

MEASURING IMPACTS

The experience of
the EIB-GDN Programme



Measuring impacts

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Measuring impacts – The experience of the EIB-GDN programme

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This is a joint publication of the EIB Economics Department and the Global Development Network (GDN).

The mission of the EIB's Economics Department is to provide economic analyses and studies to support the Bank in its operations and in its positioning, strategy and policy. The department, a team of 45, is headed by Debora Revoltella, Director of Economics.

The GDN is a public international organisation dedicated to supporting high-quality, policy-oriented research in developing and transition countries. It is headquartered in New Delhi, India, and works in close cooperation with national and international development partners.

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Disclaimer

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Foreword

The European Investment Bank (EIB) has been investing in Africa since 1963. In 2020, it stepped up its investments to help African partners respond to the COVID-19 health and economic crisis. The EIB provided €5 billion for new private and public investment across the continent in 2020 – setting a new record for the Bank’s annual engagement. This finance will back more than €12 billion in investments in 28 African countries, with 71% of the funding benefiting fragile states and the least developed economies. The support will help African countries deal with the immediate health emergency and mitigate the epidemic, as well as address the economic effects of the crisis and progress towards achieving the Sustainable Development Goals. Projects signed in Africa in 2020¹ are expected to contribute to 210 million people receiving COVID-19 vaccines, 595 400 households being supplied with newly generated energy, 778 000 people enjoying improved water supply, and farmers benefiting from 26 500 of hectares of newly irrigated land and 3 076 hectares of newly planted forest.

The EIB partners private and public sector clients and uses innovative impact finance to support high-impact projects in Africa. As in previous years, around 50% of EIB lending in Africa in 2020 involved private sector partners. The EIB uses a window of the Africa, Caribbean and Pacific Investment Facility, the Impact Financing Envelope, to support higher-risk private sector initiatives with a big impact for poorer populations.

As the European Union’s development bank, the EIB places the measurement of development impact at the very core of its business approach. Its [Additionality and Impact Measurement Framework \(AIM\)](#) captures evidence on the results of every EIB investment. The EIB aims to be at the forefront of rigorous impact assessment methodologies, combining information collected by the AIM with micro- and macro-level impact studies and independent evaluations. This creates a strong evidence base for gauging our development impact. Because we are accountable to our stakeholders, measuring our impact is essential. It also helps us and our clients learn what works, so that we can continually enhance our development impact. This learning process is particularly crucial for innovative approaches and projects, such as the initiatives supported under the Impact Financing Envelope.

The [Global Development Network \(GDN\)](#) and the EIB have partnered on an impact research programme which has deepened the EIB’s insight into its contribution to sustainable and inclusive development in Africa and the Caribbean. The programme produced 16 impact studies for investments funded under the Impact Financing Envelope, in sectors ranging from healthcare to microfinance in eight African and Caribbean countries. The studies met high standards of technical quality and academic rigour, as confirmed by a strong and independent scientific committee.

The EIB-GDN programme worked with local researchers and helped them develop their skills, while drawing on the technical know-how of top international experts. Under the programme, 30 [talented researchers from Africa and the Caribbean](#) spent a year developing an impact research study for an EIB-supported project. During this time, they were trained, guided and mentored by a [scientific committee of global experts in impact evaluation](#). With top-level academics and policymakers from institutions including the Paris School of Economics, the World Bank and the International Initiative on Impact Evaluation (3ie), the scientific committee was put in place to guarantee the quality and credibility of the research produced under the programme.

¹ 2020 Annual Report on EIB activity in the African, Caribbean and Pacific States and the Overseas Countries and Territories

The EIB will continue to invest in understanding our development impact as we work to build back better in the wake of the COVID-19 crisis, building on the lessons we have learnt from the EIB-GDN programme. The financing constraints faced by many of our partners and the high expectations of our EU stakeholders and citizens make it more important than ever that we support the investments capable of making the biggest difference on the ground. We are looking forward to continuing this research stream and leveraging the knowledge we generate to boost our accountability, our decision-making and the overall effectiveness of our development impact.

