Attribution in Results Measurement: Rationale and Hurdles for Impact Investors

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About the authors

This report was written by Willem Vosmer and Matthijs de Bruijn from Steward Redqueen, a consultancy firm specialized in impact strategy and impact measurement.

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About the Donor Committee for Enterprise Development (DCED)

The Donor Committee for Enterprise Development (DCED) is the global forum for learning, from experience, about the most effective ways for creating economic opportunities for the poor by working with and through the private sector. The DCED's member agencies have developed a substantial body of knowledge and evidence about effective approaches.

The Results Measurement Working Group serves as a platform to share information and knowledge on results measurement in international development and to identify and support good practices and new approaches in this field.

Donors are now engaging directly with the private sector, as partners in development. In addition to this report, DCED research has examined the information valued by investees, how organisations are supporting their increased work with the private sector, how business structure influences social impact, and the enabling environment for inclusive business.

More information about the DCED can be found here; information about the Results Measurement Working Group here; and the DCED's work on the topic private sector engagement here.

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Executive Summary

This study explores the current practices of impact investors around the concept of attribution in results measurement. It is commissioned by the Results Measurement Working Group of the Donor Committee for Enterprise Development (DCED)[1], and carried out by strategy consultancy firm Steward Redqueen. Its findings are the result of a literature review and interviews with 27 leading impact investors, development finance institutions (DFIs), and network organisations. The aim of this research is to better understand the current level of sophistication among impact investing fund managers in attributing results.

Concept of attribution

Consultations with fund managers show that there is no established consensus on the definition of attribution for impact investors. This was not unexpected as there is no official definition of attribution that is being used by an authoritative impact investing platform or network organisation. Most fund managers see attribution as "*determining which portion of results of an invested company or portfolio of companies is due to the activities of an investor (financial capital and non-financial value adding activities), taking into account other investors and additional factors that may have influenced the achievement of the results.*" This however still leaves some room for interpretation, and for several investors the related concepts of contribution, additionality and causality make their perception and use of attribution rather ambiguous. This was one of the premises or reasons for conducting the study.

Value chain around attribution

Although the primary focus of this study is the impact fund manager's perspective on attribution, their views cannot be considered in splendid isolation. Impact fund managers are part of a value chain which has a fundamental influence on the rationale for and practical approach towards results measurement in general – and attribution in specific. Asset owners (e.g. government donors or pension funds), investment managers (e.g. DFIs, the impact investment departments of commercial banks, family offices or foundations) as well as investee companies and their employees are important actors in this value chain.

Rationale for attribution

Impact fund managers recognise the *theoretical* relevance of attributing results to their intervention or investment. All investors who were consulted agree that attribution would provide more accurate and hence better insights into the effects of their investments and non-financial support. This in turn has several benefits such as improved accountability towards capital providers, enhanced fundraising opportunities, and opportunities for better internal decision-making on strategic allocation of capital through more accurate insights into the efficiency and effectiveness of their funding.

Hurdles around attribution

However, most investors also see hurdles to attribution. In their opinion, the hurdles still outweigh the rationale for attribution. The hurdles hold them back from applying attribution to results in practice; for example by allocating capital to that particular investment that is expected to be most impactful and deliver most attributable results. The main hurdles are the absence of a feasible, cost-effective and generally accepted methodology, a lack of demand for attributed results among capital providers, challenges in data collection and limited resources.

[1] The management of the study was done by the International Finance Corporation (IFC) as the manager of the DCED trust fund.

Approaches to attribution

Attribution of results is currently only carried out by a few investors. Examples highlighted in this study include Phatisa, the DGGF and One Acre Fund. Results of Phatisa and DGGF are attributed primarily according to the prorating approach, while One Acre Fund attributes using quasi-experimental techniques. In addition, there are two DFIs (FMO and IFC) that have tailored attribution rules engrained in their results measurement models.

Way forward with attribution

If the impact investment industry wants to move forward with attribution, there is a need to meet six steps in the medium term:

1. Development of a menu of approaches that are relevant and applicable to different products and circumstances;
2. A joint effort by capital providers to stimulate fund managers to report attributed results;
3. Recognition that advanced results measurement is resource-intensive and may require increased resources for the fund manager (through technical assistance or the management fee);
4. Assistance to fund managers in effective and efficient data collection from investee companies;
5. Promotion of innovative impact-based incentive structures for the fund manager which require attribution rules;
6. A general recognition among donors that results measurement in impact investment is different from traditional development assistance and much more complex.

To progress these issues, an authoritative platform needs to be the driving force. Potential platforms could be the Global Impact Investors Network (GIIN), DCED, World Economic Forum (WEF) or a coalition of DFIs. As a concrete next step in the short term, a practical guide on attribution would fill a knowledge gap and provide clarity on the definition, an overview of the rationale, and a deep-dive into (potential) approaches.

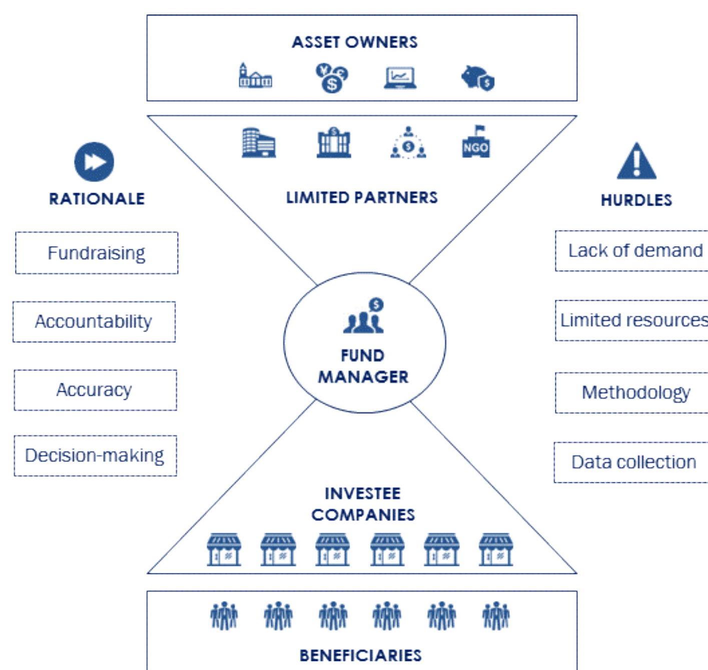

Exhibit 1 Investment value chain, rationale for and hurdles to attribution

INTRODUCTION

In September 2016 the Donor Committee for Enterprise Development (DCED) completed a preliminary review of practices in Impact Investment results measurement.[2] The report identified a number of areas within the field that merit further exploration. One of these areas is attribution of results to different investors or types of investors. The DCED Results Measurement Working Group commissioned Steward Redqueen to conduct a study on the current practices of impact investors around the attribution of results.

The issue

When reporting results, an agency or investor can measure and report all results taking place on the ground to which it contributed through its intervention. This is generally referred to as the *contribution approach*. It may also measure and report, through a particular methodology, that part of the results that can be reasonably linked to its own intervention, taking into account the inputs of other investors and/or even other influencing factors (macro-economic, regulatory etc.). This is generally referred to as the *attribution approach*.

The contribution approach is relatively simple as it does not make any claims about the precise quantity of results that can be attributed to an individual agency (in this case an investor). It is at the same time criticised for over claiming results and producing double counts, when there are multiple investors. The most basic approach to contribution taken by some is to report on the full results of projects even if they only account for a portion of the inputs (investments) in a project. This means that the same results are measured and counted by more than one investor. Using an attribution approach could be a solution to this problem as it allocates the relative portion of results to an individual investor, measured against other external factors that contribute to the results of an investment. A common approach to attribution applied by some investors is to claim a portion of impact results that is equivalent to the share of funding provided. Yet at the same time, attribution and attribution approaches also face many challenges given the complexity of their methodologies and unruly reality.

