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Management School - Liège Université

HOW TO DRIVE IMPACT PERFORMANCE IN AN IMPACT-FIRST INVESTMENT FUND, CONSIDERING AN IMPACT-BASED FINANCIAL REWARD SCHEME IN PARTICULAR?

Jury:
Supervisor:
Virginie XHAUFLAIR
Reader:
Yves FRANCIS
Mentor:
Jonathan DE JONCK

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Isaline THIRION
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LIST OF ABBREVIATIONS

EIF: European Investment Fund

ESG: Environmental, Social, Governance

EVPA: European Venture Philanthropy Association

GIIN: Global Impact Investing Network

GPs: General Partners

KPIs: Key Performance Indicators

LPs: Limited Partners

PE: Private Equity

PFS: Pay-For-Success

RCT: Randomised Control Trials

SDGs: Sustainable Development Goals

SI: Social Investment

SIA: Social Impact Accelerator

SIB: Social Impact Bonds

SIINC: Social Impact Incentives

SROI: Social Return On Investment

VC: Venture Capital

VP: Venture Philanthropy

INTRODUCTION

1. RESEARCH BACKGROUND AND OBJECTIVES

The Global Impact Investing Network (GIIN), which is the foremost organisation involved in growing the impact investing sector, 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.). Using finance as a mean to achieve societal impact, impact investors adopt the tools and methodology of the traditional financial world to pursue a clear impact mission and invest in financially viable organisations that promise significant, lasting impact achievements. Most often, impact fund managers operate similarly to Private Equity (PE) and Venture Capital (VC) fund structures (Chiappini, 2017). Investors, or Limited Partners (LPs), commit capital to a fund entity that is created and managed by the fund manager, or General Partners (GPs). When the GPs identify what they believe to be a good investment opportunity, they call capital from LPs, at the amount level that the latter signed up for when they agreed to be part of the fund (Berk & De Marzo, 2014). In such fund structures, a flat fee is typically paid to the fund manager for running the fund, in the form of an annual management fee covering expenses such as salaries and overheads. On top of that, the fund manager is usually entitled to a variable compensation in the form of a carried interest, which is a share of the fund's profits. By tying a financial reward for the GPs to the financial performance of the fund, the carried interest provides an incentive in line with the core profit-maximisation objective of classic PE/VC fund structures.

Impact investment funds, on the other hand, aim to deliver environmental and/or social impact alongside financial returns. This dual set of objectives implies that a financial reward such as the classic carried interest, which is tied to the sole financial performance of the fund, does not provide an appropriate incentive for the fund manager. Instead, the financial reward scheme should account for the impact performance of the fund as well.

In 2011, the GIIN published the issue brief "*Aligning Fund Manager Compensation with Social and Environmental performance*" which was, to our knowledge, the first time that impact-based incentive structures for impact fund managers were discussed. The brief was followed by another one published by the Transform Finance Investor Network in 2016, "*Tying Fund Manager Compensation to Impact Outcomes*". The two papers, which depict how a few pioneer organisations have tied their impact performance to their management compensation

structure, are the only publications that were found that specifically address the question of impact-based financial reward schemes.

Therefore, this project-dissertation aims to grow the knowledge on impact-based financial reward schemes and thereby address a question raised by practitioners in the impact investing field. It investigates how a variable compensation scheme may be structured, in the context of an impact investment fund, to ensure that the fund's impact objectives be appropriately weighted. Hence, in light of the fund's impact mission, the fund manager's variable compensation should be based at least partially on the fund's performance from an impact perspective. This project-dissertation considers in particular the context of impact funds pursuing an impact-first strategy, meaning that they aim to achieve the greatest possible impact whilst limiting financial objectives to capital preservation over time. Impact-first funds seek for instance to play a role with high additionality by financing valuable, impact-driven solutions that are overlooked by other investors; to finance solutions striving for systemic impact (i.e. addressing the root causes of the problem whilst providing scalable, lasting solutions); to favour solutions allowing for the most impact if confronted with a trade-off between more impact and increased financial returns, etc. As the objective is to maximise impact, fund manager's compensation cannot be based upon financial considerations only and other schemes must be found to link the financial reward with non-financial objectives, such as the environmental and/or social impact generated by the fund's activities. This paper aims to determine how an impact-based financial reward scheme, which would better reflect an impact fund's mission, might be set up and potentially provide an incentive to drive the fund's environmental and/or social performance.

2. STRUCTURE OF THE THESIS

In the first chapter, a literature review provides some background information for the setup of an impact-based financial reward scheme. Provided that such schemes were never discussed extensively and were not yet discussed at all by scholars, the literature review rather sets the scene for the discussion of impact-based financial reward frameworks. It presents the state of the impact investing industry and highlights two key concerns in the industry, hence, the aspiration for a reliable measurement and management of impact and the discussions on potential trade-offs between financial returns and the delivery of impact, thereby introducing impact-first funds. The compensation mechanisms for impact fund managers is then reviewed, highlighting how it compares to and differs with compensation schemes in place in PE/VC

funds, particularly in the context of an impact-first fund. Finally, the concept of tying payment to proven social and/or environmental outcomes is introduced with the example of pay-for-success schemes.

The second chapter outlines the methodology used in this project-dissertation. A qualitative research was conducted based on semi-structured interviews with key players of the impact investing field, in order to collect the primary data needed to investigate impact-based financial reward schemes.

The third chapter presents the findings of the research. In a first instance, the interviews enabled to identify frameworks which may be used to tie a financial incentive to an impact investment fund's impact performance. Impact investing pioneers having implemented an impact-based financial reward scheme have done so in the form of both impact-based carried interest and impact-based bonus schemes, which are both presented. Interviews' data were then analysed using Gioia's methodology (Gioia et al., 2013), in order to identify the pros, controversies and challenges related to the implementation of an impact-based financial reward framework. Finally, the dimensions of impact that may be assessed are highlighted, as identified in the interviews, as well as potential tools to measure those.

The fourth chapter discusses the findings outlined in chapter three, highlighting the contribution of this work in documenting the role of impact-based financial reward schemes to secure strong focus on impact in an impact investment fund.

Finally, the last chapter discusses this work from an ethical perspective, highlighting how it is part of a broader movement for increased fairness in our financial systems that requires to adapt the instruments used. It discusses in particular the necessity for impact fund managers to place impact at the heart of their investment strategies.

EXPOSITION

CHAPTER I. LITERATURE REVIEW

The impact investing market has incurred significant growth since the term was first used at an event of the Rockefeller Foundation in 2007, probably boosted by the 2008 crisis and the global disappointment and distrust towards traditional models (Bugg-Levine, Emerson, & Lundeen, 2016; Grabenwarter & Liechtenstein, 2011; Spiess-Knafl, 2017). The latest GIIN report (April 2019) estimates the size of the impact investing industry at USD 502 billion at the end of 2018 (GIIN, 2019), representing the assets of over 1,340 organisations worldwide. This is only an estimate of the real market size as it is difficult not only to identify all organisations potentially involved with impact investing, but mostly to certify that the reported data really is considered impact investing according to the GIIN's definition. With that report, the GIIN provides the first rigorous evaluation of the market size and therefore hopes to provide reliable baselines for evaluating its future evolution. Up to now indeed, the only figures at hand in the impact investing industry were those reported in the GIIN's annual Impact Investor Survey which, even though less accurate because including data from some 200 respondents only, highlighted a significant growth in assets under management from USD 114 billion in 2017 (208 respondents) to USD 228.1 billion in 2018 (229 respondents) (GIIN, 2017; GIIN, 2018). In any case, the reported figures show that impact investing remains a tiny fraction of the USD 88.5 trillion global assets under management in 2017 (Alijani & Karyotis, 2019; McKinsey&Company, 2018).

Yet the impact investing sector is not just growing in terms of number of stakeholders and amounts of assets contributed, it is also professionalising. Indeed, as the field grows, best practices emerge and are increasingly shared amongst stakeholders. One of impact investors' main concerns in this view is to measure and manage their impact performance, in an attempt to transparently and efficiently demonstrate the impact they achieve.

1. IMPACT MEASUREMENT AND MANAGEMENT

Two main components characterise an impact investment according to Jackson (2013b), first the intentionality to create impact in addition to financial performance, and then the tangible evidence of the claimed impact. Yet impact measurement, rather than something to

simply report on, is really a mean for impact management and improvement (Bugg-Levine et al., 2016). It is indeed first and foremost a key instrument for decision-making, as it triggers reflection on how and why the observed impact performance materialised, which allows to review strategy in order to improve (J. Nicholls, 2017; Paranque & Revelli, 2019). According to A. Nicholls (2009), social impact accounting should not be triggered by external reporting requirements, but rather be considered a key internal process to actively and strategically use impact measurement as a value adding process. The risk is that mission-driven organisations otherwise never, or barely ever question the validity and efficiency of their actions, comforted about the righteousness of their activities by the core social grounds of their business model and the assumption that impact is a systematic deliverable (A. Nicholls, 2009).

Impact fund managers should thus first define a rigorous impact strategy and articulate how their actions will lead to impact (Epstein & Yuthas, 2017). The impact strategy and objectives should be as clearly defined as possible, so that fund managers can really assess and seek to improve their performance against those (Johnson & Lee, n.d.). Hence, as a common starting point to any impact measurement methodology, mission-driven organisations often use or should use a logic model, namely a visual representation of the chain of events delivering the targeted social or environmental impact (Irene, Marika, Giovanni, & Mario, 2016). The most famous model is the theory of change, which clearly articulates the causal links between all inputs required to carry out the organisations' activities, and how those lead to all levels of deliverables, hence outputs, outcomes, and ultimately impact (Jackson, 2013b). The organisation's outputs are not only the delivered products or services, but also direct effects of the activities (e.g. additional communication skills for people following a sign language course). Outcomes look at the change triggered by those outputs (e.g. better integration and increased well-being of the hearing-impaired population following the sign language course). Finally, the organisation's impact looks at the change considering only the effects that are really attributable to the organisation, including potential negative externalities. (Lehner, 2016; A. Nicholls, 2009)

As they define their theory of change, impact investors clarify to all stakeholders the process used to deliver on impact objectives, explicating assumptions behind the expected results of the intervention (Jackson, 2013b). The idea is that for each constituting element of the process, indicators can, and should be used to express how they materialise. Defining indicators that properly reflect outputs, outcomes and most importantly, impact, is a challenging step when defining an organisation's theory of change. Whereas metrics reflecting activities'

outputs are pretty straightforward, the exercise involves a greater part of judgement when it comes to defining the resulting outcomes and impact of those activities (Arvidson, Lyon, McKay, & Moro, 2013). Nevertheless, the theory of change is according to Jackson (2013b) even more than an impact measurement and management tool, it is a core building block of the impact investing process. It is a powerful tool that provides a basis for reflection and improvements as the theory of change may, or rather should evolve and be refined over time to continuously review the mechanisms that trigger the delivery of impact (Jackson, 2013b).

Impact fund managers then need to understand what they want to measure and how they will be able to do so (Johnson & Lee, n.d.). This is the challenging part and as reported by Epstein & Yuthas (2017), mission-driven organisations often feel that impact measurement is costly and difficult. They fear that the process will shift resources from the core activities to impact measurement, while a handful of potentially dysfunctional impact measures will poorly reflect reality and may be misleading. Yet only by measuring impact can mission-driven organisation evaluate their performance, identify areas for improvement and seek ways to adjust their actions. (Epstein & Yuthas, 2017)

A few key impact measurement methodologies and tools

A whole lot of methodologies and recommendations for impact measurement have emerged which may be used by a variety of actors, including social purpose organisations such as non-profits and social enterprises, impact fund managers, as well as governments and public finance institutions. Among all impact tools and frameworks, three main categories of impact assessment can be identified in the academic literature, hence, qualitative assessment, quantification and monetisation methodologies, and experimental techniques (Arena, Azzone, & Bengo, 2015; Irene et al., 2016; Spiess-Knafl, 2017). The use of one or another approach will depend on the purpose of impact measurement, the targeted audience, the need for reliability versus resources that may be dedicated to the process and the need for comparability versus customisability (Spiess-Knafl, 2017).

(1) Qualitative assessment

Qualitative impact assessment includes collecting insights from the field and/or the organisation’s beneficiaries, using for instance interviews, focus groups, as well as discussions with professionals and experts analysis (Epstein & Yuthas, 2017; EVPA, 2015).

(2) Quantification and Monetisation

Quantitative impact assessment techniques allow to translate the delivered social or environmental value into synthetic, numeric measures (Irene et al., 2016). The data may be collected via surveys or direct measurements (Epstein & Yuthas, 2017), using for instance dashboards and scorecards with an impact dimension added to the traditional business-oriented perspectives (Spiess-Knafl, 2017). Quantitative methods allow to easily set targets, benchmark with other organisations and over time, compute ratios of the delivered performance compared to the targeted impact (Epstein & Yuthas, 2017).

Quantitative evaluation may also convert into a system of impact monetisation, expressing impact returns in monetary terms (Epstein & Yuthas, 2017). Hence, the value of an intervention may be expressed either in terms of savings to the society or the government, or in terms of perceived value for the beneficiaries (EVPA, 2015).

(3) Experimental

Finally, the control of an organisation's impact in an experimental setting provides the most scientific rigor, yet this method is also very difficult to implement and costly. The most famous experimental measurements are Randomised Control Trials (RCT) which, for social rather than environmental interventions, compare the level of improvement in the treatment group with that of a control group (Spiess-Knafl, 2017). Such setting allows to reliably assess the change triggered by an intervention compared to status quo, using a mix of qualitative and quantitative measures (Fischer & Richter, 2017).

Key impact measurement frameworks and tools: a note on IRIS, GIIRS and SROI

As impact measurement techniques keep being developed and used by a growing number of mission-driven organisations willing to assess and improve their activities' impact, a broad variety of tools and metrics have emerged. Yet there is a strong movement in the impact investing industry towards increased standardisation and shared practices in impact measurement (Reisman, Olazabal, & Hoffman, 2018). Accordingly, two leading organisations in the field are highlighted in the literature for their work in building standards for a shared methodology of impact measurement (Rangan, Appleby, & Moon, 2011; Chiappini, 2017; Lehner, 2016; Reisman et al., 2018). First, the Global Impact Investing Network or GIIN is a US-based non-profit organisation that aims to accelerate the growth and professionalisation of the impact investing market by fostering collaboration between the various players, developing

and sharing resources and tools, etc. (https://thegiin.org/) The GIIN has notably developed the Impact Reporting and Investment Standards (IRIS), an online database of indicators and their definition for impact investors to track their organisation's impact (Irene et al., 2016; Spiess-Knafl, 2017). The GIIN recently launched a new IRIS+ version (May 2019), providing an improved dataset of impact metrics for increased data clarity, reliability and comparability (https://iris.thegiin.org/). Then, the US-based non-profit B Lab (https://bcorporation.net/about-b-lab) supplies the Global Impact Investing Rating System (GIIRS), a rating for impact investment funds pursuing a clear impact strategy alongside their financial strategy (https://b-analytics.net/giirs-funds), which is in fact based on IRIS metrics (Jackson, 2013b; Lehner, 2016). Provided that IRIS metrics are mostly indicators of outputs, or outcomes for a few dimensions only, and because GIIRS is built on the IRIS set of metrics, none of those frameworks allow to really appreciate an organisation's impact (Lehner, 2016; Reisman et al., 2018).

Besides standardised IRIS indicators and GIIRS ratings, another widespread tool for impact investors willing to track and improve their impact is the Social Return On Investment (SROI) (Lehner, 2016). The SROI, which builds on economic reasoning, is the most famous approach to assess the value of an intervention such as an impact investment (Antadze & Westley, 2012). The SROI calculation aims to estimate, in monetary terms, the value created in terms of social, environmental and economic benefits compared to costs (Epstein & Yuthas, 2017; Fischer & Richter, 2017; J. Nicholls, 2017). Comparing that estimate with the amount invested in the project, the SROI provides a ratio where for instance 3:1 signals that one monetary unit invested resulted in an impact valued three times that amount (Alijani & Karyotis, 2019; J. Nicholls, 2017). Developed in the United States as of 1996, the SROI gained increased interest about ten years later and was developed further to account for a broader set of outcomes and long-term, reliable estimates (Arvidson et al., 2013; Fischer & Richter, 2017; A. Nicholls, 2009). It is now the prominent monetarisation technique for impact evaluation and builds on a set of both quantitative and qualitative indicators of outputs or outcomes, which might well be identified using a theory of change and be based for instance on IRIS (Arvidson et al., 2013).

A work in progress

The impact investing industry has incurred significant developments since the term was coined a bit more than a decade ago. A broad variety of networks, standards and metrics have emerged, demonstrating aspiration to grow and professionalise the industry and for

standardised impact measurement frameworks and tools. Yet despite clear interest for the topic, impact tracking and evaluation still faces several hurdles (Reisman et al., 2018).

First, while it is argued that the impact investing industry needs shared, formal impact measurement frameworks and indicators to improve in managing and communicating about the impact (Irene et al., 2016), the idea of some sort of universal measurement system conflicts with the need for flexible schemes and customised indicators relevant for an organisation's specific context and needs (Johnson & Lee, n.d.). The standardisation of metrics may alter the value of the information they provide with regards to the impact objective that it was initially set to measure (Grabenwarter & Liechtenstein, 2011; Reisman et al., 2018). Although impact assessment tools such as IRIS and GIIRS are increasingly adopted, and while a strong interest is awarded to impact assessment by both practitioners and scholars, the quality of those tools and the value of using one versus another was never extensively tested and discussed academically (Lehner, 2016). The SROI, for its part, has often been discussed by scholars and much can be learnt already from critics and suggested areas for improvements (Arvidson et al., 2013; J. Nicholls, 2017; Yates & Marra, 2017).

Additionally, confusion remains about the extent of impact measurement to be performed as impact investors face trade-offs between the value of a precise impact assessment and the time and resources dedicated to the process (Arena, Conte, & Melacini, 2015; Johnson & Lee, n.d.). According to Epstein & Yuthas (2017), "measurements will never be perfect, (yet) there are many ways to get closer to understanding the change your efforts have made" (p.118). Therefore, impact investors should start simple by using for instance ready-made tools or only a handful of key self-designed metrics, before improving the measurement methodology over time as they build experience (Johnson & Lee, n.d.).