Werner Hoyer
President
European Investment Bank

Introduction

Authors: Pierre Jacquet and Debora Revoltella

This book reports lessons learnt through a three-year partnership between the European Investment Bank (EIB) and the Global Development Network (GDN). The EIB-GDN Programme in Applied Development Finance applied rigorous evaluation techniques to ongoing private investments in developing countries, while building local research capacity. Local researchers provided an understanding of local contexts. The programme created a pool of local researchers with experience in development impact assessment.

The book was co-edited by Pierre Jacquet, Emmanuel Jimenez, Shahrokh Fardoust and Alexandros Sarris; Matt Ripley was a major contributor; François Bourguignon, Arianna Legovini, Claudio Cali and Nina Fenton were co-authors; Alexis Atlani, Abhay Gupta and Brendan Harnoys-Vannier provided input. The authors based the chapters on their own experience of the programme and on feedback provided by the researchers, technical experts, private-sector funds and companies involved.

The EIB-GDN Programme in Applied Development Finance started in 2017. Competitively selected young researchers from Africa and the Caribbean were asked to assess the impact of a set of projects financed under the EIB's Impact Financing Envelope. Each cohort of ten researchers was matched with expert advisors who mentored them and assigned particular EIB investments to study. The researchers usually worked in pairs. The research outputs are referred to as deep dives. Deep dives are innovative research-based impact studies that collect data and use rigorous methods to investigate the nature of development impact and discuss causality. They provide an evaluative product that occupies the middle ground between descriptive studies focusing on outputs and much heavier, comprehensive scientific impact evaluations. During the three-year programme, 30 researchers produced 16 deep dives (EIB-GDN 2019, 2020, 2021).

The programme innovated in three major ways:

It used academic research techniques to study the development impact of ongoing private-sector investments. Measuring this impact requires unusual coordination between researchers and the private sector. Deep dives answer questions that interest funders and companies as well as academic researchers. Deep dives can fill a research gap between descriptive studies and scientific impact evaluations.

It built capacity for evaluative research in developing countries. The programme relied on developing country researchers and mentored them to produce the deep dives. Researchers with an understanding of the local context of interventions add to the relevance, legitimacy and credibility of impact studies. The approach included local stakeholders in well-informed debates on how to promote economic and social development, and contribute to the sustainability of development impact.

Capacity building in itself added a development impact as compared with alternative ways to conduct such evaluative work.

It offered an opportunity to boost accountability and development effectiveness. The programme complemented the Bank's established results measurement framework by developing in-depth impact studies. The EIB gained new insights into the impact of ongoing projects. In some cases, these insights pointed towards ways to improve development impact management. Discussions with research teams allowed project promoters to reflect on their impact theses and on ways to boost impact alongside financial sustainability. The reputable and independent Expert Advisor Committee endorsed the impact studies, strengthening the accountability of EIB activities.

This book describes the three-year journey taken by the organisations partnering under this programme, detailing the lessons learnt and opportunities for future work.

Chapter 1 was co-authored by Shahrokh Fardoust, Pierre Jacquet and Matt Ripley. The chapter describes the role of impact investing in the development financing context, and the crucial role of impact measurement within this field. It illustrates the major issues and challenges behind impact measurement and the diversity of measurement practices. It discusses factors motivating measurement and describes a research gap in impact studies. It introduces deep dives as a way to bridge the research gap.

Chapter 2 was led by Emmanuel Jimenez and co-authored by Pierre Jacquet, Alexandros Sarris, Shahrokh Fardoust, Nina Fenton, Claudio Cali, François Bourguignon and Arianna Legovini. The chapter comprehensively discusses the process behind the deep dives. It explains how research fellows were selected and paired, how projects were allocated and how mentoring was provided by expert advisors. It describes how deep dives were developed through an interactive and iterative process; the role of expert advisors in the choice of methods; and the challenges of data collection. It summarises the results, describes the process of building research capacity, and discusses what the research fellows learnt from the exercise.

Chapter 3 was written by Matt Ripley. This chapter assesses the use of deep dives by stakeholders. It proposes an analytical framework based on four distinct underlying motivations for the use of deep dives: instrumental, conceptual, symbolic, and capacity building. It uses the framework to review the use of deep dives, based on a survey and discussions with key stakeholders. It discusses how deep dives were used along each of these four dimensions by the EIB and its private-sector partners, by introducing rigour in impact assessments while serving the interests of diverse stakeholders.