Objective

The aim of this research is to better understand different approaches among impact investing fund managers in attributing results of their investments. To this end, the report is structured around six topics as follows:

1. *Definition of attribution*: how fund managers define and interpret the term attribution;
2. *Value chain around attribution*: the different stakeholders around impact fund managers and how they interpret attribution;
3. *Rationale for attribution*: why fund managers and donors (would or not) attribute results;
4. *Hurdles around attribution*: the challenges that fund managers face in approaches to attribution;
5. *Approaches to attribution*: examples of how impact investors attribute results;
6. *Way forward with attribution*: views on potential steps to move forward with attribution.

The primary focus of the study is the fund manager's perspective. However, as fund managers are part of a value chain, the research also focuses on the views of influential stakeholders in this value chain, such as Development Finance Institutions (DFIs), network organisations and other influential experts. The thoughts and recommendations of these stakeholders are used to complement the vision of the fund managers.

[2] DCED, Results Measurement in Impact Investing: A Preliminary Review (2016). Link here.

Methodology

The inputs for the research were collected through three forms of data collection: desk research, an online survey, and in-depth interviews. As a first step, major existing publications that include references to attribution by network organisations, governments, universities, academics and impact investors were consulted. They subsequently sent out an 8-question online survey which provided structured and comparable views from 17 participating investors. The survey was followed by interviews with 27 selected experts (17 impact fund managers, six DFIs, and four representatives from expert network organisations). An overview of consulted fund managers is provided in Annex 1.

Process

The research and writing of this report was executed between March and June 2017. Results were presented during in the DCED Results Measurement Working Group meeting in Rome on June 13th, 2017.

Terminology

Throughout the report the terms impact, impact investment, and impact investors are frequently used. Defining 'impact' is difficult as it is a rather fluid term, but it can best be described as the tangible and intangible effects of one person's/entity's action or influence upon another. Impact investments are considered investments made into companies, organisations, and funds with the intention to generate social and environmental impact alongside a financial return. Impact investors are considered managers of investments or investment funds that aim to generate social and environmental impact alongside a financial return as part of their mission. This study uses the term 'fund managers' or 'impact investors' to specifically refer to the managers of impact funds, and the term 'investors' when reference is made to both fund managers and their capital providers, such as development finance institutions (DFIs), family offices, commercial banks or institutional investors.

1 Concept of attribution

Prior to the views on the rationale and approaches to attribution by impact fund managers, this study first explored the understanding and interpretation of the concept of attribution among fund managers. In discussions it quickly became clear that there is no single, widely recognised definition of attribution. The perception of attribution among investors was influenced by affiliated concepts, notably contribution and additionality. This chapter explores the definition and interpretation of these concepts and specifically of attribution.

1.1 Steps ahead of attribution

Impact fund managers make investments (often in combination with non-financial advisory services) that are aimed at a dual objective: to generate a financial return as well as outcomes that are beneficial to society. These outcomes vary, but may for example concern jobs supported/created, better living conditions or improved health.

Measuring and reporting on this dual objective is fundamentally engrained in the business model of an impact investor. Measuring the financial performance is relatively straightforward, as there are a number of core indicators that can be quantified. These include indicators at the fund level (e.g. gross and net Internal Rate of Return, portfolio money multiple) or at the portfolio level (e.g. company valuation, turnover growth, EBITDA or net profit margins). There is also clarity on how to attribute (“allocate”) the financial return of the investment to different investors, basically using a convention that indicates, a priori, how the financial returns of the investment will be allocated by the terms of the loan or the equity.

Measuring the results on the second objective is less straightforward and involves, strictly speaking, two steps. The first is to establish whether or not the intended (or also unintended) outcomes actually occur. This already is challenging in itself, as collecting and tracing the required data at invested companies requires clear agreements, perseverance, time and effort. When an impact fund manager knows these results, and can reasonably assume a link between his/her inputs (e.g. financial capital and non-financial value adding activities such as advice) and these overall results, he/she can measure and report on his/her contribution to these aggregate outcomes.

However, in this first step the measurement does not take into account the other factors that may have contributed to these outcomes, such as other investors and external factors. An impact fund usually has a minority stake in companies, and there hence are other investors that have contributed to the outcomes just as much or even more with their capital and advice. In addition, there are less tangible factors, such as changes in the regulatory environment, macro-economic situation, or consumer trends that may influence the impact results of a company and muddle the direct link between the investor and investee.

So this is where one arrives at the second, more complex step of impact measurement in which one determines how much of outcomes can be linked to the inputs of a single impact fund manager, taking into account other factors that may have influenced the achievement of the outcome. This question concerns the issue of attribution, but is less of an issue when taken an approach that the investment *contributes* to the outcome.

1.2 The definition of attribution for impact investors

Interviews show that there is no unified definition of attribution among impact fund managers. This was not entirely unexpected, as there is no official definition of attribution that is being used by an authoritative impact investing platform or network organization, such as the Global Impact Investors Network (GIIN), the Social Performance Task Force (SPTF) or other global or regional private equity network organisations.

The Oxford dictionary defines attribution simply as "*the action of regarding something as being caused by an intervention*". The Organisation for Economic Co-operation and Development (OECD) provides a more specific definition, describing it as "*the ascription of a causal link between observed changes and a specific intervention. (…) It represents the extent to which observed development effects can be attributed to a specific intervention or to the performance of one or more partners taking account of other interventions, (anticipated or unanticipated) confounding factors, or external shocks*".[3] The latter definition provides detailed guidance and includes the essential elements of other parties and external factors. However, this definition is rather academic and does not suit the pragmatic perspective of impact fund managers on impact.

Based on extensive discussions with fund managers a definition was formulated, tailored for impact fund managers, that describes attribution as "*determining which portion of results[4] of an invested company or portfolio of companies is due to the activities of an investor (financial capital and non-financial value adding activities), taking into account other investors and external factors that may have influenced the achievement of the results.*" This definition is in line with the most common views as well as the language expressed by fund managers in interviews.

The graph below provides a simplified visual explanation of the definition of attributed impacts[5]. It shows that, in order to get to attributed results, several steps have to be taken. First, the overall change in effects from a particular point in time is determined. The second step is determining how much of the change in effects is due to intervention by the investors, which this study will refer to here as the total impact achieved by investors. The third step is determining the proportion of the impact that is due to a single investor (e.g. investor A), also taking into account the interventions of other investors (e.g. investor B and C). This third step is the focus of this report.