2. The impact and financial returns balance

As impact investors define their investment strategy and set a combination of financial and impact objectives, the balance they seek between the two dimensions might differ. Hence, while some investors target financial returns equivalent to those observed on the market, others accept to finance projects where financial returns may be lower or less straightforward, but which promise potentially higher impact (Cetindamar & Ozkazanc-Pan, 2017; Höchstädter & Scheck, 2015; Spiess-Knafl, 2017). Born and Brest (2013) define impact investments as those that "(increase) the quantity or quality of the enterprise's social outcomes beyond what would

otherwise have occurred" (p.22). In light of their definition, such additionality may well materialise in two impact investment strategies. On one hand, impact investors finance deals with below-market rate returns, either because supporting very early-stage ventures, subsidising ongoing enterprises or catalysing traditional investors' capital in projects for which they bear the first risks. On the other hand, impact investors seek investments yielding market-rate returns at least, but they make sure to create the most impact possible versus what would have happened without them. They may for instance have developed specific expertise allowing them to engage with companies that are overlooked by traditional investors, while also being particularly qualified to select investees with the most efficient solutions to a particular issue. (Born and Brest, 2013)

According to the GIIN's Impact Investor Survey (2018), the vast majority of impact investors targets risk-adjusted, market-rate returns (64% of respondents). The remaining investors accept below-market-rate returns, among which a minority of investors pursue impact-first strategies with financial returns close to capital preservation (16% of respondents). Those two groups are commonly referred to as finance-first investors who seek market-rate returns at least, and impact-first investors who accept to let go of the financial returns for greater impact.

As investors adopt an impact-first strategy, they accept to finance ventures that have a less attractive risk-return profile and may yield lower returns or over a longer period of time, and yet promise greater impact on a potentially much larger scale and sustained over time. They operate in what Etzel (2015) calls the "sweet spot", hence, bridging the gap between grant-making philanthropists and investors providing capital only to ventures that are profitable and/or promising market-rate returns. By limiting financial objectives to capital preservation over time, impact investors may continuously invest in new deals, therefore generating more impact, while at the same time financing mission-driven organisations that are overlooked by traditional investors (Born and Brest, 2013; Etzel, 2015).

3. ADAPTING THE COMPENSATION MECHANISMS OF PE/VC FUNDS TO IMPACT-DRIVEN FUNDS

In line with classic PE/VC funds, most impact investment funds have adopted the traditional "2-20" structure, hence, charging a 2% management fee to bear the fund's basic expenses such as salaries and overheads, with an extra compensation at exit in the form of a 20% carried

interest (Balandina, 2016; EVPA, 2018; Spiess-Knafl, 2017). The management fee is charged each year to investors based on the committed capital, while the carried interest is a fee that represents GPs' share of the fund's net profits available for distribution at the time of liquidation (Berk & De Marzo, 2014).

The management fees charged by impact fund managers, however, seem to be slightly higher than the average 2% charged in PE/VC structures. According to Spiess-Knafl (2017), management fees charged by impact fund managers range between 2 and 4%, while the 2017-2018 EVPA survey records that social investment funds charge an average management fee of 3.08% (2017) as computed across 24 social investment funds. The EVPA refers here with social investment funds to "all those organisations that support social purpose organisations using all range of financial instruments (…) with the primary objectives of achieving a sustainable social impact (and in some cases a financial return, but secondarily and not necessarily)". Hence, EVPA's findings are not representative for the entire impact investing market, but rather for impact-first funds where impact objectives prevail and financial expectations are limited to preserving capital over time. This could explain the difference with results obtained by the GIIN (2014), which find an average 2.4% management fee across 127 PE/VC impact investment funds. Note that while the GIIN is the leading organisation for impact investing, the European Venture Philanthropy Association (EVPA) is the European equivalent for venture philanthropy, where capital providers range from grant-makers to investors accepting below-market-rate or no financial returns (https://evpa.eu.com/). Hence, impact-first investors in particular fall into the scope of both organisations.

The rationale for charging slightly higher management fees in impact investment funds, and impact-first funds in particular, is first that often those funds are smaller than the traditional PE/VC funds. Consequently, a management fee applied to the committed capital on a smaller scale lowers their competitivity in terms of means to hire a good team and perform in-depth, quality work (EVPA, 2018). If motivated by a solid financial plan, a higher management fee might thus be a perfectly reasonable request (Balandina, 2016). A higher fee may also account for the additional work delivered on the impact strategy (Balandina, 2016; EVPA, 2018). As they seek investments that perform well on both impact and financial dimensions, indeed, impact fund managers face more complex funding decisions (Miller & Ii, 2010). The sourcing and due diligence on deals guaranteeing both a sustainable business model and a sound impact strategy require increased time and energy, particularly as fund managers still lack efficient and cost-effective techniques to assess the impact-side of a deal (Johnson & Lee, n.d.; Lehner,

2016). This also increases costs related to human resources as staffs must have expertise in both investing and impact, particularly as they further provide portfolio companies with non-financial support to help them sustain their business and impact delivery (Johnson & Lee, n.d.).

In addition to the fixed management fee, PE/VC fund managers are entitled to a variable compensation in the form of a 20% carried interest. The carried interest is the main mechanism in place in traditional PE/VC funds to counteract so-called agency problems, which might arise if GPs put their own self-interest before those of the LPs as they manage capital on their behalf. Agency problems arise from a misalignment between the interests of the principals and agents, hence in this case the investors and the fund managers. Hence, by tying manager compensation to the success of the fund, the carried interest secures alignment between the interests of the investors and those of the fund managers. (Berk & De Marzo, 2014; Spiess-Knafl, 2017)

Similar agency problems might occur in the impact investing sector, yet the context of an impact investment fund is particularly challenging as it requires not only to align the interests of all stakeholders (i.e. the investors, the fund managers and the investees), but also to maintain a balance between pursued impact and financial objectives (Spiess-Knafl, 2017). Hence, impact investment funds face an additional risk to that related to agency problems, which is the risk of mission drift. As impact investors set a combination of financial and impact objectives, the risk of mission drift refers to the potential overruling of the financial considerations at the expense of the fund's impact mission (Cetindamar & Ozkazanc-Pan, 2017; Cornforth, 2014).

Yet the value of financial incentives, such as the carried interest, is not as clearly established for impact fund managers than it is in the context of a classic PE/VC structure. Balandina (2016) observes for instance that the value of a financial reward may be questioned in an organisation where the entire mission revolves around impact and where employees are likely to be driven by the satisfaction to achieve greater impact, rather than by any financial incentives. Additionally, a carried interest tied to the sole financial performance of the fund would not be in line with the impact investment fund's mandate, which is to ensure both financial and impact returns (Balandina, 2016).

An impact-based financial reward scheme, on the other hand, would align the interests of the fund manager with those of investors. Indeed, tying fund manager's compensation to the social and/or environmental performance of the fund makes them accountable for it, which further ensures that investments are aligned with the fund's strategy and that the impact objectives are appropriately weighted in investment decisions. Impact-based financial reward

schemes would thus guarantee mission lock, hence reducing the risk that the targeted impact objectives will not be met. (GIIN, 2011; Balandina, 2016)

Short briefs from the GIIN (2011) and the Transform Finance Investor Network (2016) provide some early examples of impact investment funds using an impact-based financial reward scheme, showing concrete interest of practitioners for the mechanism. However, the value of impact-based incentives for impact fund managers was never documented further and the framework is not discussed at all in academic literature. Yet the idea of tying a financial reward to some sort of demonstrated social and/or environmental impact is not new and has already been implemented in the form of other mechanisms. As an example, pay-for-success frameworks are briefly outlined hereafter, in order to highlight some of the learnings related to their implementation that have already been discussed in peer-reviewed academic papers.

4. A BRIEF REVIEW OF PAY-FOR-SUCCESS FRAMEWORKS

Social Impact Bonds (SIB), also referred to as pay-for-success (PFS) contracts or payment-by-results, provide a novel financing mechanism to trigger innovation in public services and deliver valuable outcomes for a community. The framework implies that solutions to an identified societal problem are first financed by private investors, who are then paid back by the commissioner of the bond a contractually defined amount, to the extent that targeted social outcomes specified at bond issuance were achieved. (Fischer & Richter, 2017; Fraser, Tan, Lagarde, & Mays, 2018)

The commissioners of SIB are often public authorities in charge of delivering the commissioned social service, or sometimes foundations, who seek to promote social innovation for improved social services delivery. Private investors, on the other hand, might well be impact investors, provided that SIB represent investment opportunities potentially delivering both social outcomes and financial returns (Jackson, 2013a). The payment received is in line with the savings for society enabled by the social innovation, which may be as high as market-rate returns (Warner, 2013). Hence, SIB provide an example of a structure where social interventions are assigned a monetary value, which allows to tie pay to performance (Warner, 2013). The mechanism has already spread quite considerably since it was first set up in 2010, with 32 SIB projects active in the UK and another 100 at least worldwide (Fraser et al., 2018), so that some key learnings can already be highlighted in the context of tying financial rewards to the delivery of social outcomes (Fischer & Richter, 2017).

Various requirements were identified for the setup of such outcomes-based payment scheme. First, such scheme implies that social performance be rigorously measured (Azemati et al., n.d.). The reliability of the reported outcomes depends on the quality of the underlying assumptions and data (Fischer & Richter, 2017). Hence, a credible third-party evaluator must not only help define the indicators of success, but also eventually assess the performance of the venture in achieving the targeted social outcomes (Fraser et al., 2018; Jackson, 2013a). Additionally, all parties must settle on "the timing of measurement and the methodology by which the program will be evaluated" (Fischer & Richter, 2017, p.106). The mechanism also presents limitations. Mostly, the definition of outcomes conditioning payment beforehand potentially narrows the scope of possible interventions (Warner, 2013). This prevents from backing innovative solutions which would not translate into the outcomes that condition payment, while the limited set of indicators might conceal potential negative externalities in other areas (Fischer & Richter, 2017; Warner, 2013).

Nevertheless, SIB are valuable schemes to finance innovations that will not only deliver increased benefits for the society, but also reduce the public authorities' expenses. By shifting focus towards measurable social outcomes, SIB allow to improve service delivery and allocate resources to the most impactful ventures (Edmiston & Nicholls, 2018). Similarly, Green Bonds or Environmental Impact Bonds have been developed with the intent to catalyse capital for the transition to a more sustainable economy (Paranque & Revelli, 2019). Here as well, measurement of the project's delivered environmental impact is at the heart of the process and proven environmental value, as verified by a certified evaluator, is required to trigger payment.

Very recently, another impact finance innovation emerged in the form of Social Impact Incentives (SIINC). SIINC were developed in 2017 by the impact finance advisory Roots of Impact and the Swiss Agency for Development and Cooperation. Here, the commissioner or third-party payer commits to paying the social purpose organisations directly for demonstrated positive outcomes, which increases the attractiveness of the venture for private investors and thus helps catalysing more capital for ventures with a proven social and/or environmental impact. The financial reward should be used by the organisation to achieve even greater impact. (Roots of Impact, 2016; Boston Consulting Group & Roots of Impact, 2019)

Although applied to a different context and for a different purpose, the above frameworks have in common with an impact-based financial reward scheme that they all link a financial incentive to performance against social and/or environmental indicators. They are all based on a simple, core principle to "make generating more impact a business choice that pays off"

(Boston Consulting Group & Roots of Impact, 2019, p.3). As the novel impact-based carried interest concept is explored, it may well learn from the PFS schemes' experience in tying impact performance to pay. PFS has indeed "contributed greatly to the discussion of outcomes" in the social sector and provided some key learnings "for maximising social benefit" (Fischer & Richter, 2017, p.108).

5. CONCLUSION

Social impact measurement, impact investing and pay-for-success schemes are part of an important movement towards a financial system achieving both financial sustainability and valuable social and environmental performance (Alijani & Karyotis, 2019). As the number of impact investments grows, they are likely to increasingly shape the expectations and practices in the funding of mission-driven organisations (Irene et al., 2016). The pursuit of an impact strategy alongside financial expectations, indeed, requires for impact investors to adapt the profits-oriented tools and practices of the traditional PE/VC world and find creative alternatives to better account for their impact objectives (Bugg-Levine et al., 2016).

Accordingly, impact investors have started implementing tools having impact performance at the centre of their process, of which an impact-based carried interest scheme is an example. Such framework ties a financial reward to the achievement of impact objectives, where it was traditionally conditioned to financial performance. Some early examples of impact-based carried interest schemes have emerged among practitioners and such scheme now appears at least briefly in series of publications (Balandina, 2016; GIIN, 2011; So & Staskevicius, 2015; Transform Finance Investor Network, 2016), however they have not been discussed at all by scholars. Yet the discussion of impact-based financial reward schemes for impact fund managers can already learn from other frameworks in which pay is tied to proven social or environmental outcomes. Pay-for-success schemes for instance have been more extensively reviewed and their limitations and implementation challenges discussed, some of which may apply to impact-based carried interest schemes. One key element in all those frameworks is that they require cautious impact evaluation, which should have at its core reliable data collection and analysis tools. Yet this remains challenging as the measurement of impact, though having received much attention over the past decade, is still subject to many discussions and concerns.

All in all, impact-based financial reward schemes for impact fund managers, such as an impact-based carried interest, are thus still very early-stage frameworks. The scarcity of

academic literature currently prevents from drawing clear conclusions on such framework's real added value and implementation best practices, so that impact-based financial reward schemes should be further investigated as more impact fund managers seek to implement them.

CHAPTER II. METHODOLOGY

As highlighted in the literature review, the concept of tying fund managers' compensation to their performance from an impact perspective is relatively novel and was never well documented. Therefore, this research relies on primary data collected via interviews with key players of the impact investing field. Following Gioia's (Gioia, Corley, & Hamilton, 2013) methodology (see exposition, chapter III, section 3), a rigorous qualitative research was conducted in order to gather insights on the topic from the field, starting from the following research question: how can an impact-based financial reward scheme contribute to securing impact fund managers' constant focus on the fund's impact performance?

Semi-structured interviews were used in order to identify how key players of the impact investing ecosystem view impact-based incentive schemes, whether they have implemented or would consider using such mechanism, and how it may be structured. The aim was then to identify best practices to tie impact performance to financial rewards, pros and cons of impact-based incentive frameworks as well as potential implementation challenges. Semi-structured interviews were useful to gather insights on all those elements of interest, whilst also allowing some flexibility for interviewees to express any information they deemed important and for adapting the questions in line with evolving needs of the research. With this in mind, the initial set of questions was each time distributed to the interviewees for them to have a view on the topics that would be discussed, and thus be better able to reflect on their own practices and views. This set of question can be found in Appendix I.

Twenty-two interviews were conducted this way between January and March 2019, which lasted about 30 to 50 minutes each, with the aim to collect the interviewees' experience and opinion on the following items: impact-based financial reward schemes; challenges in setting impact metrics and targets; impact audit and reporting challenges; and team dynamics and motivation. The interviewees were selected because they were identified to have valuable experience in impact investing and, in some cases, on impact-based financial reward schemes in particular. They include fifteen impact fund managers, six impact advisors and one academic expert. They are mostly located in Europe (17), except for five impact investment funds headquartered in Costa Rica, Panama, Brazil, the United States and Canada. In order to preserve their anonymity, the interviewees were assigned labels according to their role, hence, setting impact fund managers apart from impact advisors and the expert. The classification was not pursued further, as no major trends could be observed amongst the interviewees that would

allow to set them apart in distinct groups. Accordingly, impact fund managers will be referred to as fund1 to fund15 throughout this research, whilst the impact advisors and the expert will be referred to as advisor1 to advisor7.

After identifying possible frameworks to tie a financial incentive to an impact fund's impact performance, the Gioia methodology (Gioia et al., 2013) will be used to identify the main elements, as expressed in the interviews, to be considered with regards to the setup of an impact-based financial reward scheme. After a first review of interviews' transcript, the methodology implies to code the obtained information in a rather extensive list of opinions and ideas, in order to group similar views and concerns. The multitude of ideas are then grouped into a dozen categories, or first-order concepts, according to their expression of similar views. The further classification into second-order themes then allows to highlight key elements in the setup of impact-based financial reward schemes, which should provide a theoretical framework to analyse such mechanism and identify its main components. (Gioia et al., 2013)

CHAPTER III. FINDINGS

Provided the scarcity of academic insights on impact-based financial reward schemes, interviews with key players of the impact investing field were conducted in order to collect their insights related to such incentive schemes. The aim was first to identify whether interviewees had implemented impact-based financial reward frameworks or were familiar with such schemes, the various possible frameworks used for the setup of an impact-based financial reward as well as interviewees' views and recommendations on the topic.

In the first two sections, findings reveal how the impact performance may be accounted for using variations of the carried interest and bonus schemes. It clarifies how both frameworks may be set up, as well as the pros and cons related to each of those.

Using Gioia's (Gioia et al., 2013) methodology, the third section identifies how an impact-based financial reward scheme may contribute to securing fund managers' constant focus on the fund's impact performance. The analysis reveals three key dimensions related to the setup of such scheme. Hence, an impact-based financial reward scheme firstly is a valuable mechanism to ensure commitment of fund managers to impact. Secondly, it is only as valuable as the impact measurement and management methodology that it is based on. Thirdly, such framework's success requires to mitigate risks associated with impact-based incentives. The various concepts and themes identified in the interviews, which lead to the identification of the three aggregate dimensions, are explained in details to highlight all elements of importance related to the implementation of an impact-based financial reward scheme.

Based on the interviewees' insights, the fourth section highlights the various dimensions of impact that may be assessed and considered as a basis for calculating an impact-based financial reward, as well as suggestions of tools to assess performance against those. The second part briefly outlines identified techniques to aggregate different impact metrics, which is useful to consider the overall impact of an investment or across the full portfolio.

1. IMPACT-BASED CARRIED INTEREST

In line with PE/VC fund structures, the interviewed impact fund managers declared to be using a traditional "2-20" scheme, hence, they often charge investors a 2% management fee and consider a carried interest close to 20%. Nevertheless, some players in the impact investing ecosystem have demonstrated creativity in structuring their variable compensation scheme, in

order to reflect both the impact and the financial performance. Among the fifteen interviewed impact fund managers, seven have an impact-based financial reward scheme currently in place, one is in the process of setting up one for a fund that is about to be launched and another had designed such scheme for a fund that never raised the money to be launched. Another two are participating in such scheme as LPs for their fund of funds investments, which leads to a total of eleven out of the fifteen interviewed impact fund managers that are familiar with impact-based financial reward frameworks. Note that this proportion is not statistically representative of the impact investing market, as we specifically searched for interviewees using such scheme in order to understand better their motivation and experience in implementing impact-based financial reward schemes.

Regarding those four funds where the setup of an impact-based financial reward was never really an option, interviewees justified that by a number of reasons, including (1) they had never really thought about it, (2) they are lacking the resources to design a reliable impact-based incentive scheme, and (3) they question the real added value of having financial incentives at all in impact-focused organisations. Those funds use the classic PE/VC carried interest.

Although the various examples of impact-based carried interest identified in the interviews vary in their implementation details, they present common features that allowed to identify generic impact-based carried interest frameworks. The different frameworks are first presented hereafter to show how such scheme might work, before discussing the distribution timeframe and other important considerations related impact-based carried interest schemes.