Overall, the programme showed that tensions between the needs and interests of different stakeholders can be managed without compromising on quality. The resulting research-based deep dives can inform debates about development impact. The following chapters detail the main conclusions. Our key take-home messages are summarised below.

Interactivity

Interaction among the researchers, expert advisors, the EIB and investees shaped the deep dives. The researchers had to understand the context and the project, and test their initial ideas with expert advisors and then investees. The researchers needed the investees' cooperation and identified research questions that provoked their interest. Communication was often challenging – between the

researchers and the private-sector companies they worked with and between the researchers and the ultimate readers of the deep dives. Deep dives mobilise academic approaches to address real-life and real-time issues, but they must be relevant and clearly communicated if they are to successfully engage private-sector companies and reach wider audiences. The researchers had to learn to combine academic rigour with appealing formulation, style and content. Substantive communication training and a significant research translation effort by EIB staff helped to achieve this aim.

Knowing and understanding stakeholders' interests and needs was key. Deep dive studies addressed these interests and needs where possible. Interaction was needed because the interests of stakeholders are diverse and research design must consider more than one set of interests. The EIB-GDN programme demonstrated that this interaction produced interesting research outputs, or deep dives, which were useful to stakeholders, including private-sector partners.

Adaptability

The Private-sector companies targeted by the studies often wanted insights with relevance to their business objectives as well as their development impact. Rapid results were needed as a relevant basis for operational decision-making. The researchers wanted to produce high-quality academic papers to further their careers. Their mentors, seasoned scholars, placed a strong emphasis on academic rigour and relevance, and required high-quality work based on methodologies tailored to the questions selected and the available data. The EIB-GDN programme required a balance between rigour, timeliness and relevance. Achieving this balance required constructive interaction among stakeholders, and adaptability in setting research questions and methodologies. This was a major learning point for the researchers.

Data availability constrained the methods that could be applied and demanded adaptability. Data collection was strongly affected by the COVID-19 pandemic. The experience showed that a research-based approach can give useful and rigorous insights even when data requirements are met imperfectly. New data sources and innovative techniques (such as big data and machine learning) might help close future data gaps.

Building capacity

Substantial capacity was built among the research fellows who participated. Technical skills were boosted through interaction with global experts in impact evaluation. The researchers also gained a better understanding of the challenges of working in a non-academic context, discussing plans with non-researchers, reformulating feasible questions and approaches, and securing the buy-in of companies. The expert advisors were crucial in helping the young researchers to reorient their questions, methodological choices and presentations to meet private companies' interests without compromising on academic quality. The researchers also benefited from supervision by EIB team members. This was particularly valuable in shaping communications to a non-academic context, achieving the best use of data collected and preparing executive summaries for companies. The GDN provided organisational and logistical support for facilitating interaction, formalising commitments, monitoring work advancement, organising annual seminars for new inductees and providing research communication training.

Future perspectives

We see several ways in which this pilot exercise might usefully be scaled up. It could be expanded by increasing the number of impact studies conducted on private-sector projects that are expected to produce development impact. It could also be “deepened”, for example by choosing several projects in the same sector, so that the learning produced by impact studies could acquire a form of sector-based validity.

Funding remains a challenge. Private impact investors are unlikely to fully cover the costs of partnering with academia to more rigorously assess their impact, because of the public-good nature of this research: the learning function of impact assessments benefits everyone. Impact studies – an exercise in mobilising rigorous methods to assess impact – are an example of how public money can support good research documenting the impact of private-sector projects. They demonstrate how new kinds of public-private partnerships can emerge. We hope that other development institutions will be inspired by the example of the EIB-funded programme and help to scale up the approach.