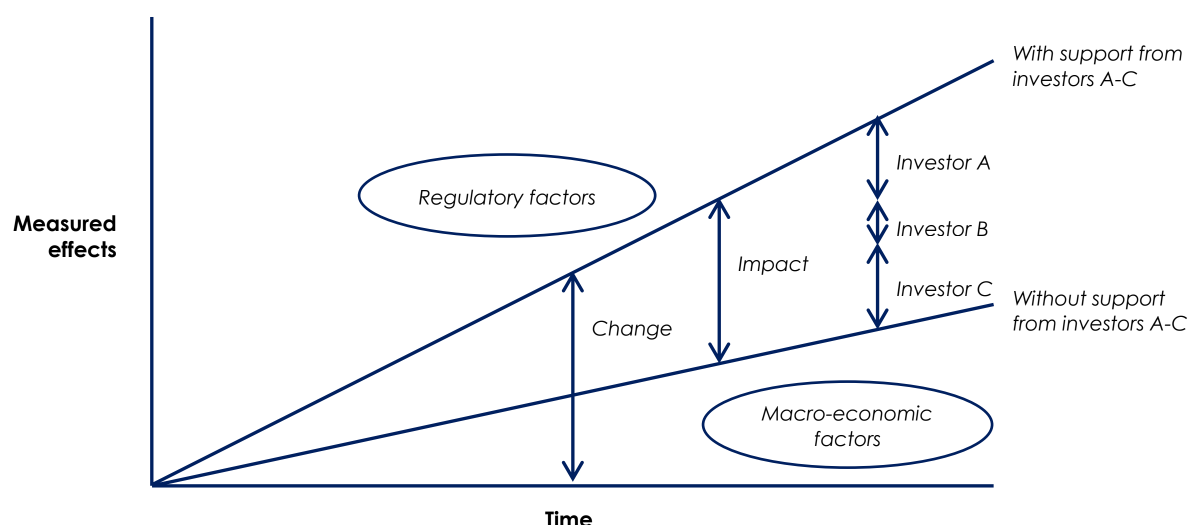

Exhibit 2 Schematic and simplified view of factors relevant for attribution

The graph further shows that, as included in the definition, there are external factors influencing the effects achieved by the company over time such as the macro-economic and/or regulatory environment. Both may positively influence or hamper impact results. As these effects are complicated to quantify, it was outside of the scope of the conversations with investors and not a focus in this report.

3 Definition by the OECD Development Assistance Committee (DAC) Network on Development Evaluation.
4 These results include outputs, outcomes and impacts; both positive and negative.
5 For the sake of a clear illustration of attribution, this example only includes positive effects and does not account for negative effects. In reality, positive and negative effects often occur in parallel and investments influence these trends in many different ways; increase the positive trend, retard the negative, or the other way around.

Most fund managers recognise the above logic during the discussions as part of this study. However, several investors had interpreted the term differently ahead of the discussion, while on the other hand several went a few steps further and mentioned additional dimensions to consider. The different interpretations can best be explained along the lines of three concepts that are closely related, and partly overlapping with the concept of attribution.

1.3 Concepts related to attribution

In discussions with impact investors the varying interpretations mostly revolved around the related and partly overlapping concepts of contribution and additionality. It is therefore useful to provide background on how different investor groups perceive the relationship with attribution. In the following chapters references will be made to these concepts and the importance investors attach to them in relation to attribution.

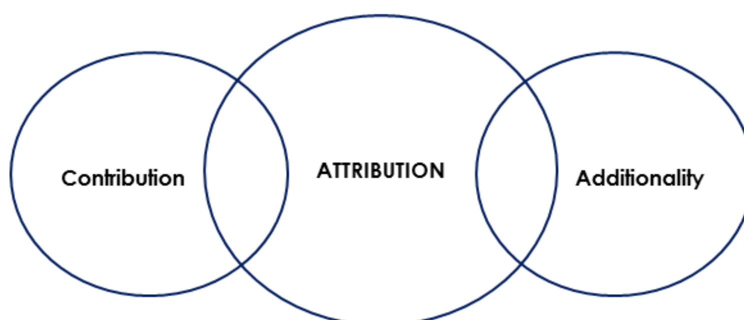

Exhibit 3 Concepts related to attribution

The first related concept is *contribution*, which is explained earlier as a preliminary step to get to attribution. Several investors either confuse contribution with attribution or considered the two concepts being the same thing. These investors usually traced the change in effects at invested companies since the start of their intervention, and considered all these effects linked to their intervention. They consequently consider and communicate their intervention to have contributed to the total effects (without taking into account the contribution of other investors).

The second related concept is that of *additionality*, which refers to the extent to which the input of an investor fills a market gap. The concept of additionality was mostly brought up by investors with a higher risk appetite (e.g. being the first external investor in a company) or strong focus on providing non-financial value adding activities (e.g. advice, assisting in raising additional capital) to companies. These investors highlighted the need for assessing their additionality as an important qualifying step to attribution, and considered mathematical approaches as inadequate reflections of their effects – as this would result in an underestimation of their role. A small non-financial value adding activity can actually make or break the results of the investments.

2 VALUE CHAIN AROUND IMPACT INVESTORS

The primary focus of this study is the fund manager's perspective on attribution. However, fund managers are part of a value chain, which has a fundamental influence on their thinking and practical approach towards results measurement in general, and attribution in specific. The views of fund managers can therefore not be regarded in splendid isolation, and should take into account the influence of these actors, albeit on a high level. The graph below provides a simplified version of the value chain around impact fund managers. This chapter highlights the key actors in the value chain, and describes the (potential) influence they have on a fund manager concerning attribution of results.

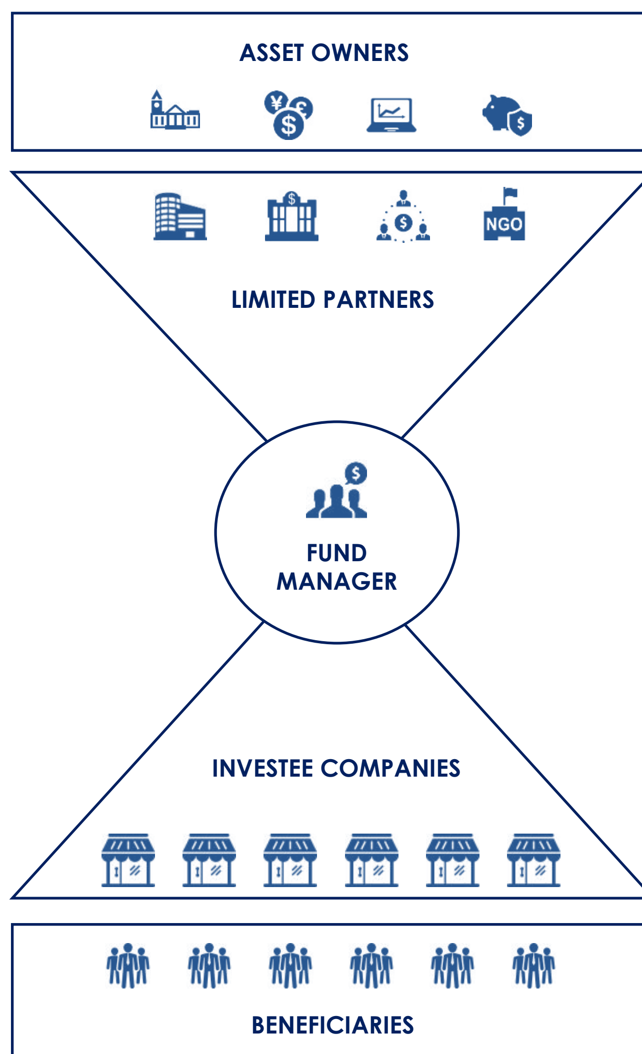

Exhibit 4 Value chain around impact fund managers

2.1 Asset owners

The top of the value chain consists of asset owners. Examples of asset owners are government agencies, sovereign wealth funds, institutional investors or pension funds. They own assets that derive from sources such as tax payments, pension savings, insurance premiums, or private investments. These assets are allocated to different asset classes, of which private equity is one. As asset owners are on top of the value chain, they have the potential to set the agenda regarding expectations on reporting on results, which trickle down the value chain. The expectations regarding accountability on non-financial results vary substantially: government

agencies traditionally have a strong focus on steering for impact and reporting on results, whereas the topic has not emerged on the radar of mainstream pension funds or insurance firms. In this space, only a small number of frontrunners look into impact investing and reporting such as PGGM from the Netherlands and Swedish AP2.

2.2 Limited Partners

The second group of actors concern asset managers who have the mandate from asset owners to manage their capital. When committing capital to an impact fund, they become the Limited Partner ("LP") in that fund. Examples of these LPs are DFIs, the impact investment departments of commercial banks, family offices or foundations. The limited partners have a major influence on results measurement practices of fund managers. Through their committed capital they acquire a stake in the fund, which provides them with the opportunity to set expectations and the right to accountability. Some also actively advise fund managers on the establishment or improvement of results measurement approaches or systems through technical assistance.