1.1. Impact-based carried interest frameworks

Two main frameworks were identified for impact fund managers to tie their impact performance to a monetarised carried interest, which are presented below. Note that fund managers typically have to reach a predefined financial hurdle rate first before any carried interest may be distributed. Quite logically indeed, and similarly to the process in traditional funds, investors' minimal financial expectations have to be met before considering sharing any profits with fund managers. Though the financial hurdle rate conditioning carried interest distribution typically is 7-8% in PE/VC funds, it might be lower for impact investment funds[1] (advisor2). Financial proceeds might then be distributed between investors and fund managers consistently with traditional carried interest schemes, though different frameworks may then be

[1] A report published by the GIIN in 2014 observes an average 6.2% hurdle rate across 95 impact investment funds

applied for impact investment funds willing to include an impact performance dimension in their carried interest scheme. Hence, either full carried interest distribution is conditioned to the achievement of certain impact objectives, or the amount of the carried interest itself may be adjusted up- or downwards according to the impact achieved.

A. Full carried interest structure tied to financial and impact objectives.

The first, most basic possibility to account for the impact performance of a fund in the variable compensation is to condition carried interest distribution upon a certain level of impact performance. Hence, the carried interest is computed using the exact same mechanism as in traditional PE/VC funds, yet it is only distributed if certain predefined impact goals were achieved in addition to the regular financial hurdle. In this case it is thus all or nothing, so that fund managers get the full carried interest only if both financial and impact hurdles are achieved.

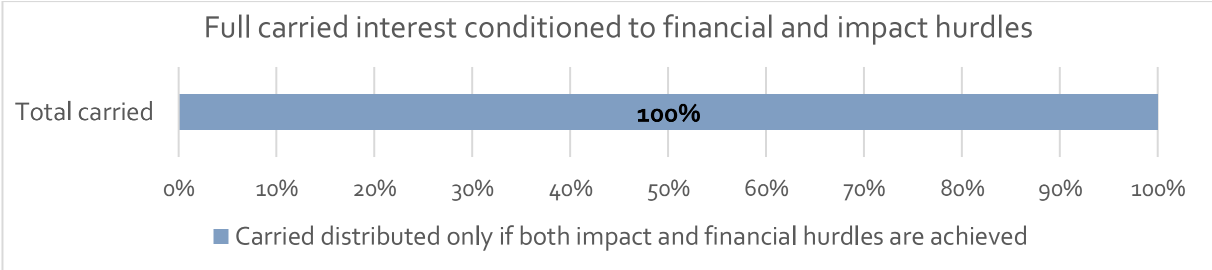

Figure 1: Full carried interest conditioned to financial and impact hurdles

B. Carried interest modulation structure based on impact objectives.

A second option to account for the fund's impact performance in manager's compensation is to adjust the carried interest upwards or downwards according to the fund's over- or underperformance against the initially set impact goals. In this case, a potentially lower portion of the carried interest is linked to financial objectives and might be increased by a second, impact-based fraction of the reward.

A first alternative is to increase the carried interest in stages, by tying different impact targets to different levels of compensation. Accordingly, different levels of achievements against the same indicator may for instance correspond to different levels of carried interest. Hence, the higher the impact, the higher the carried interest. Impact investors may also define a certain number of impact goals that the organisation is willing to achieve against various dimensions (e.g. the organisation's environmental, social and/or governance practices), tying the achievement of each of those impact objectives to a certain percentage points increase each time. Hence, the more impact objectives reached, the higher the carried interest.

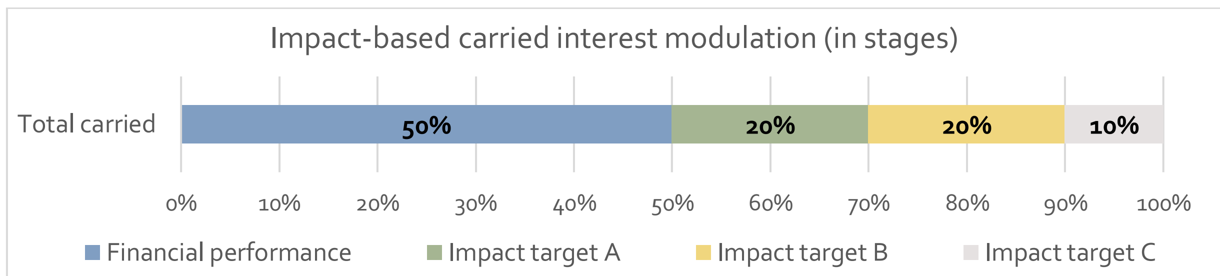

Figure 2: Impact-based carried interest modulation (in stages)

A second alternative is to distribute a portion of impact-based carried interest pro rata to the percentage of achievements of the impact objectives. Accordingly, organisations using such scheme translate the level of achievements against the different impact objectives into some sort of numeric score, allowing for a linear increase of the carried interest alongside impact results.

In the example below, for instance, achievements against impact objectives correspond to an impact score that amounts to 90%. Therefore, the fund management team is entitled to 90% of the carried interest only.

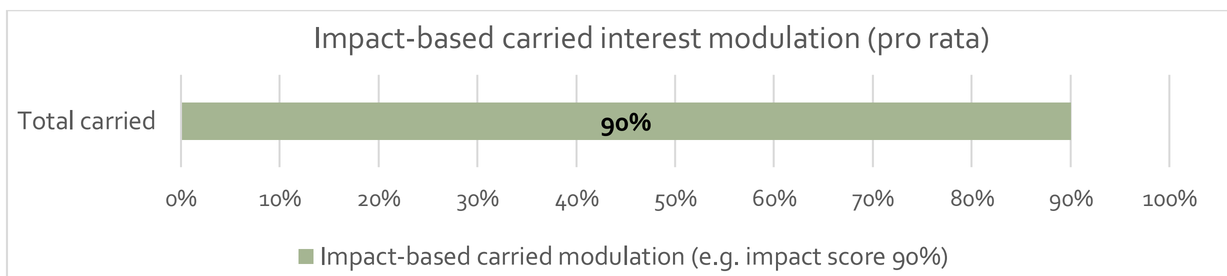

Figure 3: Impact-based carried interest modulation (pro rata)

The fraction of the carried interest that is subject to this impact-based scoring system may here as well vary. In the example below, for instance, only 50% of the carried interest is subject to the fund's impact performance.

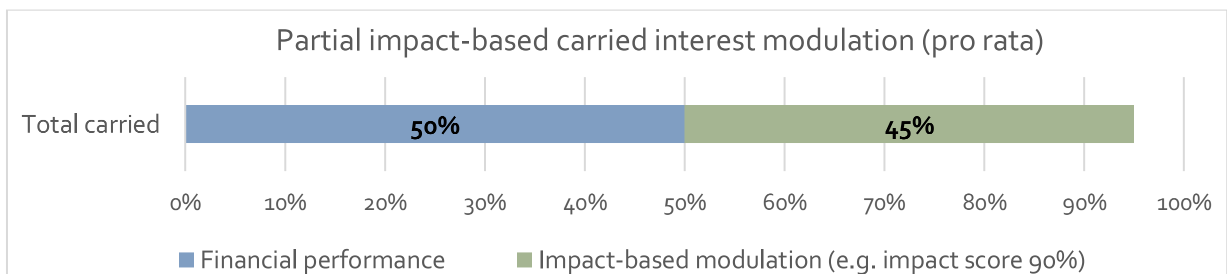

Figure 4: Partial impact-based carried interest modulation (pro rata)

Such scheme is used for instance by the European Investment Fund (EIF) under their Social Impact Accelerator (SIA), a large impact investment fund providing equity via fund of funds investments in social impact funds to support European social enterprises. The EIF has already

committed capital to a dozen European fund managers under that program, among which four of the fifteen impact investment funds that were interviewed for this research. SIA's terms involve that the social impact fund managers commit not only to measure and report on their impact performance, but also to having their carried interest subject to that impact performance in line with the above-described scheme.

1.2. Impact-based carried interest distribution timeframe

The carried interest may be paid either at each individual investment exit on a deal-by-deal basis, or at the time of the fund's liquidation. In this last case, fund managers' impact performance is assessed at a portfolio-level, accounting for overall fund's achievements from an impact perspective over its lifetime. Hence, except in those rare instances where a fund may meaningfully look at a handful of impact metrics that uniquely apply across their investment portfolio, impact fund managers willing to look at their overall portfolio's impact performance must find a way to aggregate a variety of impact metrics. A deal-by-deal carried interest, on the other hand, allows fund managers to look at their impact performance for each investment separately, so that a tailored impact assessment methodology may be defined for each deal.

1.3. Additional considerations

The above impact-based financial reward frameworks require to be able to translate the fund's impact performance into some sort of numeric score or quantifiable terms which may be included in the reward formula. This requires not only to clearly define the impact that is being looked at, but also to be able to set appropriate impact metrics and targets. Moreover, fund managers must think of means to meaningfully include various impact metrics, given that one investment requires to set different metrics and targets to assess all impact dimensions, but also that those impact metrics and targets are likely to differ from one investment to another. Hence, unlike with financial indicators that apply similarly in all circumstances and for all business models, impact fund managers willing to look at their overall impact performance must consider a fairly broad range of impact metrics. The various dimensions of impact that may be assessed, as well as different techniques to aggregate impact into a single scoring system, as identified in the interviews, are presented in section 4 of this work's findings.

Alternative impact-based carried interest distribution

Once the impact metrics and targets conditioning the impact-based carried interest are set, the performance against those objectives might, as highlighted above, be taken into account either simply in the form of a second hurdle applied from an impact perspective in addition to the traditional financial hurdle, or as an actual modulator for the level of carried interest. Both options might also be combined so that the carried interest increases modularly based on the impact achieved but is only distributed above a predefined impact threshold. Consequently, it is possible that such scheme leads to a situation where no carried interest is distributed to the fund management team if they did not meet their impact objectives, even though the financial performance was potentially achieved. In such event that the fund manager does not meet the impact targets and yet delivers above the hurdle from a financial perspective, an interesting twist suggested by some interviewees is to pay the amount foreseen for the carried interest to an independent, non-profit organisation. The later may be defined when launching the fund or chosen by investors at the time of carried interest distribution, based for instance on its appreciable work towards impact ambitions similar to those of the fund's impact thesis.

Limitations of an impact-based carried interest scheme

Although they present a valuable alternative to better incentivise an impact investment fund's impact performance, the identified impact-based carried interest schemes trigger reflection in the context of highly impact-oriented funds. Indeed, in their attempt to take better account of the fund's impact achievements, the above carried interest schemes remain highly dependent on the financial performance of the fund. Even when increasing the fraction of the carried interest which is based on the impact performance, the latter will only be as valuable as the investments' financial returns are high. Instead, a compensation scheme designed for an impact-focused fund should allow, or rather encourage the fund manager to give up part of the financial returns for higher impact achievements.

Faced with that observation, impact-first funds should look for incentive frameworks with reduced influence of the financial performance, while impact-based carried schemes may be left for rather financially-oriented funds seeking returns closer to those of the market. Accordingly, the use of an impact-based bonus, rather than a carried interest, would enable to write off the financial performance influence. Such scheme would indeed provide flexibility not only in defining the capital pool available for the incentive, but also the frequency of distribution, as it is further explained in the next section.

2. IMPACT-BASED BONUS

As mentioned in the GIIN report on impact-based incentives (2011), a financial reward in the form of a bonus, rather than a carried interest, may be more effective when the fund targets relatively low financial returns. Provided that it is based on impact achievements only, an impact-based bonus would indeed contribute to fund manager's compensation in a more meaningful way, while at the same time being totally independent of the fund's financial performance. Two main reasons justify interest for using a bonus scheme rather than an impact-based carried interest, namely the flexibility in defining the amount of the bonus pool and in defining the frequency of distribution.

2.1. Impact-based bonus framework

The amount of the bonus may be defined based on considerations that are irrelevant to the fund's financial performance such as total assets under management, committed capital, or even a predefined flat bonus pool. A bonus scheme would thus enable to shift all dimensions of the reward from the financial to the impact performance of the fund, to the extent that it is influenced by impact objectives only.

The amount available for bonus distribution is something that needs to be discussed with investors. In an impact-first fund, where financial objectives are limited to capital preservation in real terms, investors will have to commit to contribute additional capital to pay for the bonus. They might also be willing to raise the fund's financial objectives slightly, from capital preservation to a level where a bonus might be distributed without requiring additional funding from them. Raising financial targets, however, changes the dynamics of the fund as it alters the balance between impact and financial objectives, hence trading part of the impact objectives for increased financial objectives.

Once the baseline bonus is set, the mechanisms conditioning bonus distribution to the fund's impact performance may be defined similarly to those highlighted for impact-based carried interest schemes. Hence, the bonus distribution may be conditioned to the achievement of predefined impact objectives or the amount of the bonus is adjusted upwards or downwards proportionally to impact over- or under-achievements, or a combination of both. Among the fifteen interviewed impact fund managers who reported about the use of impact-based financial incentives, fund2 was the only one using, in addition to an impact-based carried interest, an impact-based bonus scheme as well. They proceed with a predefined bonus pool, from which

the management team only receives a fraction corresponding to the fund's impact performance over the year as translated into an impact score. Hence, if the base bonus is for instance $100 and the impact score for that year is 85%, then the management team receives $85.

2.2. Impact-based bonus distribution timeframe

Although only one interviewee reported using an impact-based bonus, several of them seemed open to the idea of a financial reward distributed at certain predefined deadlines, hence, based on the fund's impact performance against certain milestones over time. Such framework might make sense in the context of evergreen funds, which are open for an unlimited period of time so that the financial proceeds from investments are returned to the fund and allow continuous financing of new deals. Such structure also allows to provide capital to investees over a longer time period (i.e. providing so-called patient capital) and potentially increase the committed capital over time with existing or new investors. An impact-based bonus might thus be appropriate for evergreen funds, for the management team to have the opportunity to be rewarded for a good impact performance over time.

Two options were identified in the interviews related to the impact-based bonus distribution timeframe. A smaller annual bonus may be used to reflect the quality of the impact work over the year, and/or a larger bonus at investment exit, to reward the management team for their long-term vision and impact performance. On one hand, a bonus paid at exit is a more meaningful incentive provided that impact performance occurs on the longer run. On the other hand, however, the fund manager may lose sight of such remote incentive. Particularly as impact investment funds provide so-called patient capital, investments may last 5 to 10 years and the attractiveness of a bonus only available at exit might be reduced, unless it is a sufficiently meaningful incentive. The carried interest for instance is a long-term incentive as well, yet as advisor3 stressed it is a much more significant incentive and may thus have much more influence on the management team.

All in all, interviewees indicate that many different formulas can be thought of, leaving room for creativity and flexibility to adapt to a particular fund's context. The key is first to understand the rationale for using an impact-based financial reward scheme and see how it may best contribute to securing the fund manager's constant focus on impact.

3. THE CONTRIBUTION OF IMPACT-BASED FINANCIAL REWARD SCHEMES TO SECURING IMPACT FUND MANAGERS' FOCUS ON THE FUND'S IMPACT PERFORMANCE

Whether in the form of a carried interest or a bonus, the value of tying a fund's impact performance to managers' compensation was in turn appreciated, contested and challenged by the interviewees. Interviews revealed an overall interest in the setup of impact-based financial reward schemes, although a high number of challenges and pending issues result in varying levels of trust in such frameworks.

Following Gioia's (Gioia et al., 2013) methodology, a first review of interviews' transcripts enabled to code information in a rather extensive list of opinions and ideas, grouping similar views and concerns in their most representative expression (quotes) which also faithfully reflects the terms used by the interviewees. The extensive list of quotes expressing interviewees' opinions and ideas, which lead to the identification of the first-order concepts, can be found in Appendix II.

The data is presented hereafter following Gioia's (Gioia et al., 2013) data structure, which provides a snapshot of the concepts (first-order concepts) that emerged from the interviews and how they lead to the identification of key themes (second-order themes) related to the setup of an impact-based financial reward scheme. The six identified themes show how an impact-based financial reward scheme may contribute to securing impact fund managers' constant and result-oriented focus on the fund's impact performance, identifying the pros, controversies and challenges related to the setup of such scheme. Further aggregation of all identified themes reveals three dimensions, or building blocks, for an impact-based financial reward scheme to contribute to securing constant focus on impact. The basis of such framework is the impact measurement and management, for which impact fund managers must design a methodology that is best suited to their needs and resources. It is in fact impact management that enables to deliver on improved impact performance, whereas tying that to a reward simply provides a mean to go one step further in securing impact focus. Finally, the setup of an impact-based financial reward scheme requires to pay sufficient attention to incentive risks mitigation, for it to really secure focus towards the desired impact performance and avoid such scheme's potential perverse effects.

Research Question: How can an impact-based financial reward scheme contribute to securing impact investing fund managers' constant focus on the fund's impact performance?

First-Order Concepts	Second-Order Themes	Aggregate Dimensions
• Risk of mission drift, where fund managers let go of the impact for greater financial returns • Need to engage all parties around common impact goals and stress focus on those • Signal of trust for impact-driven stakeholders	Alignment between impact-focused investors, fund managers and investees	Ensuring commitment to impact
• Definition of the fund's impact strategy, ambitious goals and definition of success • Definition of investees' impact metrics and targets based on their impact thesis • Impact measurement and management as a professionalisation process for investees (value add rather than burdensome requirement) • Formalised impact measurement and reporting • From impact measurement and management to impact-based reward	Collaborative impact metrics and targets setting	
• Lack of benchmarks and impact indicators' track record in the impact investing industry • Difficulty to assess impact in all its dimensions	Impact metrics and targets setting complexity	Building on a valuable and sufficiently reliable impact measurement and management
• Trade-off between allowing for flexibility to adapt impact targets and indicators, and ensuring those are fair and ambitious (allow an organisation to evolve and innovate while staying core to its mission)	Impact metrics and targets flexibility	
• A reliable impact measurement and management can be costly • Trade-off between limiting costs by reducing the amount of things you measure, and measuring enough to get a full, reliable picture • Tricky balance between the need for transparent and reliable data, and the costs of an independent, third-party evaluation • Aspiration for a "good enough" impact measurement and management with a good, simple set of metrics • Investors' expectations should be managed	Impact measurement and management cost-reliability balance	
• Bias risk related to how ambitious the targets are, how fair and reliable indicators of success are (risk related to self-audited data) • Risk of providing counter-productive incentives, as a broad impact picture gets reduced to a set of indicators • Incentives direct attention to what it takes to obtain them, potentially stirring impact investing fund managers away from impact considerations at a higher level • Impact-based incentives might easily be tricked	Incentives risks and perverse effects	Mitigating incentive risks

Figure 5: Data structure

First of all, an impact-based financial reward scheme is a valuable incentive to align interests of impact-driven investors and fund managers. For such scheme to work, it is important that impact metrics and targets be collaboratively defined by fund managers and investees, for them to reflect the fund's ambitions while also accounting for the needs and means of the portfolio companies. Yet identifying adequate metrics is a complex process provided that impact may be observed in various dimensions, while setting targets is hindered by the lack of

benchmarks for impact performance in the impact investing industry. Consequently, the defined impact metrics and targets should be open for review as the business evolves, builds track record and refines its impact strategy, yet without losing sight of ambitious, core impact goals. Additionally, fund managers must find a balance in measuring, reporting and evaluating impact, for the reported indicators to deliver sufficient reliability whilst keeping monitoring costs low. Hence, they should focus on a "good enough" impact measurement and management, while making sure that all stakeholders' expectations are met. Finally, fund managers should pay sufficient attention to the potential perverse effects related to the use of incentives and those based on impact performance in particular.

