, January 17). Social Impact Investing Will Be the New Venture Capital. *Harvard Business Review*. <https://hbr.org/2013/01/social-impact-investing-will-b>
- Salgado-Criado, J., Mataix-Aldeanueva, C., Nardini, S., López-Pablos, C., Balestrini, M., & Rosales-Torres, C. S. (2024). How should we govern digital innovation? A venture capital perspective. *Technological Forecasting and Social Change*, 200, 123198. <https://doi.org/10.1016/j.techfore.2023.123198>
- Scheitza, L., & Busch, T. (2024). SFDR Article 9: Is it all about impact? *Finance Research Letters*, 62, 105179. <https://doi.org/10.1016/j.frl.2024.105179>
- SDG Impact. (2023, April). *SDG Impact Standards. Glossary*. <https://sdgimpact.undp.org/assets/SDG-Impact-Standards-Glossary.pdf>
- Shi, F., Ding, R., Li, H., & Hao, S. (2022). Environmental Regulation, Digital Financial Inclusion, and Environmental Pollution: An Empirical Study Based on the Spatial Spillover Effect and Panel Threshold Effect. *Sustainability*, 14(11), Article 11. <https://doi.org/10.3390/su14116869>
- Sillman, J., Havukainen, J., Alfasfos, R., Elyasi, N., Lilja, M., Ruuskanen, V., Laasonen, E., Leppäkoski, L., Uusitalo, V., & Soukka, R. (2024). Meta-analysis of climate impact reduction potential of hydrogen usage in 9 Power-to-X pathways. *Applied Energy*, 359, 122772. <https://doi.org/10.1016/j.apenergy.2024.122772>
- Singer, P. (2020). *The Most Good You Can Do: How Effective Altruism Is Changing Ideas About Living Ethically*. Yale University Press. <https://doi.org/10.12987/9780300182415>
- Social Investment Forum Foundation. (2010). *2010 Report on Socially Responsible Investing Trends in the United States* (p. 17). Social Investment Forum Foundation. https://www.ussif.org/files/Publications/USSIF_ImpactofSRI_FINAL.pdf
- Standards Development Process & Principles | IRIS+ System*. (n.d.). Retrieved December 6, 2024, from <https://iris.thegiin.org/standards-development-process-and-principles/>
- Stocker, F., De Arruda, M. P., De Mascena, K. M. C., & Boaventura, J. M. G. (2020). Stakeholder engagement in sustainability reporting: A classification model. *Corporate Social Responsibility and Environmental Management*, 27(5), 2071–2080. <https://doi.org/10.1002/csr.1947>
- Streatfield, D., & Markless, S. (2009). What is impact assessment and why is it important? *Performance Measurement and Metrics*, 10(2), 134–141. <https://doi.org/10.1108/14678040911005473>

- THE 17 GOALS | Sustainable Development.* (n.d.). Retrieved December 6, 2024, from <https://sdgs.un.org/goals>
- The Bridges Spectrum of Capital. How we define the sustainable and impact investment market.* (2015). Bridges Fund Management. <https://www.bridgesfundmanagement.com/wp-content/uploads/2024/07/Bridges-Spectrum-of-Capital-screen.pdf>
- TurboScribe: Audio und Video in Text transkribieren.* (n.d.). TurboScribe. Retrieved December 8, 2024, from <https://turboscribe.ai/de/>
- Turnbull, R. (2014). *Quaker capitalism.* Centre for Enterprise, Markets and Ethics Oxford.
- UN. (2024). *Synergy Solutions for Climate and SDG Action: Bridging the Ambition Gap for the Future We Want.* United Nations (UN). https://sdgs.un.org/sites/default/files/2024-08/UN%20Synergy%20Solutions%20for%20Climate%20and%20SDG%20Action-4_0.pdf
- UNDG. (n.d.). *Theory of Change. UNDAF Companion Guidance.* Retrieved December 8, 2024, from <https://unsdg.un.org/sites/default/files/UNDG-UNDAF-Companion-Pieces-7-Theory-of-Change.pdf>
- United Nations General Assembly. (2015, September 25). *Transforming our world: The 2030 Agenda for Sustainable Development.* <https://documents.un.org/doc/undoc/gen/n15/291/89/pdf/n1529189.pdf>
- UnitedforImpact Initiative. (2024, June 3). The EU needs to make impact investing a priority to achieve the fair transition [Substack newsletter]. *Impact & Growth from Ring Capital.* <https://ringcapital.substack.com/p/the-eu-needs-to-make-impact-investing>
- US SIF Foundation. (2022). *Sustainable Investing Overview* (p. 1). US SIF. <https://www.us-sif.org/Files/Trends/2022/Overview%20infographic.pdf>
- Wendt, K. (Ed.). (2021). *Theories of change: Change leadership tools, models and applications for investing in sustainable development.* Springer.
- What is Theory of Change? (n.d.). *Theory of Change Community.* Retrieved December 8, 2024, from <https://www.theoryofchange.org/what-is-theory-of-change/>
- Wintle, C. (2016). The Human Rights Movement Against Apartheid South Africa: The Impact of Boycotts, Divestment, and Sanctions. *Waterloo Historical Review*, 8. <https://doi.org/10.15353/whr.v8.74>
- Yau, A. (2024). How Can Impact Investors Enable Systems Change? Exploring the Theory and Practice of an Emerging Field. *SSRN Electronic Journal.* <https://doi.org/10.2139/ssrn.4707922>

9 Appendix

9.1 Interview Guide

Introduction

1. [Summary of investor's impact definition.] How would you differentiate yourself and your approach from other impact investors?
2. Do you have a more distinct definition for the impact of your company or that of your investees?
 - a. How is that impact transparent for others?

Startups

3. Do you have a standard set of KPIs when you consider a new investing opportunity, or do you define specific KPIs for each case?
 - a. Do you set KPIs to track impact performance or to set impact goals?
 - b. Do you keep track whether they match the KPIs during your entire cooperation with an investee?
4. When evaluating new investing opportunities, do you factor in gut feelings in the decision-making process?
5. To what end do you track the impact performance of your investees?
6. Which methodology and tools do you use to assess the impact of your portfolio companies?
 - a. (if ToC: Do you measure Outputs, Outcomes, or impact?)
7. What capacity is used for the assessment of impact? (time, employees, money)
 - a. And for the communication?
8. Do you assess impact performance as regularly as an investee's financial performance?
9. On which impact KPIs do you report on fund level across your portfolio?

Values

10. Does it concern you that impact is measured so intransparently?
11. Are impact KPIs connected to the compensation of your investment managers or entrepreneurs you invest in?
12. Do you categorize your funds within the SFDR?

Conclusion

13. What do your investors expect from you in terms of impact reporting?
14. Are you satisfied with the way your company assesses and communicates its impact? Is there anything you would like to change?
15. Is there anything you would like to add? Do you feel that important aspects were left out?

9.2 Declaration of Consent

Consent was given orally during the interview. The specific phrasing and answers can be reviewed in the interview transcriptions (Appendix 9.4).

Declaration of Consent

This interview will be recorded, and the recording will solely be used in the context of my master thesis. The recording will not be shared with anyone including persons from my university or BonVenture. It will be deleted two weeks after the transcription is done. Your company, your name and any sensitive data you may give during the interview will be anonymized in the transcript and in the thesis. You have the right to revoke your consent at any time by contacting me. Do you consent to the recording of this interview?

9.3 Codebook

See attachment.

9.4 Interview Transcriptions

See attachment.