2.3 Fund managers

The third group are the fund managers who raise capital from LPs for the funds they manage and with which invest into individual companies. These funds have a specific (impact) strategy based on which fund managers and LPs agree on the financial and non-financial terms and conditions of their commitment. For impact funds, these terms and conditions also imply specific agreements on the strategy, measurement, monitoring and reporting around impact.

2.4 Investee companies

The last groups of actors are the investee companies and their clients or other beneficiaries. They are the recipients of the capital and non-financial value add, which they use for their business activities, and hence the achievement of intended (or unintended) results. Impact fund managers are dependent on investee companies to gather, track and report financial and non-financial information for results measurement. Clear communication on expectations, a joint understanding on the relevance of collecting these data and information, and effective data collection systems are key elements for successful reporting to a fund manager. A separate DCED study focuses on the collection, analysis and use of information by social and environmental impact businesses.[6]

[6] Study on "impact investing – measurement valued by investee businesses".

3 RATIONALE FOR ATTRIBUTION

A key conclusion that can be derived from the investor consultations is that none of the involved respondents denies the *theoretical* relevance of attributing results to their intervention or investment. All agree that attribution would provide more accurate and hence better insights into the effects of their investments and non-financial support. They see several benefits which will be explored in this chapter.

It should however also be noted at this point that the vast majority of fund managers still perceive too many hurdles, both in theory and practice, to apply attribution practices to their funds. Most investors note that there would only be a true rationale for attribution when these hurdles are taken and thereby certain preconditions are met (e.g. clear demand, methodological feasibility, reliable data, and cost-efficiency). The hurdles to attribution are subsequently are further explored in chapter 4.

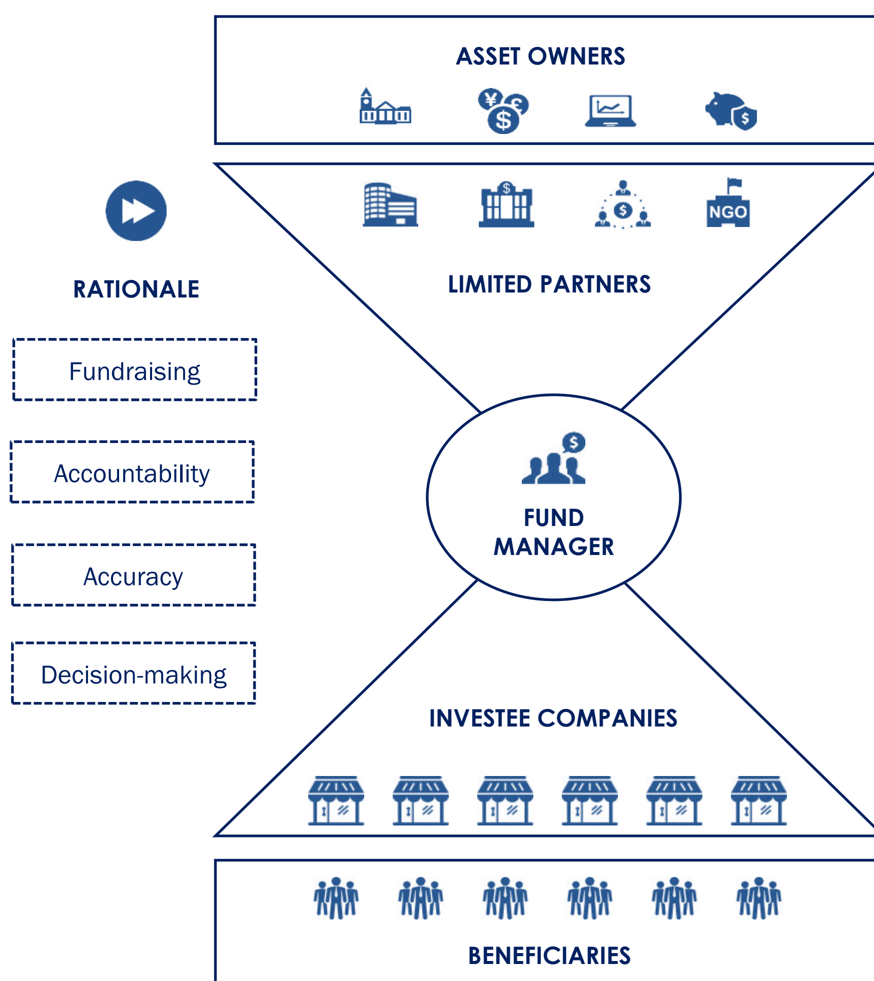

Exhibit 5 Value chain and rationale for attribution

3.1 Accuracy

The first and overarching reason for attributing impact is that it provides more accurate and hence better insights into the effects of investments and non-financial support. Creating impact, or change in a beneficiary's life, is often a joint effort of numerous parties who all contribute in their own way. In an ideal situation of impact measurement, one would be able to identify the causality or correlation between one single party's contribution and the total impact, thereby separating it from other external factors that have an influence. All interviewees are interested in measuring these "net effects" as it gives a clean picture of an investment's

result and avoids double counting with other investments. A large majority of respondents acknowledge that value of attribution for accuracy purposes. As one interviewee pointed out: *"it can't be that we claim that we jointly saved three planets today."*

3.2 Accountability

A second main reason is accountability towards the LP and asset owner. This was a point mostly raised by the fund managers operating funds with public backing. Donor organisations like the British Department for International Development (DFID) and the Dutch Ministry of Foreign Affairs are under increasing public and political pressure to demonstrate their impact, preferably in quantitative terms. In turn, these donor organisations request their executing agencies like the DFIs to provide the numbers and evidence to back up their claims. As these DFIs invest a portion of their capital through financial intermediaries, these numbers need an attribution factor to give a more correct reflection of the impact supported and to avoid double counting (see the exhibit below for a simplified example of how results can easily be overstated and double counted when not applying attribution).