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We warmly thank all participants in the programme. François Bourguignon, Shahrokh Fardoust, Emmanuel Jimenez, Arianna Legovini and Alexandros Sarris were expert advisors and mentored the young researchers. All the researchers (listed in the biography section) showed the flexibility needed to adapt research to real-life constraints and the skills needed to deliver quality products. We are extremely grateful to the EIB clients – private-sector companies and fund managers – who cooperated with the researchers on the deep dive studies and provided essential material for this book through questionnaires and interviews. Nina Fenton and Claudio Cali of the EIB oversaw participation, facilitated coordination and transformed the research products into documents suitable for wide audiences. EIB staff from the Operations and Projects Directorates and from Independent Evaluation provided invaluable contributions as members of the strategic advisory committee steering the programme. EIB management fully supported the programme, and Vice-Presidents Ambroise Fayolle and Ricardo Mourinho Félix took part in associated events. The GDN staff, notably Abhay Gupta, Anindya Chaudhuri, Madhuri Dass, Ramona Angelescu Naqvi, Aarti Khanna, and colleagues in Administration, Finance, Project Management and Information Technology, provided vital input to the running of the programme.

The production of this handbook was a team effort. Emmanuel Jimenez provided outstanding leadership. The co-editors, Shahrokh Fardoust and Alexandros Sarris, and the chapter authors made vital contributions. Matt Ripley was essential in developing the book, collecting data through questionnaires and interviews, and writing Chapter 4 on the uses of impact studies. From the EIB side, Nina Fenton and Claudio Cali from the Economics Department and Sabine Bernabè with her team from Independent Evaluation participated at various stages and commented on the text. Abhay Gupta of the GDN provided useful information on the organisation and implementation of the programme and the details of the deep dives. Alexis Atlani and Brendan Harnoy-Vannier were outstanding research assistants.

Chapter 1 – Assessing the impact of private-sector investment funds in developing countries¹

Authors: **Shahrokh Fardoust** (Research Professor, Global Research Institute, College of William and Mary, United States), **Pierre Jacquet** (President of the Global Development Network, member of the French *Cercle des Economistes*) and **Matt Ripley** (The Good Economy)

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Summary and key messages

This chapter examines impact investing – investment in private companies to generate socially desirable results in addition to financial returns – and the assessment of its effectiveness. Impact investing is growing fast, reflecting rising interest from private investors in their contribution to societal goals. Impact investments have become increasingly important both in responding to societal demands and in contributing to the investments needed for meeting the Sustainable Development Goals (SDGs), when other sources of financing fall short of the massive financing required.

The growth of impact investing is focusing attention on impact measurement and the need for credible impact studies. Generating impact mobilises a chain of stakeholders – funders, intermediaries and investees – and knowledge brokers who monitor, measure and guide processes. Each stakeholder has their own definition of, interest in, and contribution to impact. The private sector, which focuses on profitability, would also typically consider potential trade-offs between financial and societal returns. The empirical jury is still out on the exact nature of such trade-offs. However, there are various types of investor within the private sector, not all of which focus on competitive financial returns. This leads to the possibility of blended finance in which, for example, public money motivates private investors, under the promise of a commercial return, towards producing public goods.

Monitoring and evaluating the impact of impact investing involves significant challenges in defining a logical chain from inputs in an activity to outputs, outcomes and impacts. Measuring impact is complex and multidimensional, and discussing causality and attribution requires time, resources and capacity. There is no single optimal method: the choice of an appropriate method depends on resources, capacity and data availability. In practice, impact investors use a variety of approaches, try to improve clarity and credibility by adopting common standards and frameworks, and increasingly manage impact. However, there remains a research gap across investment studies.

European Investment Bank (EIB) and Global Development Network (GDN) deep dives are impact studies that try to make research-based approaches more palatable for all stakeholders and fill a gap between impact reports and fully fledged scientific impact evaluations. They combine methodological rigour with the time and operational constraints of the impact investing stakeholders, especially investees who produce goods and services generating impact.

Three main messages emerge from this chapter. First, impact studies mean different things to different stakeholders. There is a gap between the private value of impact studies (which focus on accountability, communication and targeted business-oriented learning) and their social value (which relies on the knowledge created about impact and how it can be generated). Bridging that gap requires analytical efforts, external incentives and resources. Second, rigorous academic research is important at all stages of the investment process. Evaluations should continue to consider a range of approaches and models, and evaluators should cultivate stronger connections with academia. Third, increasing cooperation with academia for impact assessments has a cost that is unlikely to be covered by impact investors themselves. To support the market for impact investing and social returns, efforts are needed to promote research-based evaluations that insist on rigour and control of biases, while considering private stakeholders' interests and motivations.