The second-order themes are explained in more details in the following sections, clarifying each time the underlying first-order concepts as identified in the interviews. Explanations are transparently evidenced by ideas and opinions gathered among the twenty-two interviewees and are often illustrated with interviewees' quotes. Finally, as the interviewees often noted that an impact-based financial reward scheme is only one of various mechanisms to secure strong impact performance, those impact safeguards are briefly presented in section 3.7.

3.1. Alignment between impact-focused stakeholders

The first valuable contribution of an impact-based financial reward scheme is that it secures a very good alignment between investors and fund managers as they both seek to maximise impact. The dual set of objectives in impact investment funds implies that a balance should be found between impact and financial considerations. Over the lifetime of the fund, there is a risk that an impact investment fund manager lets go of the impact for greater financial returns, thereby drifting away from the fund's initial impact mission. This risk is even greater when traditional incentive frameworks are in place, as those are designed for classical profits maximisation schemes where stronger financial performance leads to a higher reward.

Setting impact objectives on the other hand, and further tying them to a reward, stirs attention towards the agreed upon impact indicators and objectives. Hence, impact-based carried interest schemes provide a mean to mitigate the risk of mission drift in impact investment funds, ensuring fund managers' focus on impact by tying their variable compensation to their impact performance. The interviewed impact fund managers claim that as they only invest in organisations with an impactful business model, hence providing impactful goods and services, impact and financial returns will automatically grow along. Yet the interviewed advisors and experts, as well as some of the funds, argue that tensions exist

between both dimensions (advisor5, advisor6). Therefore, impact managers should continuously seek how impact can be maximised and ensure that impact is appropriately weighted in all decisions, which might well be incentivised with an impact-based financial reward.

Nevertheless, the risk of mission drift remains high with the implementation of an impact-based carried interest scheme, provided that the amount of such incentive will only be as high as the fund's financial performance was important (advisor3, advisor7, fund13). Whereas such scheme at least secures that some impact goals deemed particularly important will be reached, an impact-based bonus may better shift focus from the financial to the impact objectives.

In any case, an impact-based compensation scheme engages all parties around common impact goals. Indeed, such scheme provides a setup to discuss and align impact ambitions of investors, fund managers and ultimately, the portfolio companies. Hence, an impact-based financial reward scheme lays cards on the table, making sure that everyone is committed to very specific, aligned upon impact goals (fund4).

Finally, the fact that impact fund managers use a variable compensation that is measured against their impact performance is a sign that they will direct their efforts towards impact achievements. It may be seen as a step forward for the impact investing ecosystem in developing its own appropriate tools. Overall, interviewees are receptive to the use of impact-based financial reward schemes and agree with the view expressed by fund1 that tying the variable compensation to the impact performance simply makes a lot of sense in a structure where impact lies at the heart of the mission. For investors who really seek to maximise their investment's impact in particular, this guarantees a complete alignment of interests and helps convincing them that the fund is the right partner for them.

3.2. Collaborative impact metrics and targets setting

The first step in the implementation of an impact-based financial reward scheme is to determine what that impact on which the framework will be based actually is. Hence, what are the impact metrics and indicators that should be considered to demonstrate the fund's impact performance, and thus lead to the potential distribution of a reward?

On one hand, the fund's impact strategy was identified as a starting point for the definition of impact indicators and targets, for those to reflect the level of achievement against the fund's overarching goals (advisor6, fund3, fund6). Hence, impact fund managers should clearly

articulate their impact strategy and set ambitious impact goals, with a clear impact vision of what they are willing to achieve at the fund-level, the type of investees and support provided to them. They should then look at what indicators of success would be, and track those showing whether the fund's objectives have been achieved. It is key for fund managers to have an impact vision and to know where they want to take their investees, to be able to define which indicators might help them increase impact based on the targeted final goal (fund3).

On the other hand, interviewees stressed the importance that impact metrics be defined according to investees' business realities. Hence, metrics should be designed according to portfolio companies' own impact strategy, therefore accounting for their specific impact measurement and management needs. The ambitious goals set at the fund-level are thus confronted to the realities of the field, which might then lead to a review of the fund's impact strategy. Impact metrics should be defined which not only demonstrate whether a particular investment contributes to the success of the fund, but also account for investees' specific context so that "they can be used by the portfolio companies to manage their business" (fund10). For portfolio companies to fulfil the fund's impact reporting requirements, indeed, impact measurement must add value to their impact strategy rather than be seen as burdensome paperwork. Impact fund managers should thus collaboratively define impact indicators with investees based on their clear impact thesis, defining series of metrics that are suited to their environment, specific sector, business model, which they are already tracking or have very concrete interest in tracking (advisor4, fund4, fund7,).

Furthermore, interviews highlighted the value of impact measurement as it allows the management of impact, which further drives its maximisation. Accordingly, as impact-based financial reward schemes require to assess the fund's impact performance, they provide an incentive to systematically implement an appropriate impact measurement and management methodology. Although the setup might be complicated and time-consuming, it provides a truly valuable impact management tool for fund managers to be more efficient in the pursuit of their impact strategy. Impact tracking and reporting requirements for portfolio companies are then part of a professionalization process, as fund managers help them to design their own impact measurement and management framework that adds value to their business practices and activities and consequently helps them improve from an impact perspective.

While it is clear that a good impact assessment methodology brings added value in terms of impact improvements, the benefits of tying compensation to impact indicators were, on the other hand, not as significantly valued by the interviewees. Such scheme does not bring added

value per se in terms of impact management and is rather "a mean for the management team to go in the right direction, but not an end" (fund4). As advisor6 puts it, "impact measurement and management makes us really think about what we are trying to achieve, then tying compensation to that secures fund managers' drive and willingness to go the extra mile".

3.3. Impact metrics and targets setting complexity

Once agreed that impact metrics to be tracked for a specific investment should be defined collaboratively with the fund manager and the investee, another challenge lies in what those indicators should be.

Metrics for an organisation's outputs are indeed fairly easy to define (e.g. the number of meals provided by a school catering business), however those do not tell much information about the real positive change incurred by the beneficiaries. Indicators of outcomes (e.g. health improvements among students eating meals from the school catering business), and ultimately the impact of an organisation, on the other hand, reveal more about the real added value of the organisation's activities, yet they are much harder to design. How much of the change are you responsible for and can really be attributed to what you are doing? Are you sure that such change would not have occurred anyway? Have other players contributed to the change? And, importantly, have your activities generated any negative externalities that would affect your overall impact? (advisor5, advisor6, advisor7)

These questions reflect issues referred to in more academic terms as deadweight – the amount of change that would have happened even without your intervention; attribution – the amount of change that can really be attributed to your activities; displacement – the extent to which the problem was simply transferred to another group of stakeholders; and drop off – the potential fading of impact over time (EVPA, 2015). All of which should be taken into account to provide a fair picture of the organisation's net positive impact.

Moreover, impact occurs at various levels, hence, interviewees suggest to look at the impact not only of portfolio companies' products and services, but also for instance the extent to which investees impact their stakeholders positively (e.g. in terms of treating their workers well, paying their suppliers a fair price, etc.), whether they improve on environmental, social and governance (ESG) standards, whether they innovate in terms of impactful product development, etc. At the fund-level, the management team may look at each investment's contribution to solving the targeted issue, as well as for instance the quality of their work in

supporting portfolio companies to grow their impact, among others. Impact thus materialises in several dimensions which may be considered both at investee- and fund-level, so that it must be decided on which impact facets will be measured and tracked over time and, further, which may be tied to an impact-based financial reward distribution.

Additionally, fund managers may be tempted to look at the impact of their overall portfolio. They may then either set metrics that apply across the entire portfolio or find a technique to aggregate each individual investment's metrics in a meaningful way. Generic metrics present the significant disadvantage that as they are systematically applied to all investees, they may not be suited to reflect each company's own, specific realities. Generic metrics, however, may be used to assess elements that are deemed crucially important to the fund in all circumstances, such as indicators of the investee's social or governance practices. Alternatively, some tools were identified to enable the inclusion of investee-specific metrics in the aggregated impact of the portfolio. Under the EIF scheme, for instance, the impact performance of each portfolio company against their impact targets is translated into a social impact multiple, so that all companies' impact multiples may then be aggregated across the portfolio (EIF, 2017). The potential techniques to design impact indicators reflecting various impact dimensions at both investee- and fund-level, as identified in the interviews, are briefly explained in section 4.

Finally, for an impact-based incentive to reward fund manager's impact performance, it must be clearly agreed on what performance is, and a good performance in particular. Setting good impact indicators is thus not all, it is then necessary to set targets that will be sufficiently ambitious and challenging, and yet attainable. This, however, is a complex process because the impact investing industry is lacking benchmarks. Impact measurement is indeed a very novel practice and "it is very difficult to predict a company's growth and how that will translate into impact" (fund14). Impact investors providing capital to early-stage ventures, in particular, have no idea of what strong or weak performance is, so that it is very difficult for them to set hard impact targets. Impact goals for more mature businesses where there is some track record available, on the other hand, may be set beforehand in such way that tracking them would make more sense. In any case, the challenging definition of appropriate impact indicators and targets requires reasonable flexibility for them to be defined and/or reviewed at a later stage of the investment. (advisor4, fund1, fund14, fund15)

3.4. Impact metrics and targets flexibility

Once impact metrics and targets are set, fund managers should thus consider the extent to which they might be reviewed as portfolio companies' business evolves, particularly if those were set at the beginning of the investment and given the often long-term approach adopted by impact investors as they provide patient capital. Hence, interviewees advise to leave room for flexibility in the fund's impact reporting requirements to allow investees to adapt to potential economic downturns, increased competition in their markets or changes internal to the organisation and potential adaptation of the business model (fund14). As noted by fund11, "there is a tricky balance in making sure that the company stays core to its mission, while at the same time is able to evolve and innovate". Many interviewed impact fund managers allow this flexibility by frequently interacting with their portfolio companies, arguing that this ongoing conversation with them is key to understand their market environment and be better able to refine their impact strategy (fund5, fund6, fund11, fund14).

For impact achievements to be tied to an incentive scheme, however, impact metrics and targets cannot be constantly reviewed (fund6). Otherwise, the reward scheme becomes unchallenging at best if impact objectives are continuously adjusted downwards, or even strongly biased if they are reviewed as to correspond to impact targets which are already being achieved. Hence, impact fund managers should "leave room for flexibility to be able to review metrics that are not suited anymore and account for changes in investees' market environment" (fund6), while also "making sure that the company stays core to its mission" (fund11). Under the EIF scheme, for instance, fund managers have the opportunity to set targets on shorter-term impact forecasts, often the next three years, which may then be revised for the following three-years period based on the recorded achievements (EIF, 2017).

One solution to guarantee the validity of impact metrics and targets updates is to have them checked and approved by any third-party such as for instance the impact committee or investors (fund4). Another alternative is to have a system like that used by fund6 for one of their projects, where they had an independent impact committee in charge of evaluating performance on financial, operational and non-financial (impact and ESG) elements every two years, thereafter making a recommendation to the shareholders for a bonus to be distributed to the fund management team. After reviewing impact performance over the past two years, such scheme thus allows to discuss ambitions and set goals for the next two years, which is a rather manageable timeframe.

Investments may go through a lot of change over time, therefore flexibility is crucial to adapt to each portfolio company's specific means and needs as they grow and adapt to their markets. Fund managers should thus come up with a good impact assessment framework which they apply to their portfolio companies' individual realities, however they should be flexible in doing so (advisor2). Nevertheless, for some objectives deemed particularly important in light of the fund's impact strategy, their achievement might be a sine qua non condition for an investment to be considered successful and entitle the fund manager to the reward, so that they will not be reviewed over time (fund3).

3.5. Impact measurement and management cost-reliability balance

Measuring the impact of an investment adds costs to the project, particularly when it has to be sufficiently reliable as to be a condition for the distribution of a financial reward. The number of things you measure, the extent and frequency of measurement as well as the rigor of the evaluation increase the reliability of impact measurement and management, but also add significant costs to the process by increasing the amount of time and/or resources dedicated to it.

Impact measurement cost-reliability balance

First of all, there is a trade-off between reducing impact indicators to a small number of very simple, standardised metrics, as opposed to a larger number of thorough, specific indicators. While the former provides cheaper, comparable and easily accessible metrics, it yields a poor reflection of reality as you reduce not only the number of things you look at, but also the meaningfulness of those indicators. The second category of metrics, on the other hand, is costly and complicated to obtain. Their uniqueness prevents from comparing impact performance from one investment to another, or to aggregate it at portfolio level. The impact assessment thus needs to be simple, while at the same time not too limited in order to yield a full picture of the reality. While additional costs related to a sound impact assessment methodology may be acceptable for larger investments, it hardly justifies for investments with a smaller ticket size. Similarly, impact reporting requirements for more mature businesses cannot be dictated to portfolio companies that are too early-stage and do not have the human and financial resources, nor the infrastructure to monitor complex metrics yet.

Moreover, the frequency of impact reporting from portfolio companies to the fund manager, and ultimately to the investors, will increase the resources that need to be dedicated

to the process. While frequent impact assessment enables to review, adapt and improve activities and performance, it also increases the costs affiliated with impact monitoring. As fund4 importantly notes, “reporting frequency is not a key element, it is more of an administrative burden and opportunity for providing agile reactions”. Hence, fund managers should assess what frequency of reporting is sufficient to correct potential impact performance going off track, considering also the human and financial resources at hand. In that respect, interviewees are in favour of a light, small-scale monthly to quarterly reporting where portfolio companies share the evolution of business operations (including also financial elements) and report on important impact performance indicators, key updates and achievements against a couple of impact milestones (fund1, fund3, fund5, fund9, fund15), etc. This enforces the previously mentioned importance to make impact assessment an integral part of portfolio companies’ management process, for it to be systematically included in all business practices and decisions so that impact reporting does not cause an additional burden each time. Note that reporting requirements and frequency for portfolio companies should be clearly defined in the investment term sheets to avoid any conflicts afterwards (advisor4, fund1, fund3, fund12).

A more thorough impact review may then be performed annually, with a more extensive suite of assessments including not only the impact of the portfolio company’s products or services, but also improvements in business practices from an environmental, social or governance perspective, innovations and changes increasing the impact of their products or services, etc. (fund2, fund14). Advisor7 also mentions the possibility to complement that with a deep-dive impact assessment for a few portfolio companies every two years. An impact report may then be shared with investors, highlighting impact stories which they are concretely interested in and which show whether their money was spent towards predefined impact objectives. The annual report at fund14, for instance, contains a summary of all the impact metrics tracked and a deep-dive analysis of performance across the portfolio with respect to the fund’s impact focus themes. It is also then that the impact performance is open for review and discussion in the context of an annual impact-based bonus scheme. The annual impact review is an opportunity to assess whether impact performance is on track, what should be done at investee- and fund-level to improve and discuss and agree on the next steps and objectives. Finally, it is important that the impact be assessed at investment exit, as only then you can really have a view on the impact you've had throughout the investment's lifetime (advisor3).

Impact verification cost-reliability balance

Another significant costs discussion relates to the extent to which impact will be verified. Often, data is first self-reported by portfolio companies. Fund managers must thus first decide to what extent they check whether the reported information is sufficiently meaningful and trustworthy. This work can be done in-house by the fund managers or the Chief Financial Officer alone (fund2), an internal impact advisory team (fund15), or the collaborative work of an internal investment and impact committees (fund14). Investors are also very involved at fund14 for instance: they review information on impact monitoring very closely and actually specifically work with the fund on some issues that are deemed very important to their strategy. However, as investees and fund managers collectively perform the collection and analysis of their own impact data, the reliability of such assessment may be questioned. Fund managers might thus rely on an independent organisation instead to collect and analyse the data to provide the fund with the conclusions (advisor7), or one that verifies the quality and validity of the reported data. Particularly if the observed impact performance is subject to contribute to the compensation of the fund manager, the latter cannot certify themselves (advisor3, fund1, fund3, fund6). For fund1, having an independent, external impact audit was clearly a requirement if they wanted to have some sort of carried interest based on impact, as tying compensation to self-audited results creates an agency problem.

Although there is consensus that a third-party audit is required to certify the validity of the reported impact performance and guarantee transparency and objectivity of the process, the nature of that verification may vary according to the fund's needs and resources, as different parties exist with different levels of rigor and independency. A less formal impact audit may well work for instance for impact investment funds where managers have frequent, quality interactions with their investors. At fund2, for instance, the reported impact is verified by an independent impact audit committee composed of three members, which are somehow affiliated with the fund (e.g. personal investors) and "for one or another reason have a foot involved in the venture capital world and in the mission-focused impact investing world".

For a higher level of reliability, impact can be verified by an external, professional third-party. Fund1 and fund11 for instance rely on the Global Impact Investing Reporting Standards (GIIRS), which provides an annual rating for impact investment funds based on the assessment of their performance against five key dimensions: governance, workers, community, environment and customers. The tool enables not only to assess the fund's impact performance, but also to benefit from a third-party verification as GIIRS verifies that the data that is reported

to them makes sense. Additionally, it provides a benchmark as all GIIRS-rated funds are then included in GIIRS' database, so that their performance may be compared on each of the evaluated aspects. Although the interviewed funds using GIIRS believe that the tool is currently the best option to report and verify impact data at low cost, they admit that the methodology is not perfect provided that only part of the reported data is checked and the assessment is probably too generic to really tell about impact.

Lastly, impact auditors may guarantee a highly reliable certification of an organisation's performance. Traditional audit firms have indeed started developing expertise in non-financial reporting (e.g. Price, Ernst a Young, PricewaterhouseCoopers), while also specialised impact audit organisations appear (fund6). Although suggested several times in the interviews, the option is not really used by the interviewed funds, probably as a matter of the costs affiliated with such service and because qualified audit firms for impact assessment are not well developed yet. Only fund6 mention their intent to rely on such professional party at the time of their fund's exit, when an impact-based carried interest will be applied for which a high level of impact audit is thus deemed necessary.