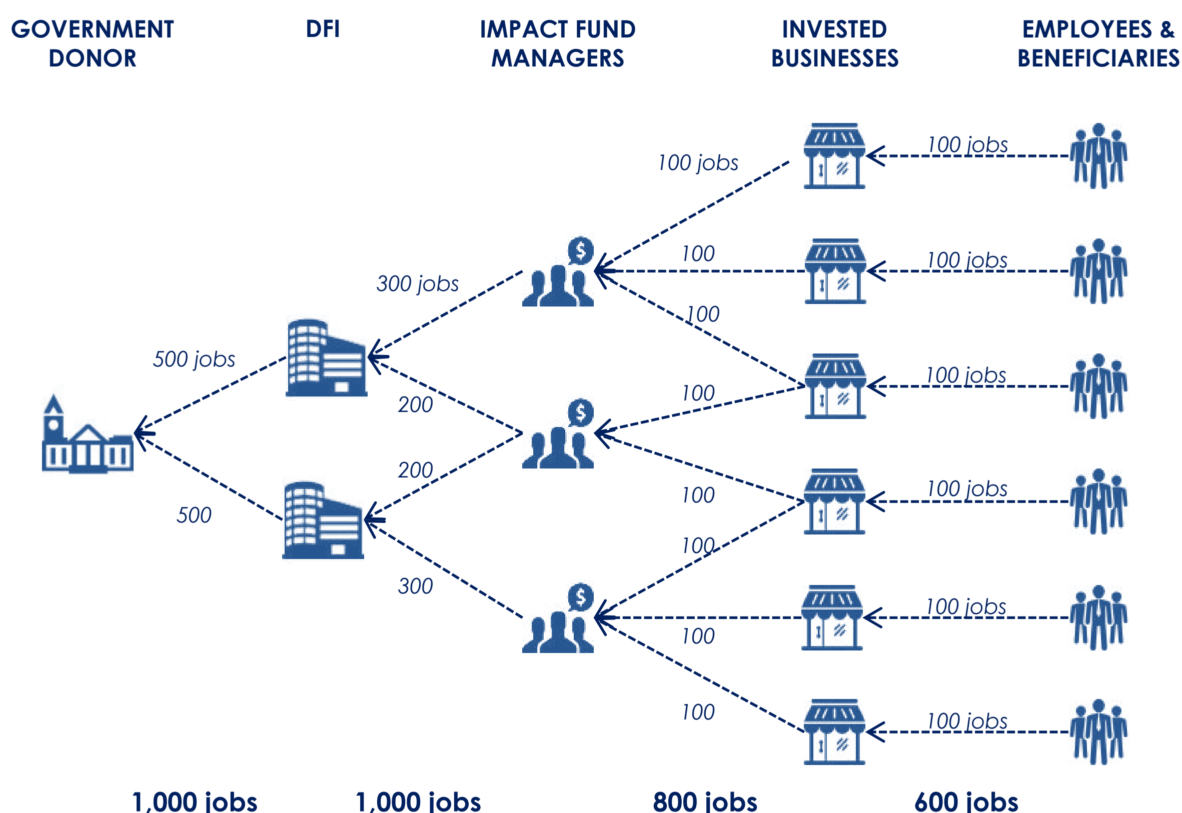

Exhibit 6 Simplified and fictional example of results without attribution

Although attribution is clearly a useful exercise for fund-of-fund constructions[7], it currently is hardly relevant for fund managers. Their close position to the companies in portfolio gives them more than enough credibility to report on results at that company level and claim that they contribute to reported results (positive or negative). Moreover, their LPs are not asking for attributed results (for more discussion please refer to the demand hurdle in the next chapter). With increasing top-down attention for attribution, this might however change. As one interviewee summarised it: *"attribution is merely an aggregation question and therefore most*

[7] This is an investment vehicle holding a portfolio of (shares into) other investment funds.

relevant to those who are far away from the action, such as DFIs. But as we [fund managers] all deal with DFI commitments, it is becoming our problem too."

3.3 Fundraising opportunities

Another reason for attribution is a clear commercial one: increased fundraising opportunities. This is particularly relevant for those impact funds working with donor-backed investors like DFIs. Fund managers looking to raise funds should not only convince their potential LPs of the financial proposition, but also need a solid story on their impact. Attribution can help a fund manager distinguish itself from competitor funds on its impact proposition in various ways. In the consultations with fund managers two main reasons were discussed.

The first is that by attributing results a fund manager can show that it has a thorough understanding of results measurement. As the impact investment industry is still relatively nascent and many impact investors still struggle to set up a solid results measurement system to assess their contribution, a fund manager that understands how to attribute results can distinguish itself from less experienced peers. Estimations of expected or generated results per $1mln invested help interested investors gain insight in the (potential) effect of the commitment to a fund. Investors appreciate this as it gives a quantitative – whether perfect or not – picture of what to expect. This allows potential limited partners room for comparison between different investment opportunities. One fund manager mentioned: *"it is only fair that an investor asks an impact investor to be just as clear about the fund's expected social return as its financial return."*

The second is that attribution is required for accurate impact-based incentives structures[8], which is an upcoming practice in this space. Whereas fund managers are usually incentivised by the returns made above a mutually agreed minimum return target (the 'hurdle rate'), there are investors experimenting with variable payments for impact results that are achieved above a certain agreed level. In order to properly attribute the results to the fund manager, attribution is essential. When this practice gains further traction, attribution will rise in importance alongside it. This is most relevant to the experimental impact investors.

3.4 Internal decision-making

The fourth and most debated argument for attribution is internal decision-making. Some fund managers say attribution of impacts gives insight into the efficiency and effectiveness of their funding. In other words, how big is the bang for my buck? Knowing this helps steering their investment towards maximum effects. Others take more of beneficiary perspective and are only interested in the impacts for beneficiaries on the ground. Translating these effects to a portion they can claim seems pretentious and irrelevant to them.

Especially the latter is important to the fund managers who are sceptical toward impact attribution. They question how answers to attribution question would change their decision-making. As one interviewee put it: *"…even if I would be able to identify that portion of the cake that's mine, where does that get me? It is not going to change my thinking. I really don't care about my share of the cake, I just want it to be big and good. At the most I would like to know what part I have in the recipe, which is the Theory of Change."*

In the interviews, only one fund manager said they measured the net effects of its operations across portfolio; the One Acre fund. They monitor the income levels of the farmers receiving its support and benchmark that against the income levels of farmers without its support. This is a useful exercise with solid insights into the net effects of the their intervention. However, it must be noted that One Acre does not fit the standard profile of an impact fund and that its approach for measuring attribution would not be feasible for an average impact fund (see chapter 5 for more information).

[8] For more background on these structures, see GIIN, *Impact-Based Incentive Structures. Aligning Fund Manager Compensation with Social and Environmental Performance* (2011).

4 HURDLES AROUND ATTRIBUTION

As mentioned in the introduction on the rationale for attribution, investors currently see significant hurdles to attribution. For nearly all consulted investors these hurdles hold them back from applying attribution to results in practice. This chapter analyses these hurdles, which are structured around methodological challenges, the current lack of demand for attributed results, challenges in data collection, and the limited available resources.