This chapter examines impact investing – investment in private companies intended to generate socially desirable results in addition to financial returns (Box 1) – and the assessment of its effectiveness. Such investment reflects rising interest on the part of private investors about their contribution to societal goals². As such, impact investments have become increasingly important both in responding to societal demands and in contributing to the investments needed for meeting the Sustainable Development Goals, when other sources of financing fall short of the massive financing required (United Nations IATF, 2020).

Section 1 of this chapter briefly sets the context. Section 2 reviews some issues and challenges pertaining to impact investing. Section 3 discusses the measurement of impact. Section 4 introduces the rationale for the EIB-GDN deep dive programme.

² We use the word “societal” as a shortcut to encompass social and environmental dimensions.

1. The rapid rise of impact investing

Achieving the Sustainable Development Goals will require massive investment. In 2014, the United Nations Conference on Trade and Development (UNCTAD) estimated that the total investment needs of emerging market and developing countries could be as high as \$3.9 trillion a year, only about \$1.4 trillion of which could be financed from domestic revenue sources, official external aid, and private-sector financial flows and investments (UNCTAD, 2020). Given the magnitude of the gap, increases in official financial flows – which account for less than 5% of financing needs – must be supplemented by increases in developing countries’ own domestic resources and by a substantial increase in the private sector’s funding of and investments in the SDGs.

The situation has become even more challenging since those estimates were made. As a result of the COVID-19 shock to the world economy, financial flows to emerging markets and developing countries may decline by as much as \$700 billion in 2020 compared to the level in 2019 (OECD, 2020). The negative impact of the pandemic on the financial flow to developing countries has been at least 60% larger than the impact of the global financial crisis in 2008 to 2009.

Box 1: The origins of impact investment

Recognition of the role of the private sector with respect to social and environmental goals came gradually. A first step was the observation that production processes as well as the final good or service affect society, and that invested money should not support activities that society considers immoral or unethical. Avoiding unethical or welfare-reducing activities was the approach of the first socially responsible investing mutual funds and the establishment of development finance institution financing of the private sector in developing countries – for example, by the CDC Group or the International Finance Corporation (IFC) in the 1950s (O’Donohue et al., 2010).

The environmental movement in the 1970s and the movement for divesting from apartheid South Africa in the 1980s followed a similar logic (Bugg-Levine and Emerson, 2011; IFC, 2019). This evolution towards corporate social responsibility was concerned more with ethics and avoiding negative impact than with actively pursuing specific social and environmental objectives.

Barman (2015) dates the “invention” of impact investing to about 2007, when the Rockefeller Foundation noted the gap between the trillions of dollars of social and environmental needs around the world and the resources committed by global philanthropy, which amounted to only about \$500 million at the time. Several market-based solutions – including microfinance, community development and clean technology (Rockefeller Philanthropy Advisors, 2009; Monitor Institute, 2009; O’Donohue et al., 2010) – were being promoted at the time; however, these initiatives were not coordinated around an objective of societal impact, and investors did not include the pursuit of such impact in their objective functions. The Rockefeller Foundation brought together experts and mainstream investors to explore the conditions of their involvement. One conclusion reached was that such involvement needed to be based on evidence. From the start, the requirement of assessing impact was an intrinsic part of the impact investing concept.

The importance of assessing investment activities that involve both financial and social dimensions is reflected in the core characteristics that define impact investing (GIIN, 2019):

- Intentionally contribute to social and environmental impact and earn a financial return
- Use evidence and impact data to design the investment
- Manage impact performance
- Contribute to the growth of impact investing

Recognising this need, international donors have increasingly focused on new and innovative financial instruments to support private-sector investments in developing countries. The rationale – that there are market failures that prevent efficient private investment – is twofold. First, there may be information failures that increase the perception of risk in SDG-related investments in developing countries. Second, there are missing markets for social and environmental benefits, and public money may be needed to orient investor choices. A key challenge is that of “additionality,” or the idea that donor intervention should not be a substitute for private choices that would have been made otherwise. In recent years, impact investing has emerged as a potential bridge between the financing requirements of the SDGs and official development assistance.