Impact fund managers may also rely on such third-party verification on a need basis. Fund9, for instance, states that "in the event that the fund managers, the investment committee or investors see there is an issue or don't trust the impact metrics which have been reported, we have the opportunity to have a third-party check the report or the impact metrics". All in all, the key here is thus to find a balance between the aspiration for transparent, reliable data and the costs affiliated with an independent, third-party impact evaluation. As advisor5 observes, "whether you want an external party to audit your data is a trick of the costs and what you benefit from having that (…) most funds are not really having someone look at the impact they achieved".

Finding the right balance

Whether for the design of an impact-based financial reward scheme, or simply an impact assessment methodology, impact fund managers must decide on what they will measure and how, the frequency of impact assessment and level of rigor of the verification. On one hand, the amount of time and resources that a fund manager may dedicate to their impact assessment depends on the fund's size, strategy, tickets size and investors' expectations. On the other hand, what they may ask investees in terms of impact measurement and reporting further depends on investees' size and resources and on the investment ticket. Accordingly, there is consensus that

impact measurement and management should be limited to what is "good enough", hence, sufficiently precise for informed, efficient decision-making and a resulting improved impact performance. Therefore, it is important that the implementation of an impact-based financial reward scheme does not over-complexify the existing assessment requirements, but rather strengthens the measurement and management of impact dimensions that should anyway be tracked as part of a continuous improvement process. Hence, the "shortest, sweetest, most focused metrics which will secure the most impact, are those to evaluate" (advisor2).

3.6. Incentive risks and perverse effects

Adding to the challenges related to impact measurement and management, some risks specifically arise from the use of incentives, and of impact-based incentives in particular. First of all, "as with any incentive, there is a bias in how ambitious the targets are" (fund6). Hence, fund managers may be tempted to set impact objectives that are easy to achieve and make those the condition for the reward to be distributed. The bias risk is even greater as impact fund managers often lack benchmarks and track record to be able to reliably define what challenging, though realistic objectives may be.

There is also a risk that impact-based financial reward schemes provide counter-productive incentives. As impact materialises in many dimensions, they might not all be included in the impact-based incentive scheme. Yet the selection of certain elements only directs attention towards those, potentially at the expense of other important elements. Additionally, the complex definition of impact metrics and targets makes it particularly challenging to design fair and reliable indicators of success, as often only outputs or outcomes are being looked at. Hence, as a broad impact picture gets reduced to a set of indicators, fund managers should be careful in setting hard impact goals and increase performance according to those, while aspects which are not being measured deteriorate. Fund14 exemplifies this issue with one of their objectives, which is to prompt portfolio companies to rely on a larger number of suppliers. While setting goals in terms of number of suppliers might well increase performance against that indicator, using that single metric might result in companies buying only very small amounts to each supplier, making the overall situation worse than before the fund's action. Impact-based incentives might thus have perverse effects as fund managers focus on what it takes to have the reward and look at those few requirements individually, whilst losing sights of a broader vision of impact. Similarly, there is a risk when the reward scheme is fully based on the impact

performance that the fund managers ease up on their efforts from a financial perspective, which might harm the fund's overall strategy if they fail for instance to return capital (advisor6).

3.7. Other impact safeguards in fund's structure and investment process

Each fund may design its own impact incentivisation framework, as soon as it is something that impact fund managers are happy to deliver on and which satisfies their investors. Hence, fund managers need to know what they want, while also making sure to manage their investors' expectations. Accordingly, impact-first funds may not always charge a carried interest (advisor5, advisor6, fund13) and may rather have something less formalised if they know their investors well. For those funds where investors have a particular sensitivity for impact and yet strong financial expectations, on the other hand, tying certain key impact requirements to a traditional carried interest scheme might well work.

Findings indicate that impact-oriented investors mainly positively welcome the idea of an incentive tied to the fund's impact performance, yet they would be open to other frameworks demonstrating that impact is awarded sufficient attention within the fund (advisor3, advisor6, fund1, fund9, fund12). Accordingly, it appeared that impact-based financial reward schemes are only one of a number of tools and safeguards that may be used to secure strong focus on impact. While the process of setting up an impact-based incentive in itself is valuable for discussing, aligning with and committing to impact objectives, it is not what secures impact achievements per se: as stated by fund6, "it is the impact investment strategy, and the engagement of the investment team driving it, which will really secure impact by making it a priority". In fact, several mechanisms were identified in the interviews that enable to secure strong impact focus and consequently better impact performance in an impact investment fund, which impact-based financial incentives may only complement. The variety of impact safeguards that impact fund managers may use are presented below, starting from the structuring of the fund and definition of the impact strategy, then following along the investment process.

First of all, a key lever for impact performance is to have an ambitious impact vision shared by investors and the management team and a clearly defined impact strategy. What is the problem? What are the fund's objectives? How will we tackle the problem? What do we expect investees to achieve and how will we help them get there? The answers to those questions may be articulated in a theory of change, which was thought by interviewees to be a key tool for defining, reviewing and improving an organisation's impact. The impact strategy must then be

carried out by an impact-driven team that is committed to impact, as the interviewees argued that a great deal of motivation towards impact is intrinsic. The investment team should care deeply about the pursued impact goals and have some specific knowledge or experience related to the fund's impact strategy (fund2, fund12, fund13). Finally, it is important that the fund operates consistently with its impact mission by demonstrating impact-oriented culture and business practices (fund2, fund13). Impact may for instance be secured by having investors and Board members who care deeply about impact, setting up an impact committee with the key role to ensure that impact is awarded sufficient attention, implementing and following best ESG business practices, etc.

Then, the deal screening and due diligence investment phases are key to guarantee the delivery of significant impact. By investing only in businesses where core impact generation is tied to the growth of the company, increased impact delivery is guaranteed as long as the business performs well (fund15). Before any investment, fund12 consistently asks the following questions: does it fit our investment thesis categories? Does it have real impact? Is there anything about that company that makes us uncomfortable? Additionally, they make sure to invest in companies who are willing to improve both their impact performance and business practices, so that their investment will have a real additionality and help them deliver increased impact. Fund6 adds to the subjective screening discussion a more formal assessment in the form of a notation grid, which is applied to all investment opportunities. Based on considerations on both core business model impact and the organisation's ESG practices, each company is assigned a score on 100%. The score gives a good idea of how the company performs overall on those criteria that are deemed important to the fund and is a valuable tool to objectively assess the deal from an impact perspective, yet it is only used in addition to the discussions and analysis performed by the team. Finally, it is important that the impact committee be consulted for advice, to have them challenge the impact side of the business.

Thereafter, a simple mean to secure impact performance is to set strong, minimum impact standards that are formalised in contractual terms with investees during the deal structuring phase (fund13). Setting formalised impact deliverables and reporting requirements already in the investment term sheets is key to enforce those later and hold portfolio companies accountable for it (fund14). Impact covenants might also allow the fund manager to divest deals that do not meet impact requirements.

During the lifetime of the investment, portfolio companies' impact performance can be enhanced by having an ongoing conversation with them, rather than always focusing on hard,

quantitative goals (advisor2, fund13). Frequent discussions allow to have a good visibility on what is going on throughout the year, to understand the dynamics of the company as a whole and take into account cyclical or company-specific potential downturns (fund14). It also provides an opportunity to discuss their impact strategies with investees, ask what they need to improve from an impact perspective and see how fund manager's non-financial support might help them get there, which further safeguards impact performance (fund15).

Finally, it is key that impact fund managers secure mission-aligned exits, hence, not driving an exit with the intent to maximise the financial returns, but rather at a time and in a way that secure the most value in all impact dimensions. The fund manager should make sure that the portfolio company has become a resilient organisation with a strong impact culture and business activities with a proven positive impact, which is also financially sustainable to be able to guarantee impact in the long run. The fund manager could also have ensured with formal means that the company's impact-driven mission will be secured over time, making sure in particular that potential follow-on investors will maintain or expand the company's mission, for instance by including a specific impact-related clause in contracts with potential acquirer.

4. IMPACT MEASUREMENT AND MANAGEMENT

Building on the variety of impact assessment methodologies suggested in the interviews, this section identifies the key impact dimensions that may be assessed at both investee- and fund-level. It highlights potential metrics suggested during the interviews, as well as convenient tools to define and measure them. As it already appeared in the literature review, the IRIS metrics and GIIRS rating are common standards. Unless the interviewees mentioned using completely self-designed tools and metrics, they systematically referred to IRIS, GIIRS, the B Impact Assessment and B Corp certification from B Lab and to some extent the Sustainable Development Goals (SDGs). Only fund7 declared using the SROI calculation. The interviewees overall appreciate the ease-of-use and shared understanding provided by standardised tools, yet they recognise that those are not always best suited to individual organisation's contexts. A brief description of all tools mentioned in this section can be found in Appendix IV (alongside other impact assessment tools, principles and organisations contributing to the setting of impact standards). Where useful to aggregate, interviewees also provided series of metrics and techniques to assess the aggregated portfolio impact performance, which are presented in the second section.

4.1. Impact dimensions

As identified in the interviews, impact materialises in various dimensions, at both investee- and fund-level, which may be considered as a baseline for an impact-based financial reward.

❖ **Net positive impact**

Investee-level net positive impact

The net positive impact is directly related to the organisation's core business and the delivered products and services, so that it is likely to grow as the business scales up and increases sales or service delivery. Impact fund managers can look at their investees' net positive impact by setting business-specific indicators, about 3-5 per portfolio companies as recommended by the interviewees (advisor2, fund5, fund11). Those are the 3-5 KPIs providing in a snapshot a sufficiently good and reliable picture of the change triggered by the company's activities. They should be tracked by portfolio companies anyway as a valuable part of their business management. The definition of such KPIs implies to first wonder: what is the effect that we are looking at? And there might be more than one, but it should be focused on those deemed particularly important. A second question is then: what would be appropriate indicators

reflecting that effect? Here as well there might be more than one and it might be a combination of qualitative and quantitative indicators.

In addition to tracking those 3-5 KPIs, series of questions should be observed to reflect on other effects which the company's activities might have which are not included in the KPIs and are not necessarily desirable or expected: would (part of) the change have happened even without the company's intervention (deadweight)? How much of the change can really be attributed to their activities (attribution)? Have their activities transferred (part of) the problem to another group of stakeholders (displacement)? Is the change sustainable over time? These questions should be considered at least qualitatively to see whether the expected impact really materialises, because often the KPIs will only reflect the delivered outputs or in the best case, outcomes. Additionally, the company's performance should be benchmarked with other players and compared to the size of the issue, in order to assess the value of the investee's contribution.

Handy tools to reflect on the effects of a portfolio company's activities and set relevant KPIs are for instance the Impact Value Map from Social Value UK, the Impact Data Categories Worksheet from the Impact Management Project, or the Social Business Scorecard from CERISE. Inspiration for impact indicators can also be found on IRIS, yet although the IRIS database is a good starting point it really provides indicators of outputs, or outcomes at best, so that adjustments should be made to really have an idea of the delivered impact.

Fund-level aggregated impact

Aggregating impact at the fund-level provides an idea of the fund's achievements towards the overarching goals, whilst allowing to assess the extent to which each individual investment contributes to the overall performance (advisor6, advisor7). The interviewees helped identify several means to aggregate impact at a portfolio-level and thus have an idea of the overall fund's performance, which are described in the second part of this section.

A handy tool for impact fund managers to evaluate their fund's performance as a whole is the GIIRS rating from B Lab. The GIIRS rating provides a score reflecting the overall performance of an impact investment fund based on an assessment of portfolio companies' performance on the B Impact Assessment, as well as the impact intent of the fund.

❖ Environmental, social and governance (ESG) standards and processes

Investee-level ESG standards and processes

Apart from their core business impact, portfolio companies also have an impact resulting from their business practices, the extent to which they treat the environment and their stakeholders well and have quality internal governance processes. Fund managers may thus want to look at the extent to which impact is engrained in their culture and business practices (fund12, fund13) and whether they improve on ESG standards. Particularly for mission-driven organisations, fund managers should expect high standards of business responsibility and be willing to see that they continuously seek to increase the quality of their ESG practices.

A handy tool to assess the quality of an organisation's business practices against ESG standards is the B Impact Assessment from B Lab, which rates organisations' practices with regards to their environment, community, customers, workers and governance. The B Impact Assessment, was referred to by fund13 as a very lean tool that does not require much effort for collecting information, reflects a holistic view of an organisation's practices and demonstrates an impact-oriented business culture. Having all portfolio companies, as well as the fund manager, become B Corp would therefore evidence strongly impact-oriented businesses. Alternatively, the Social Value Certificate from Social Value International verifies the quality of an organisation's efforts towards maximizing its social value.

Fund-level ESG standards and processes

An impact-oriented culture, in line with ESG standards, can also be enforced at the fund-level (fund13). Valuable impact-oriented practices at the fund-level include having fund managers and board members with passion for impact, an impact committee with impact-oriented profiles (e.g. environmental experts and/or people with a non-profit background), transparency and quality relationships with co-investors, etc.

Handy tools to assess the quality of the fund manager's ESG standards are the fund version of the B Impact Assessment and GIIRS rating from B Lab, or the Impact-Driven Investor Assessment from CERISE.

❖ Additionality

Investee-level additionality

The additionality of a portfolio company can be assessed by looking at the novelty and the efficiency of their solution to solving the targeted issue (advisor7, fund3). Key questions to assess an investment's contribution to solving the fund's targeted issue include the following: what is the quality of the investee's theory of change, hence, what is the targeted positive environmental impact and how do company's activities allow to get there? How pertinent is the solution with regards to fund's impact thesis? How innovative? How efficient is the solution, comparing also with what already exists? Is the company targeting an urgent, underserved issue? One that is currently being tackled by a very limited number of actors only?

As suggested by fund2, the quality of the solution can be valued by benchmarking with the "next best alternative" available on the market should the investee not exist, to see how much better the proposed solution is versus that next best alternative.

Fund-level additionality

The concept of additionality at a fund-level really looks at the contribution of the fund manager's work and the support provided to the portfolio companies against a series of criteria (fund3, fund6). The fund manager may for instance assist portfolio companies in growing their core business impact by helping them build their own theory of change, reflect on their impact strategy, implement an impact assessment framework, etc. They may help investees to secure financial sustainability of their business (e.g. working with them on refining their business model, increasing revenue growth, improving margins, etc.), because sustaining and growing the business over time is key to maintain and improve on the delivery of impact. Finally, the fund manager may provide non-financial support for portfolio companies to improve on their ESG practices. They identify with the investee key areas of improvement and work on helping them to get there, for instance to implement more sustainable business practices, fair remuneration across the supply chain or a more diverse workforce (fund3), improve the quality of jobs and security at work, move towards green energy and a better waste management system (fund6), etc. Hence, it is the fund manager's role and real additionality potential not only to prompt investees to improve on various aspects, but also help them along the process for instance with regular on-sites visit, human resources available for support (financial, management, governance), etc.

In addition to that impact-related additionality, the fund manager may also bring financial additionality by investing in deals that are overlooked by other investors and yet promise significant, lasting impact on a large scale. They may also for instance help to catalyse other investors' capital, use financial instruments that are best suited to investees' needs, provide capital for a longer period of time (i.e. patient capital), secure impact-driven exits, etc.

Handy tools to assess a fund manager's additionality for portfolio companies are any lists of areas for non-financial support as provided by leading industry organisations such as the EVPA (Appendix III). Although general frameworks at hand are useful to identify a list of potential areas of value addition, the specific set of non-financial support areas should be tailored to the fund's impact strategy and resources, management team's specific expertise as well as investees' needs. The B Impact Assessment for fund managers also includes several checks for additionality, including for instance the support provided to the investees to track their impact performance, the presence of a contract with the acquirer for the continuity of the mission at exit, etc.

- **Responsiveness**

Investee-level responsiveness

Finally, responsiveness was mentioned as a very lean measure, simply asking stakeholders: "how responsive do you think we are to your needs?" (advisor4). Considering that a responsive organisation is more likely to increase impact, evidence of responsiveness at the investee-level ensures that the organisation remains focused on delivering products or services that are valuable to their beneficiaries. Responsiveness is thus a concept which is rather applicable for organisations pursuing a social, rather than environmental mission.

Evidence of responsiveness may be collected, for instance, via end-user feedback, satisfaction surveys, etc.

Fund-level responsiveness

At the fund-level, responsiveness is related to the fund manager's ability to react to the investees' needs. It is strongly related to the quality and value of non-financial support for the investee and includes, for instance, providing adequate form of funding, not pushing for an early exit, accepting to postpone if needed…

Evidence of responsiveness may be collected, for instance, via satisfaction surveys.

4.2. Aggregated impact at portfolio-level

Three main categories of aggregation techniques were identified in the interviews. First, a common set of indicators might be used across the portfolio, which is the easiest but also the least meaningful solution. Top-down indicators, indeed, may not properly reflect specific business activities of individual portfolio companies. Yet some interviewees declared to have indicators that are key to the fund applied across the portfolio, such as ESG criteria (e.g. gender ratio, number of jobs created, etc.) or a score for the organisation's responsiveness towards their beneficiaries' needs. Key goals might for instance be defined at the fund-level, and performance of each individual investee against those assessed.

An alternative is to look at a varied set of quantifiable impact metrics and measure the relative increase over time, then aggregate the obtained ratios. Once a company has some track record for the observed KPIs, impact projections might also be defined for instance by drawing an expected impact curve. This enables to compare those projections with the delivered impact, which allows to compute relative impact performance ratios for each KPI and thereafter aggregate them. In the setup of an impact-based bonus for instance, the minimum thresholds conditioning the bonus distribution should rise over time to reflect increased impact delivery, whilst allowing for the possibility to review projections if strong deviations are observed (advisor4).

Finally, impact monetisation techniques assign a monetary value to the various impact achievements, according to their importance, so that they may then be easily aggregated (advisor5). Fund7 for instance uses the SROI calculation, which was already described in the literature review.

CHAPTER IV. DISCUSSION

There was an overall agreement among the interviewees that there is no "one size fits all", whether looking at impact-based incentives or impact measurement and management methodologies. Impact fund managers develop those frameworks according to their resources and needs, adapting to their own context as well as that of their portfolio companies, while the extent of the assessment and level of rigor applied depends on the expectations of investors and the nature of fund managers' relationship with them.

When articulating them all together, findings from the interviews allowed to build the theory model below, which clearly identifies all interactions driving the contribution of an impact-based financial reward scheme to securing the impact investment fund manager's constant focus on the fund's impact performance. A valuable and sufficiently reliable impact assessment methodology is the foundation of the framework, which ensures fund manager's commitment to impact to the extent that incentive risks are appropriately mitigated.