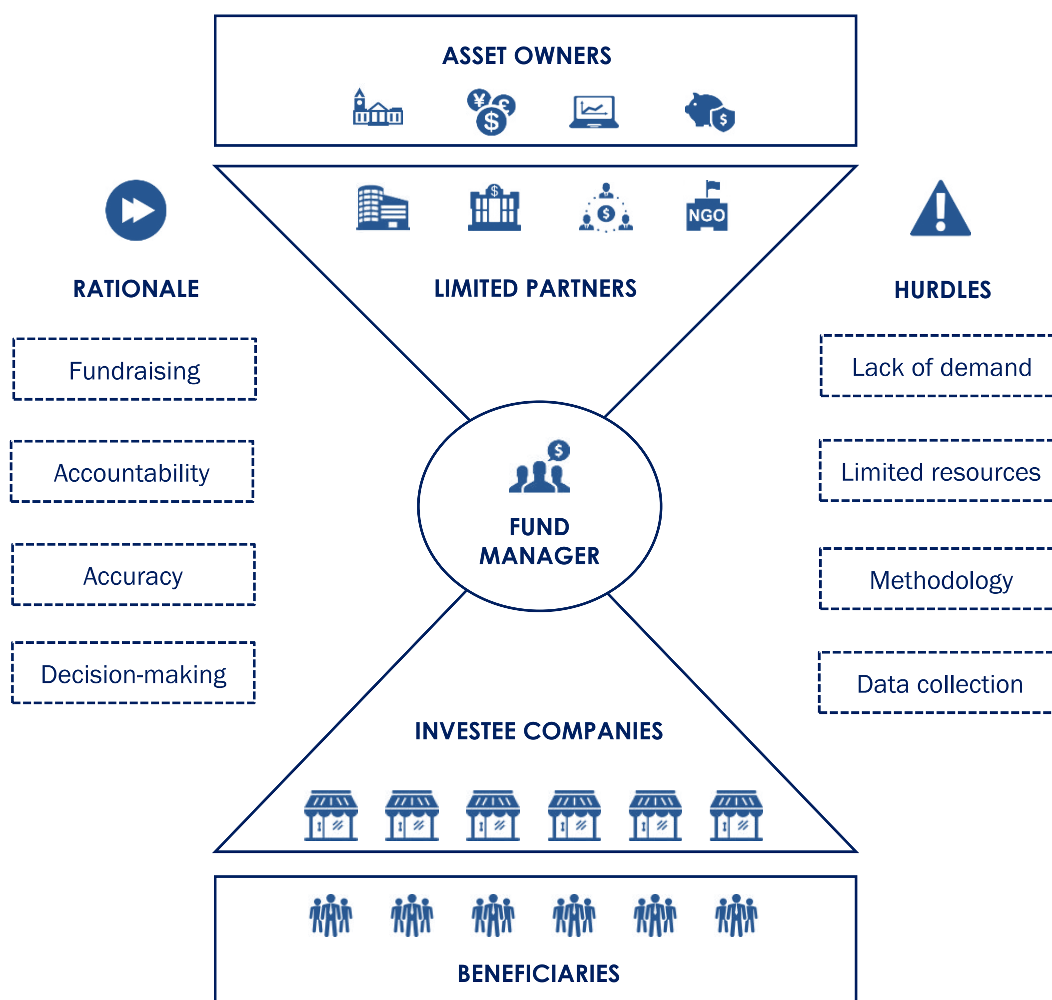

Exhibit 7 Value chain, rationale and hurdles

4.1 Methodology

The first hurdle to attribution by impact investors concerns the methodology. To date, no standardised or otherwise generally accepted methodology has been developed for impact investors. This is not surprising, because impact investing is a relatively nascent industry. Results measurement in itself still is a challenge to many impact fund managers, as investment staff often has a background in finance rather than development. Moreover, existing methodologies are not one-on-one applicable for impact investing. There are a number of factors that make results measurement – and attribution in specific – a more complex exercise for impact investors compared to more traditional development interventions.

Why attribution is more complex for impact investors

There are several established methodologies that are applied for attribution of results by traditional development-focused interventions, such as grant-funded programmes or projects funded by government agencies or charities. These methodologies vary from resource-intensive but precise measurement techniques such as randomised control trials (RCTs), other quasi-experimental designs and regression analysis to approaches that are easier to conduct such as Before and After Comparisons (BACOs).[9]

Most of these established methodologies are however not fully applicable for results measurement of impact investments. A number of factors make interventions by impact fund managers more complex: there usually are multiple other investors (with different amount of capital invested), a more diversified targeted results focus, and different financial instruments. The table below further provides an overview of differences between traditional development interventions and impact investments on several aspects relevant to attribution. Please note that this is a generalised overview of different approaches.

Table 1 Differences between grant-based interventions and impact investments

	Traditional development interventions	Impact investments
Principals	• Single or limited number of agencies	• Large number of private investors
Investment focus	• Single or pre-determined type of activity	• Diversified types of activities by companies
Financial instruments	• Grants	• Debt and (quasi)equity
Leverage over receiving entities	• Strong: usually sole funder	• Limited: usually multiple shareholders
Causality	• Relatively straightforward: usually sole funder and advisor	• Complex: multiple investors that invested different capital volumes and levels of non-financial advice at different times

Most recognised methodology

The main question to answer when attributing results in impact investors is which portion of the results can be linked to which investor. The most recognised approach to attribute results to different investors is through prorating. This essentially entails allocating a part of the results to an investor based on its capital invested (see section 5 for practical examples). There are basic rules that are being applied to debt and equity:

- *Equity*: prorating impact results based on share of invested capital divided by total shareholders capital (e.g. 10% share in a company means 10% of the results can be attributed to the investor);
- *Debt*: prorating based on loan amount as part of total assets or project costs (e.g. if a US$ 100,000 loan is provided to a company with US$ 1,000,000 in total assets then 10% of results can be attributed to the investor);

Most impact investors recognise these relatively straightforward rules. The simplicity of these rules is considered both a strength and a weakness: on the one hand they are quantitative and objective (like financial ratios), on the other hand they omit a number of relevant factors in the equation (see next section). Impact

[9] For a good overview of these methodologies, please refer to DCED, *Guideline to the DCED Standard for Results Measurement: Estimating Attributable Changes* (2016).

investors point out that prorating at best paints a simplified picture of their role, while most note that prorating alone does not adequately reflect the benefits of their intervention.

Specific issues with methodology

Other specific issues around attribution methodologies for impact investors need to be addressed in order to adequately reflect the results that can be attributed to them. The three that were mentioned most are:

- *Additionality*: this refers to the extent to which the input of an investor was a fundamental or catalytic element to the company and the effects achieved. As mentioned in chapter 1, for some investors (e.g. venture capital) their willingness to invest in the start-up or early stage phase of a company is a core element of their strategy and impact proposition. Current approaches to attribution do not address both the timing of investments (e.g. cornerstone investor vs. later round of financing) and the type of capital (e.g. growth capital vs. replacement capital). These investors feel their unique role should be reflected in attribution rules, particularly when other investors step in at later stages;
- *Catalytic role*: this refers to the extent to which the capital itself or any personal efforts of an investor led to additional financing for a company. For some impact investors this is a specific objective. With guarantees there even is a specific financial instrument offered by some investors that is entirely focused on achieving this catalytic effect. Investors with a large catalytic effect feel that all or part of the effects realised due to this additional capital should be attributed to their intervention;
- *Non-financial added value*: this refers to various forms of advice and assistance offered to an investee company by an investor. Examples are technical assistance, capacity building, advice by an experienced Board member representing the investor, or introducing the company to an investors' business network. The costs of these forms of advice and assistance usually are much lower than the capital invested, but may still make a major difference to companies. Investors with an active focus on advice and assistance feel that this value added should be reflected in attribution of results.

These aspects are complex to integrate in a methodology, as they are not or only partly measurable and need validation from third parties. In addition, reflecting these forms of value add beyond the capital itself would mean that the share that can be attributed to other investors not offering this value add would dilute.

Some sort of standard rules for these aspects would provide a fairer reflection of an investor's intervention and hence make attribution quantifications more feasible for impact investors. However, developing rules that have some objective basis, are practical and acceptable to different types of investors will be a major challenge.

4.2 Lack of demand

The second and probably most fundamental practical hurdle perceived by impact fund managers is the lack of demand for attributed results. This mainly concerns a current lack of interest among their principals, the limited partners. In addition, it is questioned whether attribution has any value for investee companies.

Limited partners

With the exception of two impact investors, none of the fund managers consulted for this study were ever formally requested to include attribution practices in results measurement or report attributed results back to their investors. This lack of demand is the first and most serious hurdle to attribution practices by fund managers. Ultimately, fund managers receive a mandate to manage a pool of capital according to pre-determined objectives and conditions. These objectives and conditions are contractually agreed, and this usually includes agreements on results measurement and reporting. If there are no expectations on attribution

in this mandate, there is no incentive for fund managers to invest scarce time and efforts (see resource hurdle) in moving from their contribution to results to attributed results.

This lack of demand was confirmed by several DFIs acting as LPs of impact funds. Some of them do not to expect fund managers to report on attributed effects as they are still exploring themselves how attribution could be approached in their own internal results measurement – and what it would mean for their reporting on results. Other DFIs who do account for attributed results (e.g. FMO) can often do the calculations themselves based on the financial and non-financial data provided by the fund manager. All DFIs do however expect that their increasing focus on data accuracy will eventually lead to stronger requirements in the future for fund managers to report on attributed effects.

Investee companies

In addition to capital providers, there is no interest among investee companies in attribution practices by impact investors. This is not surprising, because, in contrast to measuring results to which investors contribute, there is no value in attributing results to their different investors. In other words, it is of interest to companies to measure how many people they have provided with improved access to healthcare, but not as interesting to understand which part of those results belong to which investor.