However, impact investing is also under a market-driven dynamic supported by increasing demand for societal benefits from citizens, consumers, workers, investors, advocacy groups and governments. A new class of investors has emerged who jointly focus on financial profitability or sustainability and a positive contribution to society. Impact investing thus appears both as a market-led trend on international financial markets and as a channel to stimulate international donors’ efforts, which often reinforce each other.

These investors cover a spectrum of organisations from family offices and foundations, to large banks and investment houses that are increasingly entering into the space. The term “investor” may include asset owners (for example, pension savers), asset allocators (for example, financial advisors) and asset managers (those managing investment funds and client accounts). A simple distinction can be made between organisations like commercial entities, which invest with impact (where the primary focus is on financial rate of return alongside social impact) and those investing for impact (where the primary focus is on achieving social impact) (West, 2019). Major players in the investing for impact category are development banks that specialise in providing risk capital and supporting private-sector projects in developing countries. They can be either national institutions that are wholly or partly owned by governments, known as bilateral development financial institutions (DFIs), or private-sector arms of multilateral development banks (MDBs) that have been established by more than one country. These multilateral development banks – or dedicated organisations within them, for example the International Finance Corporation (IFC) as part of the World Bank Group – extend loans and equity investments to private firms in developing countries. They do this by investing in fund managers (so-called “intermediated” investments) or by providing capital “directly” to companies.

Impact investing has proven to be fairly resilient to the effects of the COVID-19 shock, particularly compared with foreign direct investment and portfolio investment inflows into developing countries (Kharas, 2020). It currently accounts for less than 10% of total net flows to developing countries. Size estimates vary among sources. The Organisation for Economic Co-operation and Development (OECD) analysed a portfolio of \$70 trillion assets under management (OECD, 2020); around \$17.5 trillion met the environmental, social and governance (ESG) criteria, while only a small fraction of these assets (around \$444 billion) was labelled as impact investing. Using another methodology and database of

1 720 impact investors, the Global Impact Investing Network (GIIN) estimated the size of the impact investing market in 2020 at \$715 billion (GIIN, 2020a).

The successful expansion of the private impact investing market appears to be a crucial component of the SDGs, particularly in developing countries. However, it fuels questions about how impact should be assessed and draws increased attention to impact measurement within the development finance community and the group of impact investors (see, for example, GIIN 2019). Even among international development organisations that have spent decades grappling with the issue of impact, according to a report by the Overseas Development Institute, “there is too much ambiguity and confusion about what ‘impact’ is, how it should be defined, how to measure it and what kind of measurement is sufficient” (Hearn and Buffardi, 2016).

2. Pursuing impact: Concepts, stakeholders and motivations

2.1. What is impact?

Just as investors have diverse financial return expectations, different definitions of impact shape diverse attitudes to seeing evidence of impact “returns.” The various ways in which investors conceptualise impact give “different weight to the importance of causality between an intervention and its effects and the measurability, breadth and timeframe of those effects” (IMP, 2020a). These expectations and definitions shape what investors mean by measuring impact. In practice, however, impact investors use the term “impact” in one of three ways³.

First, impact refers to any type of change. Under this definition, most investments have direct and indirect, intended and unintended impacts on consumers and users, the environment and society at large (OECD, 2019). Impact is a synonym for any kind of positive or negative change, referring both to specific “outputs” (such as a company’s products, services and practices) as well as “outcomes” (the effect of those products, services and practices on people and planet). This is the most general use of the term impact – a catch-all that many investors have now added to their financial lexicon to signify that a non-financial element is under consideration; for example, the “impact of a real estate investment” (IMP, 2020b) or the impact of a microfinance institution on a village in India.

Second, impact as contributions to higher-level change. In this definition, impact “refers to change occurring in communities or systems” (So and Staskevicius, 2015). Impact is the intended changes at the highest level of a theory of change or the top of a results framework. As defined by the International Initiative for Impact Evaluation (3ie), impact is “how an intervention alters the state of the world ... [so] impact evaluations typically focus on the effect of the intervention on the outcome for the beneficiary population” (White, 2013). This framing is often used by practitioners and project managers emerging from the world of international development, and wider social science. In other words, it describes how projects are contributing to longer-term outcomes concerning poverty, prosperity and well-being, for example the impact of a health fund on mortality and morbidity.