The contribution of an impact-based financial reward scheme to securing impact investing fund managers' constant focus on the fund's impact performance

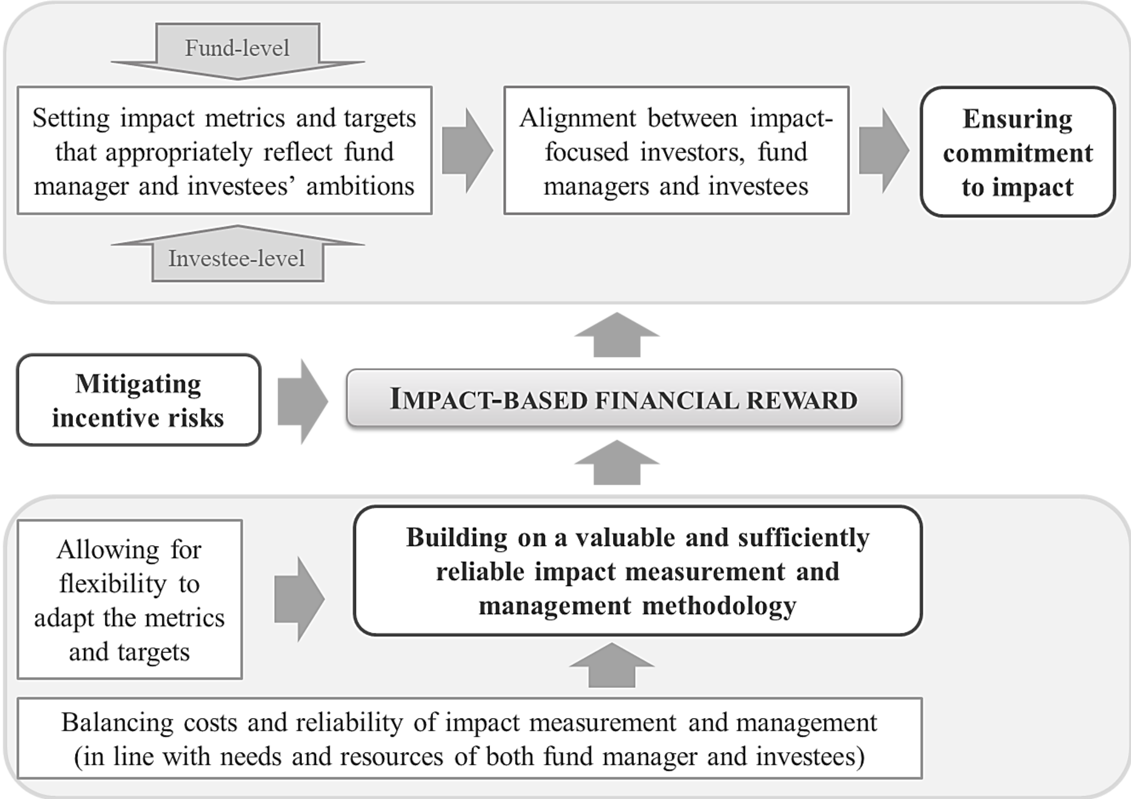

Figure 6: Theory model

This research contributes to the knowledge on impact-based financial reward schemes for impact fund managers by discussing in details the underlying requirements, implementation

challenges as well as potential value add of such framework, as identified from twenty-two interviews conducted with key players in the impact investing field. The theory model, in light of the detailed findings highlighted in the previous sections, provides indications for designing incentive schemes for impact fund managers by tying their variable compensation to the fund's impact performance.

Building on a valuable, sufficiently reliable impact measurement and management

In line with the literature, the interviews confirmed that impact assessment plays a key role in maintaining strong impact focus. It appeared that while impact measurement and management is a mean to really improve performance in order to maximise impact, tying such evaluation to a reward really is one of several means to go one step further. In any case, an impact-based financial reward scheme will only be as good and reliable as the data that it is based on. Hence, the quality of the impact metrics and their assessment are key to the process. Yet designing reliable impact metrics and setting appropriate targets remains challenging and the interviewees, in line with the academic literature, revealed strong aspiration for improved, easy-to-use tools to measure and manage their impact. This research complements the existing literature by considering impact measurement and management for the specific purpose of designing an impact-based financial incentive scheme to reward an impact investment fund manager for a valuable impact performance. It suggests that impact fund managers, particularly in the context of an impact-based financial reward scheme, should rely on an impact assessment methodology that is simple enough to deliver the required level of reliability whilst keeping the related costs and efforts reasonably low.

Mitigating incentive risks

Impact measurement, at this stage of development of the impact investing industry, remains complicated and imperfect. Therefore, the inclusion of impact metrics and targets in a reward formula should be carefully thought through in order to mitigate risks related to an impact-based financial reward setup (i.e. the risk to have biased incentives if targets are too easily achieved and the risk to provide counter-productive incentives as a broad impact picture gets reduced to a set of indicators). This implies setting impact objectives that are relatively simple in their definition and deemed particularly important to the fund's impact thesis, hence, those that should be achieved for the fund manager to exit an investment thinking that they have successfully contributed to the achievement of their fund's overarching impact goals. Additionally, evaluating impact still involves a great deal of qualitative assessment, which

should not be underestimated when designing an impact-based financial reward mechanism. The process requires to determine how and by whom the impact metrics and targets will be set to guarantee their fairness, but also when and by whom impact will be verified and the level of rigor required in that process, among other recommendations highlighted in this work's findings. Hence, this research should help anyone willing to implement an impact-based financial reward scheme to reflect on the potential challenges and drawdowns of the mechanism and help them to consider how they will mitigate incentive's perverse effects risk.

Ensuring commitment to impact

Finally, to the extent that it builds on a sufficiently reliable impact assessment methodology and appropriately mitigates the risks associated with impact-based incentives, an impact-based financial reward scheme might well contribute to securing the fund's impact performance by ensuring the fund manager's commitment to impact. As impact investment funds provide capital to ventures with an impactful business model, investees' growth should automatically increase their impact to a certain extent. Yet the interviews clearly demonstrated that increased impact could be delivered on many more dimensions at both investee- and fund-level. By tying the fund manager's variable compensation to objectives deemed particularly important to deliver overall significant impact across the fund's portfolio, an impact-based financial reward scheme ensures their focus on those. Therefore, and because using the classic PE/VC incentive schemes proves to be inappropriate in an impact investment fund context, the interviewees in this research demonstrated overall strong interest in impact-based financial reward mechanisms. Yet they were not all fully convinced of the added value that such scheme would deliver and suggested to consider other mechanisms in addition to, or instead of, implementing an impact-based financial reward framework (e.g. including strict impact covenants in investees' term sheets, hiring staff who cares deeply about impact, setting an impact committee, etc.).

All in all, an impact-based financial reward scheme is only part of the solution and comes with its share of challenges and risks. However, to the condition that those are properly managed, an impact-based financial reward scheme might well complement other tools and impact practices in securing a strong, collective commitment to impact. Building on the fund's impact measurement and management methodology, it helps ensuring management team's commitment to impact in line with investors' expectations. This research contributes to the currently scarce documentation on impact-based financial reward schemes not only by highlighting more examples of such framework, but also by discussing how it may be

concretely implemented to secure impact investment fund manager’s constant focus on the fund’s impact performance.

CHAPTER V. ETHICAL CONSIDERATIONS

The concerns raised with impact-based financial reward schemes are one example of a broader movement towards responsible investment practices. Whilst the traditional financial mechanisms and investment tools have been shaped by years of investing with the sole ambition to fulfil self-interested profit-maximising objectives, the rise of ethical concerns about the way capital is used worldwide call for new investment practices and tools that better reflect these growing ethical concerns (Cetindamar & Ozkazanc-Pan, 2017; Hellsten & Mallin, 2006). This chapter first discusses how impact investing plays a key role in that movement for responsible finance, then highlights how these new investment objectives call for more impact-oriented financing instruments, of which impact-based financial reward schemes are one example. Finally, it highlights how a particular attention should be paid to design a fair impact-based incentive securing optimal focus on impact.

The rise of responsible investment practices

The current global challenges on both social and environmental fronts, as well as global doubts casted by the 2008 financial crisis, have raised aspirations for more ethical and responsible economic behaviours. Accordingly, the purpose of finance has progressively shifted and investing is considered by a growing number of people as a mean to achieve much more than profits maximisation. They call for financial instruments leveraging capital to develop and scale the solutions to progress towards a more inclusive and sustainable economy. (Hellsten & Mallin, 2006)

Following the thoughts of Bugg-Levine & Emerson (2011), the new financial paradigm is, or should be, focused on blended value creation. Hence, financial, social and environmental deliverables should be considered and pursued simultaneously, rather than in silos. In this “world of blended value” (Bugg-Levine & Emerson, 2011, p.15), social enterprises develop revenue-generating business models to pursue clearly defined social and/or environmental missions; governments leverage capital to address our world’s pressing challenges; financial intermediaries facilitate the supply and demand of capital for socially responsible ventures (Viviani, 2018); and of course, impact investors provide capital with the aim to deliver financial returns alongside social and/or environmental impact. This requires that the workforce in business and financial sectors be skilled to include economic, social and environmental dimensions in all decisions, whilst shared frameworks be developed for a standardised

measurement of blended value to define strategies and drive decisions accordingly. (Bugg-Levine & Emerson, 2011)

In line with that vision, impact investing keeps gaining momentum in the global movement seeking to infuse more ethics in business and financial practices. Yet as the impact investing market grows, a whole lot of different strategies develop that place more or less emphasis on impact, so that it is often argued that a clear definition of impact investing is lacking (Höchstädter & Scheck, 2015). In his brief on *Solution-Driven Finance: The New Way of "Impact First"*, Grabenwarter (2017) calls for bringing focus back on the impact delivered with impact investing. According to him, we are too often satisfied to see that the capital contributed to impact investing increases, whilst those investments are in fact stuck with "obsolete financial market logic". We must instead change our investment strategies for them to have impact at their core, so that impact investing is driven by the search for solutions to the current challenges faced globally rather than self-satisfying impression of doing good (Grabenwarter, 2017; A. Nicholls, 2009). The scale of today's challenges requires for impact investments to deliver on their impact promise, which calls for new principles and methods in which impact is appropriately weighted. Following this line of thoughts, impact-based financial reward schemes are developed with this strong requirement in mind: how can we make sure that it is impact, first?

The development of impact-driven financing instruments

As already highlighted in the literature review, the reflection on impact-based financial reward schemes is one of several examples where traditional financial instruments are being reviewed to place greater emphasis on impact. As noted by Cetindamar & Ozkazanc-Pan (2017), the risk of mission drift results from a dissociation between the end goal of an intervention and the means employed to reach that goal. Accordingly, the use of profit-oriented tools to achieve positive social and/or environmental objectives risks putting the mission at stake. In line with that reasoning, new financial instruments have developed which place a greater emphasis on impact deliverables. Pay-for-success contracts, for instance, aim to catalyse investors' capital to finance solution-oriented ventures improving society's well-being. These mechanisms ensure that the creation of social and/or environmental value is incentivised.

Impact-based financial reward schemes, such as impact-based carried interest, are another example of such mechanism in the context of an impact investment fund. By reducing, or even suppressing the incentive towards profits maximisation, those frameworks allow to reconnect

with impact investment fund's ethical concerns. Hence, they place the achievements of social and environmental objectives back at the heart of the impact investment process. Therefore, this research contributes to the development of fair and ethical investment practices for impact investment funds, by suggesting how a reward scheme based on the fund manager's performance may best strengthen the impact mission of the fund.

A fair impact-based incentive securing optimal focus in impact

The impact-based financial reward structure suggested in this paper is thus aimed at reconnecting the incentive with the fund's impact ambitions. To follow through with that reasoning, it is good to look at what the proceeds from the reward scheme will be used for. Whilst a first option is to distribute financial gains among individual team members, an alternative is to use those additional revenues in a way that would deliver even more impact. In a reflection on the theme of "smarter money", Asok (2018) suggests that financial rewards distributed for the delivery of increased social and/or environmental value should serve the delivery of even greater impact, rather than increase profits for the individual management team members. Just like social enterprises first reinvest their profits to sustain their business in a way that maximises the value for all their stakeholders rather than that of their shareholders, impact fund managers should seek to use the extra revenues in a way that their overall positive impact may be improved.

Accordingly, the impact-based financial reward scheme should not only reward the fund manager for appreciable impact work, but also provide the means to drive impact even further. The extra revenues generated by the implemented impact-based financial reward scheme should not necessarily go to the individual investment team members as personal financial gains for their own performance, but rather serve the organisation as a whole. Hence, the money can be used to grow and improve as an organisation, for instance to provide staff trainings, develop the business and hire highly qualified staff, develop or acquire new tools, etc. Going even one step further, an alternative is that the proceeds from the reward, or at least a fraction of it, go to a specific envelope dedicated to financial interventions for increased impact delivery. In line with that idea, impact investment funds sometimes use a Technical Assistance (TA) pool, which is a capital pool apart from the fund that is used to strengthen various impact dimensions in the portfolio. A TA pool might for instance pay for an external impact audit, provide team trainings on ESG or governance best practices, develop tools for improved impact management in the portfolio companies and provide them with assistance and training, etc. (Balandina, 2016; GIIN, 2011).

In that respect, the reward scheme is a mean to secure strong impact focus, rather than an end for increased personal financial gains. It places a strong emphasis on the investment manager’s impact-oriented processes and culture, the impact performance of the impact investment fund manager itself as an organisation rather than the sole impact performance of the investees, the non-financial support provided to investees for them to generate more impact, etc. By tying a reward to the fund’s performance on those impact dimensions, then making sure that the additional financial means are used to generate even more impact, the impact-based financial reward scheme provides an optimal fit with the fund’s impact-first mission.

CONCLUSION

This research helps to determine how an optimal impact-based financial reward scheme might be set up for an impact-first investment fund. Several examples of such schemes already exist where impact fund managers have linked their variable compensation frameworks to their fund's impact performance, however the topic remains very much untapped. Therefore, this research mostly relies on the data collected via twenty-two interviews conducted with key players of the impact investing industry, who shared their insights on impact-based financial reward mechanisms for impact fund managers.

Findings indicate that a reliable impact measurement and management is the foundation for an impact-based financial reward scheme. It is also what really helps to improve impact performance, whilst an impact-based financial reward scheme is only an additional mean to secure fund managers' focus on impact. However, and although impact measurement is increasingly discussed by both practitioners and scholars, the process remains challenging. Current impact assessment methodologies do not yet provide convenient frameworks to yield fair and reliable pictures of broad impact realities, which therefore adds complexity to the implementation of reliable impact-based financial reward schemes relying on those. Therefore, according to this work's findings, the impact evaluations at the core of impact-based financial reward schemes should appropriately account for each impact fund's realities, to provide a framework that is deemed sufficiently reliable considering that specific context. To that extent, tying impact investment fund manager's compensation to impact achievements is a valuable mechanism to ensure their commitment to impact and secure constant focus on the fund's impact performance, as long as the risks related to impact-based incentives are appropriately being accounted for.

Limitations of this work and recommendations for future research

This project-dissertation does not provide an exhaustive list of possibilities in which a financial reward may be tied to impact performance, but rather a hands-on identification of the challenges that will rise, and suggestions to address those, in the context of an impact-first investment fund. Therefore, interviewees' answers were provided with that specific setup in mind, whilst also reflecting influences related to each interviewee's own experience and context, so that they do not provide a comprehensive view for all impact investment funds in the ecosystem.

Another limitation of this work is that no precise information was collected on the amounts paid for management fees and carried interest in the interviewed impact investment funds, due to the sensitivity of such information. This prevents from drawing clear conclusions on the total amounts paid to the fund managers in terms of either fixed or variable compensation, so that further investigation would be needed for more precision on the financial side of the scheme.

This paper provides an exploratory analysis of impact investing players' insights on impact-based financial reward schemes for impact fund managers. Those schemes should be further researched to discuss their value for impact investing players willing to set impact high on their agenda and to provide recommendations that will facilitate and improve such scheme's implementation.

APPENDICES

APPENDIX I. INTERVIEW SET OF QUESTIONS

Have you included the impact performance of your organisation (or of the funds you manage) in your compensation scheme?

A. If no, why not?

1. What is your state of reflection / proposition on the topic? To what extent have/would you consider including the impact performance of an impact investment fund in the financial reward scheme for the fund's managing team?
2. Do you believe that it would be interesting for you? How would it be perceived by the different stakeholders (investors, team, investees)?
3. What do you need/miss to implement such scheme?
4. What is your opinion on the challenges described below? I.e. challenges in terms of setting impact targets and metrics, impact audit and reporting, stakeholders' involvement…

B. If yes, how is it structured?

I. Detailed impact-based compensation structure

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1. **Can you describe the mechanisms of your impact-based compensation structure?**
   i. Is it part of a bonus or carried? To what extent do financial and impact performance respectively contribute to the financial reward? What's the threshold and what is then the minimal/maximal possible reward?

   ii. How often can the financial reward be received? Is it fixed (all or nothing, e.g. in case of targets achievement, over-achievement…) or does it increase according to the level of targets achievement (e.g. when various impact scenario are tied to specific levels of compensation)?

   iii. Where does the financial amount foreseen for the reward go if not distributed? *E.g. Does it return to investors, or is it donated to a third-party pursuing similar impact objectives?*
2. **What are the biggest difficulties you encountered in setting up such scheme (defining thresholds, impact metrics, reporting, auditing, acceptance from team members/investors…)?**

II. Lessons learned on defining metrics

How does the integration of impact-based incentives in your remuneration structure affect the impact assessment process?
I.e. trade-off between the extra impact assessment burden and the incentivized incremental performance.

1. **When assessing the impact of your organisation, do you set targets and measures at the investee level, the fund level or both?**
2. **If you consider impact at the investee level, to what extent are impact objectives included in your contractual relationships with investees?**

i. Do you contractually impose impact targets to your investees? If so, do you allow for flexibility according to investee's capabilities?

ii. How do you make sure that those targets are stretched, yet realistic? To what extent are you able to review the targets if they seem unrealistic vs. unchallenging? How do you proceed?

iii. To what extent and how do you expect investees to report on specific impact measures? Do you provide tools for them to report on their impact, or do you assess their impact achievements directly?

iv. Do you consider impact generated by investees, or the incremental impact generated thanks to your investment only? *I.e. the actual impact generated by your investment thanks to your organisation's financial resources and expertise*

3. **If you consider impact at the portfolio level, how do you ensure a common set of metrics applicable or comparable across the portfolio?**

   Do you have a set of indicators at portfolio level that is applied as such for each investment, or do you aggregate investments in a way that allows for a variety of distinct metrics?

III. Lessons learned on reporting / audit challenges

How do you include impact performance in your reporting system from portfolio companies and to investors/clients?

What are the biggest challenges you are facing when it comes to reporting and the quality of reporting? How do you manage those?

1. **How does the integration of impact-based incentives in your remuneration structure affect reporting to your clients/investors and how do you manage it?**
   I.e. trade-off between the extra reporting burden and increased value for clients/investors as it demonstrates that their money was used effectively towards achievement of the targeted impact.

2. **To what extent are clients/investors involved in the process of setting clear impact goals, defining impact indicators, performance measurement and incentives?**
   What's their view on/demand for an impact-based incentive structure?