This is an important factor that discourages impact investors from attribution practices. As one fund manager stated: "*we are primarily focused on supporting the companies we invest the best way we can. This includes results measurement, as companies can use that for managing their business. But measuring the part of those results that we as an investor could claim credit for is of no use to the company. That is why we are not focusing on attribution*". Contrary to limited partners, this situation is unlikely to change. So if the demand hurdle is to be tackled, it should be done by the asset owners and LPs.

4.3 Data collection

The third hurdle concern the collection of necessary quantitative and qualitative data required for attribution. For fund managers, getting complete and reliable impact data is challenging as this is often not a priority for the companies they invest in. These are often fast-growing businesses that focus on the commercial front-end of operations and less on back-end things like general data handling. This makes it an effort for investor to acquire the necessary data for results measurement from the company, especially when the data are not collected through the company's operational management system. And it becomes even more difficult when there is also input required from third parties such as clients or beneficiaries. Obtaining the insights from these, often large groups, takes significant financial and human resources.

They key to good data collection is to collect it in a timely and systematic manner, and ensure data requests align with an investee's operational processes and information needs. It is also important for the investor to clearly explain to the company why the data are needed, and share any analysis that results from measurement practices, as this may be used for a company's own decision-making.

4.4 Limited resources

The fourth is the resource hurdle. Compared to more traditional donors or NGOs, impact fund managers have significantly less financial and human resources available for result measurement. Developing, implementing and maintaining an impact measurement system already is a major challenge for most fund managers from a technical as well as a resource point of view. Developing and integrating an attribution approach in their impact measurement is perceived as a next step that is resource-intensive.

This concern is understandable when one compares the monitoring and evaluation resources of impact fund managers with more traditional government-funded development programmes or NGOs. For the latter group, budgeting in sufficient financial human resources for results measurement is an integral part of the

proposition. In fact, the DCED standard for results measurement on development projects suggests that 5-10% of the project budget is spent on results measurement, monitoring and evaluation. This figure was recognised and confirmed by expert respondents that were part of this research.

This is different for fund managers, as all operational expenses have to be paid from a management fee that usually is around 2% of the capital committed to the fund. Out of this management fee, all operational expenses around running the fund have to be paid, including staff salaries, office costs, travel expenses, legal and accounting fees as well as results measurement practices.

Getting familiar with the concept of attribution, considering how it would be applicable in their specific situation, and developing a suitable approach to attribution requires a significant amount of time. Subsequently there are the potential costs of data collection for attribution (e.g. qualitative surveys or experimental approaches). This means that setting up an individual, tailored approach to attribution as part of results measurement is in practice hardly feasible under current impact fund manager practices.

5 CASES: APPROACHES TO ATTRIBUTION

As mentioned in the previous chapter, there is a limited number of fund managers that currently apply attribution in results measurement on a fund level. Below concrete examples of three approaches are provided by impact investment fund managers and DFIs: the prorating approach, a quasi-experimental approach and integration into results measurement models.

5.1 Phatisa and DGGF: prorating approach

Two examples of fund managers that take the prorating approach as a basis for attribution are Phatisa and the managers of a part of the fund-of-fund activities of the Dutch Good Growth Fund (DGGF).

Phatisa

Phatisa is a private equity fund manager operating across sub-Saharan Africa with offices in Mauritius, South Africa, Zambia, Kenya, and London. The firm has two sector-specific funds under management, focused on food and affordable housing: the African Agriculture Fund (AAF) and the Pan African Housing Fund (PAHF). AAF is a US$ 246 million fund with investments across diverse agricultural activities (e.g. primary farming, palm oil, processing, inputs, fertiliser, protein production and FMCG beverages) in 15 countries across the continent. PAHF is a US$ 42 million fund that currently holds six affordable housing investments in Kenya, Rwanda and Zambia.

Although results are yet to be published, Phatisa is developing an approach to account for attribution when measuring its funds' impacts. As a basis, it uses the prorating approach, discounting impacts based on the proportion of Phatisa's investment (i.e. the % shareholding in the portfolio company). On top of that, Phatisa will include the time spent by its team on advisory services to investee company, when relevant. This will be calculated either by using the hours spent by Phatisa team members multiplied by market equivalent charge-out rates (using professional consulting fees for services such as management, financial or ESG consulting). If the inclusion of management time makes a material change to attribution percentage, then it will be included. If no material change is made then this is not included.

The main reason for Phatisa to apply attribution is that it is wants to monetise its impacts and share more accurate results, in order to account for the true value made by Phatisa's investments into food and housing in Africa. As Phatisa explains: "*we believe that impact numbers should be as accurate as possible and therefore include attribution as a core discounting factor. We recognise that this means we may report lower numbers than our peers, but we feel our results will be more reliable and meaningful and will represent the actual commitment made by Phatisa to the continent. It also creates the opportunity to have more meaningful conversations around impact within the private equity and broader investment community*."

DGGF

The DGGF is a revolving fund of the Dutch Ministry of Foreign Affairs. A part of the fund is fully focused on providing financing for local SMEs through investing in intermediary impact funds in up to 68 selected countries. This part of the fund is managed by a consortium of Triple Jump and PwC and has a size of EUR 328m (of which about EUR 100m is currently committed).

Triple Jump and PwC report attributed results of the DGGF based on the prorating approach discussed earlier in this report. It attributes results for DGGF's commitments to the funds, but does not ask the intermediary impact funds to also provide attributed results of their investments into individual companies. This is understandable, because this would require aligned expectations on a methodology and additional resources. Triple Jump and PwC also monitor and report on non-financial advice and technical assistance as well as how much additional funding was raised after DGGF invested, but these aspects are not factored in attribution.

It should be noted however that there are two features that distinguish DGGF from other impact funds, and which make it more logical to attribute results. The first is that it has a single, public capital provider. The second is that DGGF is a fund-of-funds, and does not directly invest in companies. As the fund is one layer away from the actual investment in the entities that generate results, it makes more sense to attribute, as claiming full results of all funds could be considered to over claim results.

5.2 One Acre Fund: quasi-experimental approach

The One Acre Fund is an NGO that provides smallholder farmers in East Africa with asset-based financing and agriculture training services. Its objective is increasing farmer productivity and agricultural yields, in order to reduce hunger and poverty. The organisation is headquartered in Kenya and cooperates with farmers in Kenya, Tanzania, Uganda, Rwanda, Burundi, and Malawi.

One Acre is committed to measuring its effectiveness, because attributed results provide learning for internal decision-making and because demonstrating the success of its business case is a major objective. One Acre uses high-quality methodologies like Randomised Controlled Trials (RCTs) when possible. But even with the significant budget that One Acre Fund has (around 7% of budget is spent on Monitoring & Evaluation), the organisation cannot deploy RCTs on a regular basis.

Alternatively, One Acre Fund tests its impact through a quasi-experimental methodology for roughly 8,000 client and control farmers per year, over 6 countries of program operation. Through this approach the organisation looks at the impact level increase of its farmer clients vis-à-vis the impact levels of a control group. The methodology allows for measuring across countries, across regions within countries, and to compare five different crops. The methodology also allows for a quantification of the portion of impact that is attributable to the fund. One Acre Fund periodically uses RCTs to confirm that that its regular measurement methods produces correct indications of impact and attribution.

However, it must be noted that the organisation does not fit the standard profile of an impact fund and has specific features that facilitate attribution. Three factors are most prominent. First, it has a dedicated focus on smallholder farmers, which form one homogeneous beneficiary group. Second, in nearly all cases is the only entity supporting these beneficiaries. Third, it has a budget for monitoring & evaluation practices which is based on grants from donors and not a commercial commitment. This approach would not work for a standard impact fund with different investments and a constrained monitoring and evaluation budget.