Third, impact as causal change. In this definition, impact is the increase in the “quantity or quality of the enterprise’s social outcomes beyond what would otherwise have occurred” (Brest and Born, 2013). This can be termed the more academic definition of impact, which is at the heart of the growing field of impact evaluations that seek to assess the changes that can be attributed to a particular project,

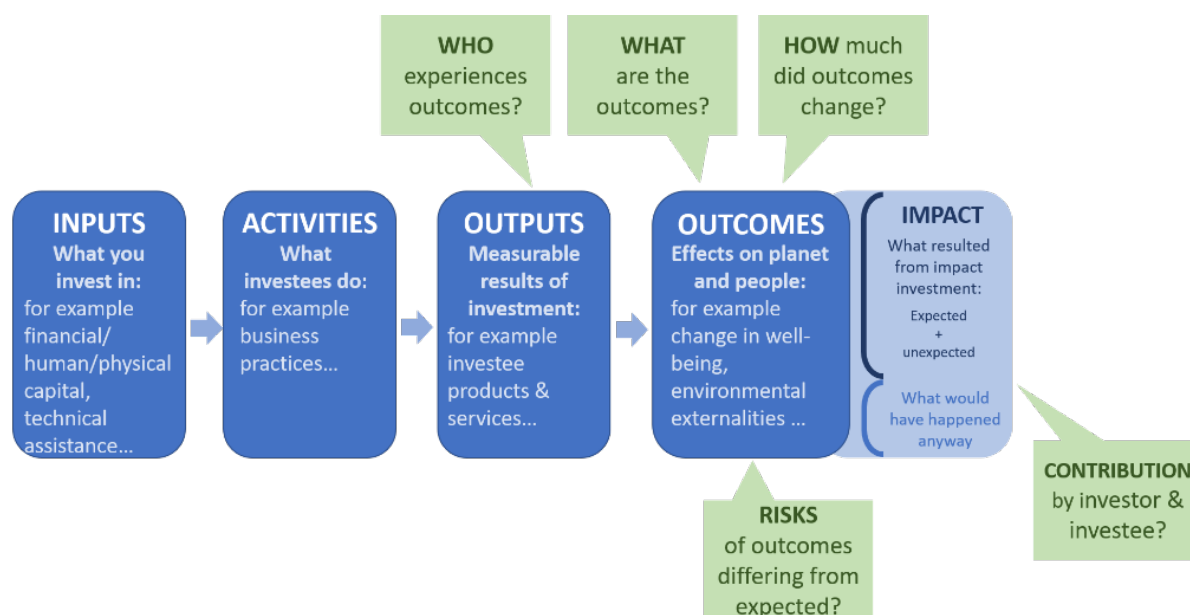
³ For more on this discussion see Hearn and Buffardi (2016).

programme or policy⁴. Such evaluations seek to predict the outcome had the investor and enterprise not done what they did (the “counterfactual” scenario)⁵. Impact is therefore a specific change that is caused by the investment; for example, the additional profit accruing to small enterprises as a result of accessing a microfinance loan.

Many of the fundamental challenges – and confusions – about impact measurement can be traced to the difficulty of articulating what “impact” means and the different ways in which the term is defined (Thornley and Locascio, 2018). One investor may use the term in a narrow sense while others may use a broader definition. This can cause misunderstandings about the purpose and scope of impact assessments and evaluations. Even among multilateral development banks there are a range of uses: some see impact as a synonym for “results,” while others see it as an academic term for counterfactual scenarios, or for the indirect and induced effects beyond outcomes (EIB, 2019).

To move beyond definitional debates and examine what impact looks like in practice, a collaborative effort by over 700 organisations under the auspices of the Impact Management Project (IMP) produced a set of shared fundamentals for measuring, managing and communicating impact. This deconstructs impact into five dimensions: understanding what outcomes are contributed to; who experiences those outcomes; how much those outcomes affect people or planet; what the contribution was to impact; and what risks exist to impact being different than expected. These IMP dimensions are set out against a simplified results chain (Figure 1)⁶.