3. **How do you ensure the quality, reliability and transparency of reporting?**

   i. Is a third-party needed to assess impact performance (professional external auditor or external advisor, independent review…)?

   ii. How often is impact monitored? How often is the amount of the variable compensation determined and paid?

   iii. How often do you revise your incentive system?

4. **What are the human and financial resources needed for your impact assessment?**

   i. What data needs to be collected? How and how often is it collected?

   ii. Have you developed a specific expertise and/or specific tools in order to be able to measure and assess the impact delivered by your organisation?

   iii. Who is involved in the impact performance evaluation and how?

   iv. What are the reporting requirements for investees? Which human and financial resources do you expect them to dedicate to their impact assessment and reporting?

IV. Team dynamics and motivation

How does the integration of impact-based incentives in your financial structure contribute to alignment of all stakeholders (managing team, investees and investors) towards impact achievements?

1. **To what extent does the integration of impact-based incentives in the compensation structure incentivize the fund's managing team to go the extra mile?**
    i. What are the expected results regarding motivation of the fund's managing team and resulting fund's performance?
    ii. To what extent does it drive the impact investment fund's portfolio efficiency?

2. **To what extent are investees incentivized on the same targets?**
    i. To what extent does it secure alignment between your organisation's impact targets and investees' activities?
    ii. To what extent does it instill motivation and increase performance among investees?

V. Other

Are there, in your opinion, any additional advantages, disadvantages and/or challenges regarding the implementation of impact-based incentives? Is there anything more you would like to add?

Which other financial or non-financial mechanisms have you set up in order to incentivize your impact investment fund's managing team?

APPENDIX II. INTERVIEWEES' QUOTES (GIOIA ANALYSIS)

Research Question: How can an impact-based financial reward scheme contribute to securing impact fund managers' constant focus on the fund's impact performance?

Interviewees' Quotes	First-Order Concepts
• There is a certain level of risk that management team decides to let go of the impact for greater financial returns: impact-based carried interest makes fund managers accountable for the long-term delivery of impact (fund1) • A profits-based incentive scheme definitely pressures managers to make decisions that are more financially-oriented (fund13) • Even with an impact-based carried interest, an exit might be more successful if you focus on the financial, rather than the impact performance (advisor7) • You don't want a reward scheme that promotes the returns of the fund, because otherwise the management team will focus on making too much money: if the mandate is to return capital in real terms, then you need to have a bonus pool allocation going up and down depending on what you deliver on impact (advisor3) • In an impact first you will not find those perfect opportunities where impact and financial returns just go hand in hand; there will be tensions (advisor6, advisor5) • An impact-based financial reward scheme triggers frequent discussion of impact objectives (fund6) • An impact-based financial reward scheme directs fund managers' motivation towards the right objectives, i.e. impact objectives aligned with those of investors (fund4) • An impact-based financial reward scheme stirs attention towards social indicators, which investees and fund managers may have overlooked if those metrics had not been agreed upon in the first place (fund11) • Impact-based carried interest schemes seem to be helpful to stir the impact performance of fund managers' portfolio (fund10) • If the challenges are properly managed, as any good incentive I think an impact-based financial reward is an idea that is worth exploring (fund15)	Risk of mission drift
• The impact-based incentive is a federating process, engaging all parties around common goals and reflecting what it is you're trying to achieve (fund6) • An impact-based financial reward scheme lays cards on the table: everyone is committed to impact, measures impact and assesses performance against impact objectives (fund4) • An impact-based financial reward scheme triggers collective reflection on the impact that is to be pursued (fund6) • It's good to have an incentive for investing for a longer time and run an extra mile (advisor6) • Provided that investors' motivation is to have social returns in addition to financial returns, fund managers need to be aligned with that (fund4) • We, as managers, wanted to be accountable for the impact: we felt that if we were only compensated based on the financial returns of the fund, there would be a slight misalignment between us and our investors (fund1) • Fund managers are happy to make impact a more visible part of investment process • As fund managers we are always happy to have our impact reports challenged by our investors, discuss with them and explain (fund15) • Having the impact really locked in with a carried throughout the lifetime of the fund show that you get the maximum focus on the long-term impact (fund9)	Engagement around common impact goals
• An impact-based carried interest scheme is a real signal of trust, which helps convince impact-driven investors that the fund is the right partner for them (fund5) • An impact-based financial reward scheme makes clear to investors that fund managers are truly committed to impact; they are receptive to that idea (fund11) • Requiring an impact-based financial reward scheme helps us very easily distinguish between impact investment funds and responsible investment funds: whereas the former do not have any issue with	Signal of trust

it, the later that do nothing but a negative screening have big difficulties in committing to impact targets (fund10) • Having an impact-based financial reward scheme sends a signal to other players in the ecosystem that managing, and seeking to maximise impact, is something everybody should be doing (fund1) • Even if being accountable for the impact results does not bring a specific benefit, to me it simply is the right thing to do (fund1) • Impact measurement and management should not be used as a marketing tool (fund13)	
• You need to look at the kind of investments you will make, in what type of businesses, the timeframe and what the likely success factors are (advisor6) • I would just really link it to your thesis (…) just try to see what kind of business you do and what would actually be a successful fund (advisor6) • When can you consider that an investment was successful? (advisor7) • The most important thing is for fund managers to have an impact vision: where do you want to go with investees? Then you can see which indicators might help them increase impact based on the targeted final goal (fund3) • Constantly ask yourselves whether an investment really fits with what you're trying to achieve, review fund's overarching impact strategy and whether it should be refined (fund6) • The first step is to clearly define the fund's specific and differentiating objectives, impact strategy and resulting investment strategy, as well as how the team will accomplish that – then you need to look at investment pipeline to make sure that your objectives are not too narrow and won't prevent you from finding interesting deals (fund6) • The difficulty is to figure out what are the KPIs or indicators that allow you to set an impact benchmark, which the team is happy to deliver on and have their bonus adjusted up- or downwards if they get more or less (advisor3)	Fund's impact strategy, ambitious goals and evidence of success
• A challenge in the impact space is how much responsibility you put on investees to track and report on the impact? (fund11) • Companies may get scared away to work with impact investors if they feel those do not really get the business side of what they do (fund14) • Portfolio companies' buy-in is needed for them to give you the data that you need (fund2, fund7, fund5) • A lot of portfolio companies are really keen to share their success (fund15) • Impact measurement and management is part of a professionalization process, for investees to know how effective their impact strategy is: it should not be that much effort because that's what they should be looking at anyway (fund5) • We want indicators to be very case-by-case-driven, because any impact indicator only makes sense in the context where it is achieved – and we want those indicators to be so specific that they can be used by the portfolio companies to manage their business (fund10) • Ideally, come up to an agreement with investees: what are the right metrics, interesting and ambitious objectives for them? How can metrics be best designed so that they're not too much of a burden? (fund4) • Setting impact targets should be done bottom-up: having investors dictate targets can be devastating (fund7) • Stick to metrics that the enterprise is already tracking or has a very concrete interest in tracking, so that they do it without being much more burdened (in terms of resource use) (advisor4) • It really depends on what you can ask from them: for smaller funds with ticket sizes of €100,000 – 200,000 you cannot ask a company that small to fill in your impact assessment every 3 months because that's too much for them (advisor7) • We try to identify weaknesses of each individual portfolio company from the start, to set targets for improvements on those over the lifetime of our investment (fund3) • The real challenge is to find a collaborative mechanism with investees so that impact measurement and reporting is not seen as burdensome paperwork, but rather brings real added value regarding the definition of their impact strategy and performance (fund4) • The discussion with portfolio companies should be "What would you like to achieve in impact?", then "How do you actually find out whether you succeed or not?" – and translating that into indicators, those giving portfolio companies the indication of whether they are on the right track or not (fund10) • Each of our term sheet is individually worked out for the purpose of that company (fund12)	Investees' impact strategy, impact metrics and targets

• When you choose the metrics for impact assessment, don't make them too prescriptive (advisor2) • It's important that you help your portfolio companies set up their own impact management, so that they would be able to deliver more impact and grow (advisor6) • Your impact requirements might translate into a phase model, where whatever qualifies as "good enough" varies according to the stage of the company you're investing in and the ticket size (advisor7)	
• It is on the investment agreement that investees should track and report on impact (fund1) • Make it an obligation for each investee to do an annual responsiveness survey (advisor4) • We require as part of our term sheets that investees participate in things like GIIRS, because if you do not require that then it is hard to enforce it later (fund12) • We want to set goals with portfolio companies over 5-7 years and set those in the investment agreement, to have a clause where investees commit to those requirements (fund3)	Formalised impact measurement and reporting
• Measuring impact is first and foremost a sign of good management and helps manage and maximise impact, then tying it to compensation is an extra: it's a mean for the management team to go in the right direction, but not an end (fund4) • Impact measurement and management makes us really think about what we are trying to achieve, then tying it to compensation secures fund managers' drive and willingness to go the extra mile (advisor6) • Making the impact documentable, something that you can put a number on is a key instrument for managing the investment and the scaling up of impact over the investment: you can go back to your impact report the year after and hold yourself accountable for the year's achievements (fund14) • The process of setting up an impact-based financial reward scheme itself has virtue, yet it is not what guarantees an impact-oriented team: for that you need to hire the right people, with values and motivations that will be reflected in their work for impact achievements (fund6) • It is the impact investment strategy, and the engagement of the investment team driving it, which will really secure impact by making it a priority (fund6)	From impact measurement and management to impact-based reward
• It's very difficult to predict a company's growth, and how that will translate into impact (fund14) • Defining indicators before you have any investment track record is really hard (fund6) • You can identify individual metrics, but the issue is that when you apply those metrics to young and scaling organisations you have no idea of what strong or weak performance is… It's really difficult to set hard targets for this kind of metrics: you would need a benchmark, and the benchmarking possibilities are really slim (advisor4) • You definitely can set goals and then compare whether you reached them to get your compensation defined, but it also depends on the development stage of the companies you invest in: if they are too early-stage and their business could be adapted, then maybe the metrics you define early on will be outdated – but if they are more mature projects, then there is less risk that this happens (fund1) • The main implementation challenge is to be able to meaningfully measure impact: it is hard to do that well and agree on a benchmark which is good enough – often we invest in quite innovative models, where sometimes no one else in the industry is doing it and where you can only start measuring over time (fund15)	Lack of benchmarks in the impact industry
• First you need to know what are your objectives, what are your targets… but also how does it compare to what the rest of the market is doing? Are you really doing better? What would have happened without that initiative: would the impact have occurred anyway? (advisor7) • How much of the change are you responsible for and can really be attributed to what you are doing? (advisor5) • How much influence do you have on whether or not the impact occurs? (advisor7) • What is the urgency of the problem? How underserved is the issue? What's the duration of the solution? (advisor7) • How do you weigh different types of impact? How do you make sure to reflect on the net impact (positive as well as negative)? (advisor7) • There is no absolute impact, but only an impact against set objectives (fund6) • We use a mix of portfolio-overarching metrics and sector-specific metrics (fund14) • Your model may well have a set of both generic metrics (allowing for comparison, though difficult to apply across portfolio and less meaningful), and specific metrics (more rigorous, though quite time-consuming process)	Impact assessment in all its dimensions

• Is it really based on impact? You likely won't have a perfect measurement of impact, so that what you're measuring is really outputs (advisor6) • Are your business practices and business culture impact-oriented? That's something to be considered, because you may be formally very impact-oriented but still behave poorly as an organisation (fund13) • We measure the impact of portfolio companies' core business activities versus a traditional business, and then we also measure on the social side (e.g. the extent to which employees in the companies participate, caring about all stakeholders' benefits…) (fund12)	
• What we do is try to evaluate the company as a whole; like sometimes you have a company that really gets into a moment of liquidity squeeze or a big client discontinues their product and they find themselves in that moment where they really have to fight for survival and solve serious issues (fund14) • Don't overlook the commercial viability and context of the business: come up with a good framework which you apply to the real world, but be flexible in doing so (advisor2) • It's really important for us to sit down with each company and have an ongoing conversation to understand the dynamics and evaluate how they are doing in terms of impact, rather than set quantitative goals that sometimes are hard to live up to (fund14) • Throughout the whole investment process, impact is of course an important topic and is discussed with the portfolio companies (…) it's an ongoing process to assess whether it differs from targets, why it differs… (fund5) • For a small company, trying to fill in B Corp requirements for instance is a huge pain: they are focused on trying to get their product to market… So we support by facilitating, helping and suggesting things (fund12) • Leave room for flexibility to be able to review metrics that are not suited anymore and account for changes in investees' market environment (fund6) • Metrics are important, but there has to be flexibility and adaptability in those metrics as you want your portfolio companies to be innovative and think about new ways to address their markets – which metrics defined ex-ante may not be capturing (fund11) • An independent committee might allow to review the objectives if needed over the investment (fund6) • There is a tricky balance in making sure that the company stays core to its mission, while at the same time is able to evolve and innovate (fund11) • I would say you cannot evaluate that much of the impact during one year, so I would use the impact-based bonus at investment exit – the problem is that if the projects are 5-years long then the management team is going to wait 5 years until they get their bonus. And it would be the same for a carried interest anyway, but the carried is a massive incentive… (advisor3)	Trade-off between flexibility and fidelity to core, ambitious mission
• We do not have the means to build an impact measurement and management infrastructure ourselves; we are too small of a fund for the deep dive thinking required to come up with metrics that are fair (fund12) • I would love it if there were a great standard form of impact assessment (fund12) • I see a danger in this impact measurement: it is another element of cost added to a project and it may add significant costs, especially for small investments (fund13) • There is a trade-off between enough rigor and costs of the process (fund1) • If you want to have a simple measurement system in order to reduce costs, the first thing you do is reduce the number of things you measure – so the question is, do you get the right image with the reduced number of things you're measuring? And if you increase the number of indicators to measure many things then it provides a better picture of reality, but it increases your costs enormously (fund13)	Impact measurement & management costs
• One of the biggest challenges you should look at is that the impact can be verified and accounted for (fund5) • One of the requirements for this impact compensation scheme to work is that it is validated by a third-party, right? Because if you were evaluating your results, and your compensation is tied to it, then you have an agency problem – so you need a third party, doing credible work, to validate that you are delivering what you're saying (fund1) • It simply is best practice to have an independent, external audit of the data as soon as it is tied to compensation (fund6)	Tricky balance between transparent, reliable data and the costs of an independent, third-party evaluation

• What are the KPIs that you will be measuring and who will be measuring it? If you are, then does it require verification? How often? Will you hire an external company to do the actual impact measurement? It's a matter of who your investors are, who is paying for it and also how complex, subjective or objective the whole system is (advisor6) • Whether you want an external party to audit your data is a trick of the costs and what you benefit from having that (…) most funds are not really having someone look at the impact they achieved (advisor5) • Who is collecting the data and how objective and independent is that – so how trustworthy is your data basically? Is it an independent organisation that collects and analyses your data and provides you with the conclusions, or do investees and the investment manager collect the data together? (advisor7) • Your impact KPIs are going to come from the companies' data, so you need to make sure that they have the right data and don't make that up – and you would think that as an investor you would want an independent auditor to verify that the data is correct (advisor3) • Who would be validating your data and how much would that cost? You need sufficiently reliable data and for it to be validated by someone else: you cannot validate your own data (fund1) • It's important to have data that can be validated by a third-party to make sure, as with financial audit, that in the end we did achieve what we said we would achieve (fund3) • An external audit comforts investors that there is no, or at least limited, bias in communicated results (fund6) • Depending on the level of trust and evidence behind data collection, you decide whether you check them or have them check by an external third-party (fund9) • We have an independent impact audit committee with three members, affiliated with the fund in the sense that they are e.g. personal investors, and for one or another reason have a foot involved in the venture capital world and in the mission-focused impact investing world (fund2) • Although there is room for improvement, GIIRS is probably the best that is out there (fund11) • GIIRS is not as rigorous as it could be, but if it were then it would also be more expensive: there is a trade-off there, and we made clear to our investors that if anything better developed over time we could change the methodology to have a better one (fund1) • Our impact reports are reviewed by our impact committee and investment committee, and we have very involved investors who review information on impact very closely and actually specifically work with the fund on some issues when they are sort of very important to their strategy (fund14)	
• What would be something good enough, simple enough? What type of data is good enough in your context? (advisor6) • What type of data is good enough for you in your context? For some, it is for instance good enough to send a questionnaire to the investees, which they report on. Is that company owner able to really do an impact assessment of his own impact? It really depends on the context (advisor7) • A good, simple set of metrics is all you really need to keep an average investor happy (advisor2, fund4) • Keep it as simple as possible, do not reinvent the wheel nor develop a process requiring much extra resources (advisor1) • Focus on those 1-3 really important KPIs (fund5) • The shorter, sweeter, most focused metrics, which will secure the most impact, are those to evaluate (advisor2) • All you need to assess impact is 7-8 key questions, limited to what you really need to know, then if you think that it is not sufficient you can always go back and ask for more (advisor2) • Make impact reporting requirements easy to honour; identify exactly what you need (fund2) • Narrow it down to a handful of things, agreeing upfront on those 2-3 key elements to track and potentially adding metrics as the company evolves and iterates (fund11) • I would suggest to be very pragmatic: keep it simple and pragmatic, but in a way where you really engage and think what it is that you are trying to achieve (advisor6)	"Good enough" impact measurement and management
• There are a lot of impact-first funds who do not charge a carried interest (advisor6) • I'm not sure that a performance-based bonus is even needed in the social sector (advisor5) • Do you want at all to have a financial incentive structure? Do you really need it? (fund13) • As for choosing between carried interest or bonus scheme, I think you can have a mix: having a hybrid, annual and multi-year structure might be good as e.g. managers may leave after a couple of years, while performance is tracked multi-year... (advisor4)	Managing investors' expectations