5.3 FMO and IFC: attribution rules in results measurement models

Two examples of DFIs that have integrated tailored attribution rules into their results measurement models are FMO, the Dutch development bank, and IFC, the private sector arm of the World Bank Group. Both have public shareholders and a higher level of expectations on results measurement both by shareholders and stakeholders.

FMO

FMO has an impact model which enables it to track its progress towards its ambition of doubling its impact (i.e. (in)direct jobs supported) and halving footprint (i.e. GHG emissions avoided) by 2020. FMO applies attribution rules for its reported impact as it wants to credibly steer for impact, report achievements, and prevent adverse incentives. Through attribution rules, expected impact on client level is directly linked to FMO financing.

The FMO impact model takes into account the EUROs invested by FMO as well as third party amounts catalysed by FMO. The underlying idea is that without FMO the third party would not have invested in the

project. For its financing it follows the prorating approach, but uses a multiplier of 2 for private equity investments to factor in the stronger impact it considers to have with equity products vis-à-vis lending.[10]

IFC

IFC has contribution rules to estimate the expected results of its investment services. As part of the contribution rules, it uses a contribution factor for equity and debt investments. The contribution factor is prorated only in cases where the equity investment is lower than 10% of the client's total equity or the loan is lower than 20% of the client's total long term debt. Above these thresholds, full expected results– 100%, of the invested entity are counted.

IFC includes the results that can be linked to capital that it mobilised, such as through syndicated loans. It also has specific rules for advisory services to different types of clients.[11] IFC does require a clear link between the advisory services and the intervention and a formal client services agreement (e.g. MoU) in place. IFC also ensures that no double counting can take place in case of an investment that is combined with advisory services.

[10] For a full overview of the methodology of FMO's Impact Model please click here.
[11] For an overview of the contribution rules for the IDGs and the specific rules for advisory services is provided here.

6 WAY FORWARD WITH ATTRIBUTION

In sum, it can be concluded that frontrunners in the impact investment industry generally recognise that attribution is fundamental to the development and credibility of impact measurement by investors. Several investors think that attribution can improve accountability, help with fundraising, and may improve internal decision-making.

However, it can also be concluded that in practice most impact fund managers do not see attribution as a direct priority. In fact, attribution in results measurement is currently only executed by a few investors that have special circumstances. This is because the hurdles to attribution outweigh the reasons for attribution. The main hurdles are the absence of a feasible and accepted methodology, a lack of demand among capital providers, challenges in data collection and limited resources. These hurdles are so significant that one investee remarked that "*it would be great if it is broadly acknowledged that it is simply too complex*".

6.1 The challenge

If the impact investment industry wants to move forward with attribution, for which there undeniably is motivation, the challenge is to meet a number of requirements. The six main steps that should be taken in order of relevance are:

- Development of a menu of standardised approaches for attribution that is feasible, flexible, cost-effective and sufficiently simple to be applied by investors with different fund sizes, investment objectives, and financial instruments;
- A joint effort by capital providers to stimulate fund managers to report attributed results as part of their impact reports;
- A recognition among investors that advanced results measurement is resource-intensive for fund managers which should hence be reflected in the management fee;
- Assistance to fund managers in effective and efficient data collection from investee companies, actively taking into account ambition levels and business relevance to the investee;
- Promotion of innovative impact-based incentive structures for the fund manager based on attributed impact results;
- A general recognition among donors that results measurement in impact investment is different from traditional development assistance, and that complex, resource-intensive methodologies such as RCTs are not feasible.

6.2 The driving force

As highlighted in the requirements above, enhanced attribution practices in impact investing will need to come from different types of actors. At the same time, the study identifies a need for an authoritative entity or platform to be the main driving force. There are different views among fund managers on which entity would be most suited to act as a coordinator and promoter. The most frequently mentioned options are:

- *GIIN*: the Global Impact Investors Network is the primary network organisation of impact investors. It already promotes guidelines on impact measurement for fund managers, and has global reach through its newsletters and regular conferences. Moreover, it developed and manages IRIS, the catalogue of generally-accepted performance metrics;
- *DCED*: as a forum for inter-governmental agencies that focuses on achieving the most effective ways of creating economic opportunities for the poor through private sector development, the DCED has a

wealth of experience with advanced results measurement. Whereas the DCED has less experience and network in impact investment, it does have the DCED Standard for Results Measurement, an own tested approach to results measurement, which includes attribution;

- *WEF*: the World Economic Forum runs the 'Mainstreaming Impact Investing Initiative', a multi-year project that aims to identify how impact investing may be a feasible strategy for traditional and mainstream investors. Additionally, from 2016 it has been looking at the issue of impact measurement and management and coordinating with the GIIN and Impact Management Project (coordinated by Bridges Ventures). The WEF does have the name and platform to bring together all different actors in the value chain, including the biggest institutional investors;
- *IFIs/DFIs:* As the major source of funding for impact investment funds, some IFIs and DFIs, particularly larger organisations, may consider jointly taking the initiative to advance attribution in results measurement. It is an upcoming issue for IFIs/DFIs, they have the most practical experience and are best positioned to stimulate and support impact fund managers. This will however require intensive cooperation and flexibility in decision-making.

6.3 The next step

Developing a standardised, all-encompassing approach on attribution will be difficult in the short-term, but all consulted fund managers voiced the need for a focused guide on attribution. As guidance on attribution is usually an omission in guidebooks on results measurement, a standalone guide on the topic would fill a clear gap. The guide could provide much-needed clarity on the definition, an overview of the rationale, and a deep-dive into different (potential) approaches. Both the authors of this report and fund managers see the development of such as guide as the most logical next step.

ANNEX 1: LIST OF EXPERTS CONSULTED

Organization	Name	Function
Fund managers		
Acumen	Tom Adams	Director of Lean Data
Aga Khan Development Network	Marc Theuss	Director Monitoring, Evaluation and Research
Bridges Ventures	Olivia Prentice	Manager Impact+ Team
Cardano Development	Ingwell Kuil	Development and External Affairs
Global Environment Fund	Jim Heyes	Managing Director
GroFin	Roubesh Jhumun	Impact specialist
Impact First Investments	Cecile Blilious	Managing partner
Investisseurs & Partenaires (I&P)	Elodie Nocquet	ESG & Impact Director
KL Felicitas Foundation	Lisa Kleissner	Co-Founder
Leapfrog Investments	Samantha Duncan	Head of Impact
LGT Impact Ventures	Tom Kagerer	Head of Impact
One Acre Fund	Kimberley Siegal	Director, Monitoring & Evaluation
Phatisa	Gwendolyn Zorn	Impact Team Leader
Sarona Asset Management	Vivina Berla	Managing Partner
Small Enterprise Assistance Funds	Bob Webster	Managing Director
Triple Jump	Christophe Bochatay	Social Performance & Impact Manager
Triodos Investment Management	Hadewych Kuiper, James Niven	Commercial Director, Head of Corporate Affairs
DFIs		
CDC Group	Alex MacGillivray	Director of Development Impact
DEG	Elleke Maliepaard, Dr. Julian Frede	Managers Development Policy and Evaluation
FMO	Emilie Goodall	Impact and Sustainability Expert
IFC	Claudio Volonte, Alan Lukoma, Ugo Amoretti	Development impact
Private Infrastructure Dev. Group	Joe Shamash	Manager Evaluations
Proparco	Pascale Scapecchi	Impact Manager
Network organizations / experts		
ANDE	Genevieve Edens	Director of Research and Impact
GIIN	Kelly McCarthy	Director IRIS, Impact Measurement
New Philantropy Capital	Plum Lomax	Deputy Head of Funders Team
Social Value International	Jeremy Nicholls	CEO

ANNEX 2: LITERATURE

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