• For one of our projects we have an independent impact committee in charge of evaluating performance on financial, operational and non-financial (impact and ESG) elements every two years, and then make a recommendation to the shareholders for a bonus to be distributed to the fund management team (fund6) • You need to understand your investors, how familiar and comfortable they are with a carried interest mechanism, and what their expectations are in terms of impact measurement (know where they want to stir) (advisor6) • If you know your investors well, and there is a certain level of trust between investors and management team, you can set something which is less formalized (advisor3) • As investors we are sufficiently comfortable that the investment committee will define metrics that are sufficiently challenging, yet realistic; the more important for us is to have a dialogue and see where metrics come from (fund9) • As investors we would appreciate to see impact part of the reward structure, yet we are open to other solutions as well - as soon as it works, is not vague nor ambiguous (fund9) • A lot of options may work, whatever suits you (and your investors) and gives you (and them) the comfort you will do the best you can to deliver what you promised (fund1) • As an investor, you at least expect fund managers to tell you why they're making an investment, why it makes sense from an impact perspective and what they're going to measure to prove whether impact has occurred (fund12)	
• As with any incentive there is a bias related to how ambitious your objectives are (fund6) • You want to stay away from people being perversely incentivized: you have the risk of setting what is easy to achieve as the target that you want to pursue (fund15) • Coming up with a fair and appropriate mean of rewarding and incentivizing on impact is a really tough work (advisor4)	Incentives' bias risk
• As soon as you limit things to some indicators, you lose information (fund6) • People might focus on what it takes to have their bonus, rather than impact itself (fund1) • We have seen examples where impact targets actually provide the wrong incentives, e.g. where impact investors predominantly go for the safe investments which they know will have an impact, rather than riskier investments which, if they succeed, have a higher impact potential (advisor7) • People just try to do everything in order to get their carried interest and that becomes an excuse for not managing the rest (advisor6) • It's already difficult to generate financial returns, so the dual set of objectives in the incentive may distract management (advisor6) • You still need to deliver on the financials; even if it's impact-first, you need to preserve capital and returns or it's not impact investing and harms the whole market (advisor6) • Standardised metrics sometimes may not do the job that they were set out to do (advisor2) • You have to be very savvy about managing impact for those schemes to work (advisor6) • Clear thoughts on what impact metrics, targets and objectives are much needed to set up an impact-based financial reward scheme (advisor7) • Impact measurements are quite easy to trick, it's not something very solid (advisor5)	Counter-productive incentives' risk
• There is probably no need to align impact metrics with an incentive: fund managers are committed to impact anyway and would be doing the exact same thing without it (fund2) • Creating impact is the fund's intrinsic purpose; all investments are reviewed under that lens (fund14) • We seek our own impact by restricting the types of companies that we invest in – our due diligence process involves a lot of questions about impact and our first screen is mission: does it fit in our investment thesis categories? Does it have real impact? Is there anything about this company that makes us uncomfortable? (fund12) • We have a notation grid which is applied to each investment opportunity to rate them on a 100% note; as it is a standard grid, not all opportunities will meet all criteria, but it certifies that a good fraction of those criteria at least are met (…) the grid is a tool for decision-making which may only complement, rather than replace, discussions about a specific deal, but it provides an objective, overall impact assessment of the organisation (fund6) • It is key to have impact-oriented culture and business practices, and teams with deep care about impact (fund13, fund12)	Impact safeguards in business practices, decisions and investment process

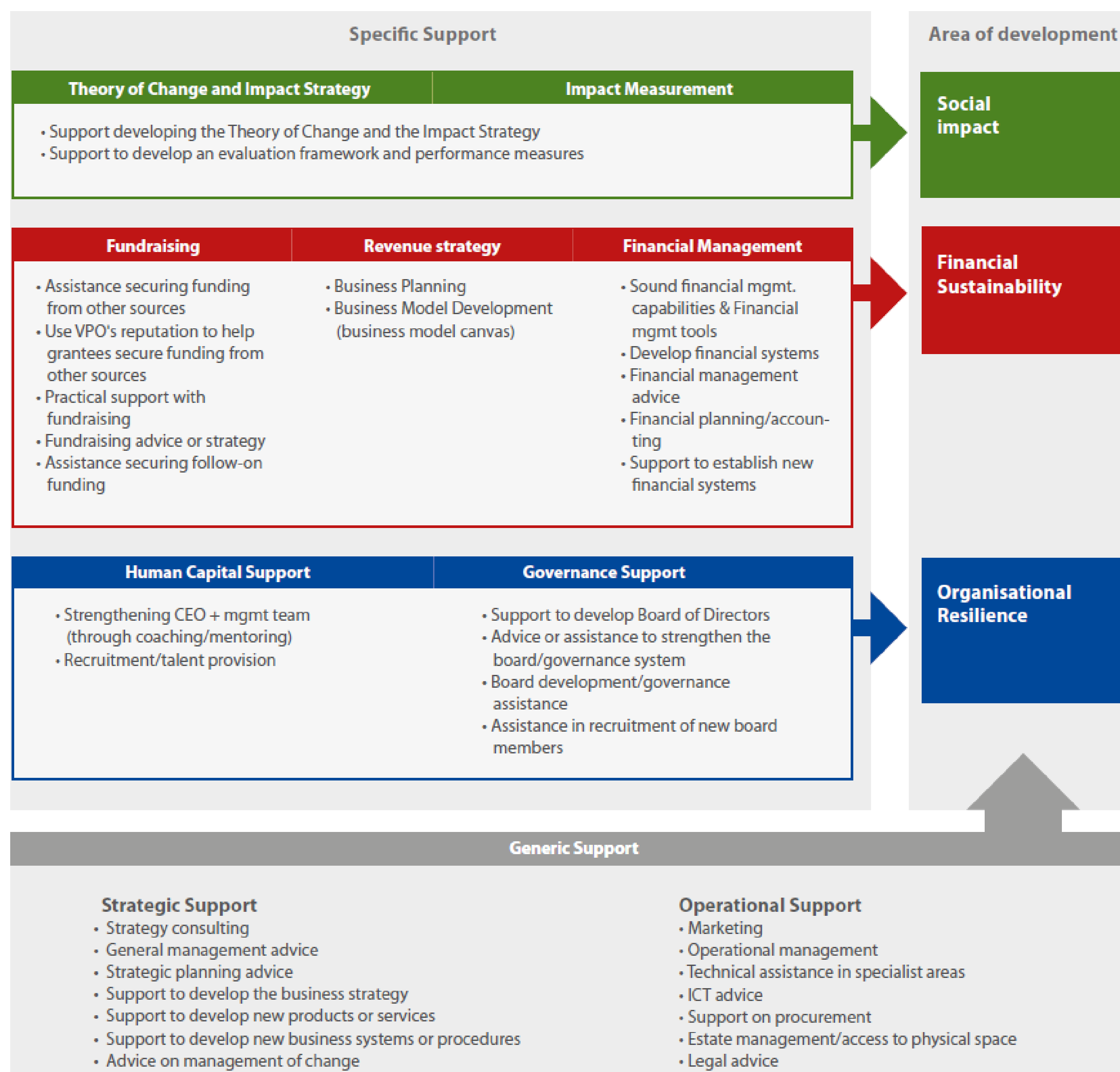
• We have a woman on our team who is our B Corp person – and she does a lot of work trying to help portfolio companies (fund12) • We only invest in people we think will be happy to improve their impact and ESG practices - it's a battle otherwise (fund12) • We come in as impact investors, so investees commit to both parts of the relationship: the financials, and the impact work that comes with it (fund14) • We usually hold more than 50% in portfolio companies so our role is quite hands-on, and we always check with them that impact gets sufficient attention. We don't just want to collect the data and report that back to investors, but our team actually engages with our portfolio companies and meets with the staff to find out what is going well, and where they want to go next – and we set an impact agenda, so that's like a 100-day plan to decide what we want to do in the next 3-6 months and what the core priorities are (fund15) • There is always intrinsic discussion about the impact side of deal before investing, between fund managers, investors, investment committee and impact committee (fund14) • Set minimum impact standards; include impact measurement and reporting requirements in term sheets, things you expect to happen and where you don't invest or divest if they are not performed well (fund13) • Impact is also why our fund is special: we only invest in businesses where there is sort of a lockstep, so that core impact generation is tied to the growth of the company (fund15) • As we are in touch with portfolio companies on an ongoing basis we know what the drivers for growth vs. downturn are, and we would really only take action in those case where we feel everything is going as planned, and the company is just being lazy on the impact part (fund14) • Adopt a qualitative approach, try to grab the full reality and be involved with what investees do: be present, discuss with them and follow up with the business (fund13)	

Note that three interviewees expressed their views in French, which were translated here as accurately as possible for consistency purposes.

APPENDIX III. KEY ELEMENTS OF FUND MANAGER'S NON-FINANCIAL SUPPORT (EVPA)

The following tool was developed by the European Venture Philanthropy Association and highlights key areas where fund managers may provide non-financial support to the organisations they finance.

Mapping of non-financial support provided by fund managers



Source

European Venture Philanthropy Association (EVPA). (2015). *A Practical Guide to Adding Value through Non-Financial Support*. The Hague/Berlin: P. Boiardi, & L. Hehenberger.

APPENDIX IV. GENERIC IMPACT ASSESSMENT TOOLS, PRINCIPLES AND ORGANISATIONS CONTRIBUTING TO THE SETTING OF IMPACT STANDARDS

B Lab is a US-based non-profit which provides simple tools to assess, compare and improve impact. In 2011, the *Measure What Matters* initiative gathered leading impact investors willing to make it easy and valuable for all companies to measure "what matters most", hence, their social and environmental impact – a vision that is now shared by an increasing number of organisations. The initiative lead to the development of a common impact management platform using B Analytics, GIIRS Ratings and the B Impact Assessment, which were all integrated under B Lab.

- **B-Analytics** is a customisable platform for measuring and reporting on impact, as well as benchmarking with the 50,000 organisations whose results on the B Impact Assessment *(see below)* are included in the database. B-Analytics is a fully integrated data and technology platform for investors to measure their portfolio impact using custom impact metrics and comparable GIIRS Ratings *(see below).*
- **The B Impact Assessment** (BIA) is an online self-assessment of an organisation's environmental and social performance. The BIA evaluates the quality of the company's performance on five dimensions: governance, workers, customers, community, and the environment. Above a certain score on the BIA, organisations may ask for the **B Corp certification**, which guarantees to their stakeholders that they meet high standards of business responsibility.
- **The Global Impact Investing Rating System (GIIRS)** is a rating system for impact investment funds pursuing a clear impact strategy alongside their financial strategy. GIIRS evaluates a fund manager's performance based on an overall impact business model and operations rating, which weighs each portfolio company's score on the B Impact Assessment based on the amount invested. A fund manager assessment then measures the impact intent of the fund, in approximately 60 questions looking at the defined impact targets, investment criteria and portfolio management.

  GIIRS, which was set up by the GIIN, is now part of B Lab. GIIRS also provides a benchmarking opportunity as all GIIRS-rated funds may compare their performance, thereby providing a standardised system to assess and compare impact investment funds' performance. Both the BIA and GIIRS use IRIS metrics *(see below)*, in addition to another set of criteria, in order to provide an overall company or fund rating.
- **The Impact Cloud** is a graphic tool conceptualizing a company's impact and potential for improvement as measured by the BIA.
- **PULSE** is a software that enables impact investors to collect, manage and report on the impact of their investees. Developed by Acumen in 2006, it was merged into the B Analytics Platform in 2013.

https://b-analytics.net/

CERISE

CERISE is a non-profit organisation (France) promoting responsible, ethical and inclusive finance. Initially focused on inclusive finance sectors, CERISE also contributes to the co-creation of social standards and social assessment tools for social businesses and impact investors, which are freely available for download on their website:

- **IDIA** – Impact-Driven Investor Assessment: light assessment for impact investors to assess their performance on 5 critical dimensions – impact thesis, governance, products and procedures, business model and data protocols – using a simple Excel file, providing scores for each indicator, then for each dimension
- **Social Business Scorecard**: self-assessment tool for social-purpose organisations to report on their performance on 7 key dimensions – purpose, public, product, HR policies, ethical principles, profits and partners – using a simple Excel file

https://cerise-spm.org/

Global Reporting Initiative (GRI)

The GRI is a pioneer independent organisation in sustainability reporting, helping businesses worldwide understand and communicate their impact with the GRI Sustainability Reporting Standards – the first and most widely adopted global standards for sustainability reporting, with 80% of the world's largest corporations today use GRI standards. The GRI Standards present global best practices to report on a range of economic, environmental and social impacts.

In an attempt to align and thus simplify reporting requirements, GRI and IRIS *(see below)* have joined forces to provide guidelines for impact investors to aggregate and compare GRI Standards with the IRIS impact metrics, in a complementary reporting framework.

Global Value Exchange (GVE)

The GVE is a free online database of over 30,000 social impact measurement metrics, combining datasets from the Big Society Capital Outcome Matrix, the Global Goals for Sustainable Development, the Global Reporting Initiative (GRI), IRIS 4.0 and the New Economy Unit Cost Database, among others.

http://www.globalvaluexchange.org/

Impact Management Project (IMP)

The IMP aims to build global consensus on how to measure, report, compare and improve impact performance, via the discussion of technical topics and best practices sharing with over 2,000 practitioners. The IMP enabled to identify five dimensions against which enterprises and investors assess their impact performance (what, who, how, how much, contribution and risk) with 15 underlying categories. The IMP suggests that mission-driven businesses and investors reflect on the effects of their activities against each category, set indicators for each and assess their performance against those.

In an attempt to join forces and end the development of siloed methodologies for impact and sustainability reporting, many key organisations contributed to the project, which was developed at the United Nations in 2018 (including for instance the GIIN, the GRI, the GSG, the IFC, the OECD, PRI, SASB, Social Value International, the UNDP, UNEP Finance Initiative, the United Nations Global Compact, the World Benchmarking Alliance, etc.)

https://impactmanagementproject.com/

Impact Reporting and Investment Standards (IRIS)

IRIS is an online database of impact indicators and standard definitions for impact investors to select and track the metrics that matter to them for their investments, launched by the Rockefeller Foundation, Acumen and B Lab and further developed by the Global Impact Investing Network (GIIN). A new version of the database, IRIS+, was launched in May 2019 with the aim to provide an improved dataset of impact metrics for increased data clarity, reliability and comparability.

Contributors to IRIS believe that a common framework to report on impact "is necessary to reduce inefficiency, increase comparability, and facilitate performance benchmarking and other analyses that support investment decision-making". Hence, IRIS aligns with and has included over time several other metrics sets such as the GRI Sustainability Reporting Standards, the B Impact Assessment and GIIRS rating, the SDGs, among others. IRIS+ now integrates even more of those global standards in the metrics database and was developed with the contribution of over 800 individuals and organisations, with the aim to group all general as well as sector-specific frameworks into a single database with the IRIS catalogue.

https://iris.thegiin.org/

United Nations Social Development Goals (SDGs)

The SDGs, which define priorities for the world to direct efforts towards ending poverty, protecting the planet and ensuring that all people enjoy peace and prosperity, have become a reference in impact measurement and reporting. All organisations want to show how their activities contribute to some or other SDGs, which represent a widely adopted set of 17 goals, 169 targets, and 230 measurable indicators. Yet the SDGs are more of an ambition at a global scale than a handy framework for impact measurement and management. Their worldwide recognition and attractive visuals have made them a nice marketing tool, yet evidence of organisations' sincere contribution to those goals is still difficult to assess clearly.

The SDGs Compass is a tool for companies to align their strategies to the SDG, measure and manage their contribution towards those.

Note that considering the widespread attractiveness of the SDGs, IRIS has also worked on linking their metrics set to indicators of contribution to the SDGs.

https://sdgcompass.org/

Social Value International (SIV)

SIV is a UK-based network organisation focused on social impact and value creation, including members from 45 countries willing to "change the way our society accounts for value".

The Social Value Certificate verifies the efforts committed by an organisation to maximise its social value and meet the seven principles of social value as described by SIV: 1. Involve stakeholders; 2. Understand what changes; 3. Value things that matter; 4. Only include what is material; 5. Do not overclaim; 6. Be transparent; and 7. Verify the results. Hence, it assesses how an organisation is working towards maximizing social value, rather than an evidence of the social change resulting from activities.

The Impact Value Map developed by Social Value UK is a template for impact-driven organisations to reflect on their theory of change and assess their activities' deliverables in terms of outputs, outcomes and impact.

https://socialvalueint.org/

LIST OF RESOURCE PERSONS

LIST OF INTERVIEWEES

Contact LAST NAME Name, Function, *Organisation name* (Headquarters country), Organisation Type, Interview Date

BALANDINA Julia, Founder and Managing Director, *JBJ Consult* (Switzerland), Advisor, 25 January 2019

BARBA Tracy, previously Head of Global Marketing and Partnerships at *Bamboo Capital Partners* (Luxembourg), Impact investment fund manager, 19 February 2019

BEGHIN Bertrand, Co-Founder and Chief Executive Officer, *ChangeSquare* (UK), Advisor, 23 January 2019

CAMPANALE Mark, Senior Advisor, *Consilium Capital* (UK), Advisor, 18 January 2019

DE BORCHGRAVE François, Managing Director, *KOIS Invest* (Belgium), Impact investment fund manager, 18 January 2019

EKE Andreas, Director, *Futuro Forestal* (Panama), Tropical forest investment Management firm (classified here as impact investment fund manager), 4 February 2019

GRABENWARTER Uli, Deputy Director (Equity Investments), *European Investment Fund* (Luxembourg), Impact investment fund manager, 5 March 2019

HERDRICH Jochen, Investment Manager and Partner, *Bonventure* (Germany), Impact investment fund manager, 11 February 2019

IZZO Daniel, Co-Founder and Executive Director, *Vox Capital* (Brazil), Impact investment fund manager, 8 February 2019

KNEER Stefanie, Manager of internal Impact Advisory Team Impact+, *Bridges Fund Management* (UK), Impact investment fund manager, 16 January 2019

LAMERS Anieke, Investment Manager, *Social Impact Ventures* (The Netherlands), Impact investment fund manager, 21 January 2019

NEWMARK Tammy, Managing Director, *EcoEnterprises Fund* (Costa Rica), Impact investment fund manager, 9 January 2019

NOCQUET Elodie, ESG and Impact Director, *Investisseurs & Partenaires* (France), Impact investment fund manager, 19 March 2019

OOSTLANDER Pieter, Fund Manager, *SI² Fund* (Belgium), Impact investment fund manager, 18 January 2019

PFISTER Sandrine, Financial, Environmental and Social Analyst, *Quadia* (Switzerland), Impact investment fund manager, 15 March 2019

RICHARDSON Paul, Chief Strategic Officer, *Renewal Funds* (Canada), Impact investment fund manager, 21 February 2019

SPIESS-KNAFL Wolfgang (Austria), Academic/expert on social impact strategies, 13 March 2019

TEWS Rory, Programme Manager, *Roots of Impact* (Germany), Advisor, 11 February 2019

VAN WESTENBRUGGE Wouter, Impact Investment Manager, *DOEN Participaties* (The Netherlands), Impact investment fund manager, 14 January 2019

VERHEIJKE Emma, Managing Director, *Sinzer* (The Netherlands), Advisor, 8 February 2019

WEXLER Zev, Chief Operating and Financial Officer, *Core Innovation Capital* (USA), Impact investment fund manager, 17 January 2019

WRIGHT Jon, Head of Institutional Sales, *ClearlySo* (UK), Advisor, 11 January 2019

OTHER RESOURCE PERSONS

DE JONCK Jonathan, Head of Impact Investing – Impact Investment Manager, *Telos Impact* (Belgium), Impact advisory firm

GAYET Flavie, Impact Investment Manager, *Telos Impact* (Belgium), Impact advisory firm

FLAMMANG Marc, Founder and Managing Director, *Telos Impact* (Belgium), Impact advisory firm

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