Figure 1: The impact value chain and the dimensions of impact



Source: adapted from Clark et al. (2004) and IMP (2019)

⁴ World Bank.

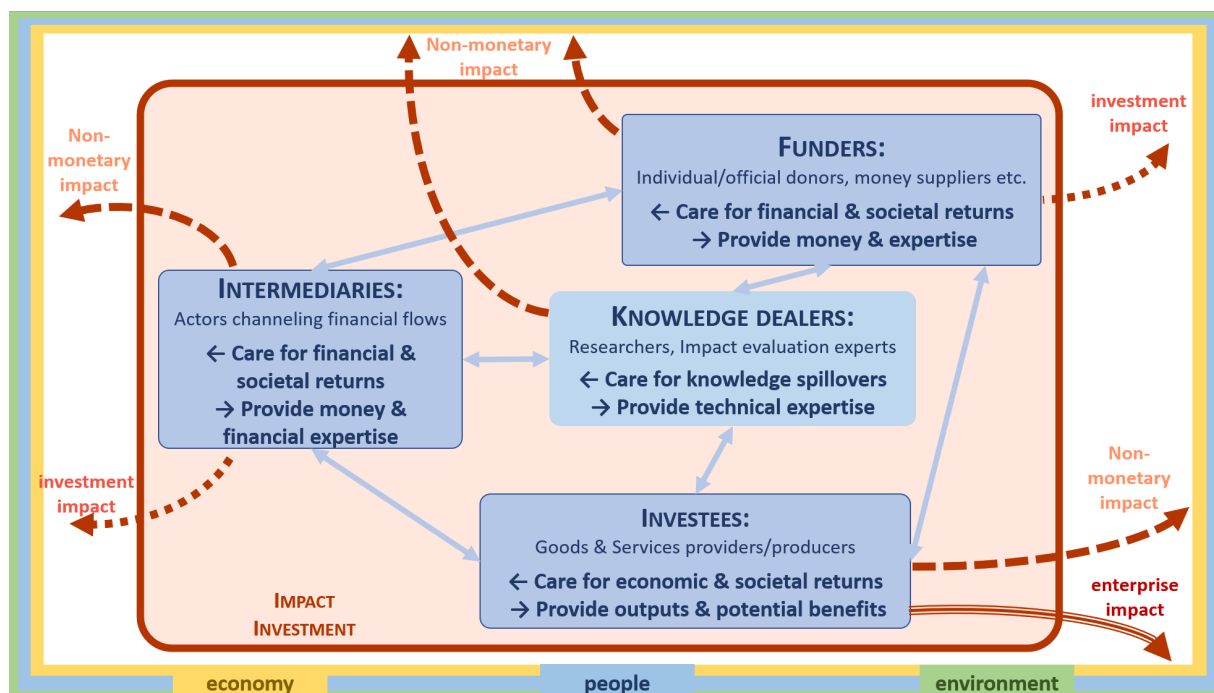
⁵ IMP contribution.

⁶ In the W.K. Kellogg Foundation 2004 “logic model,” outcomes refer to effects on programme participants, while impacts describe intended or unintended changes beyond participants in the society at large within seven to ten years as a result of programme activities.

2.2. Impact from what or whom?

Who creates impact and through what actions? The generation of impact involves a chain of stakeholders (Figure 2). Funders including individual and official donors as well as asset holders provide financial resources either directly to investees who provide impact-producing goods and services, or to financial intermediaries who reach out to investees. Brest and Born (2013) distinguish three categories of impact generation: enterprise impact, investment impact and non-monetary impact (Figure 2).

Figure 2: Stakeholders in impact investment



Source: prepared by the authors

Enterprise impact, the most straightforward (once a credible counterfactual is considered), is “the social value of the goods, services or other benefits provided by the investee enterprise.” This is the category of impact that evaluations mostly consider (and this is the focus of the EIB-GDN deep dives discussed later).

Investment impact is “a particular investor’s financial contribution to the social value” created by the enterprise in which the investment takes place (Brest and Born, 2013). There are several routes through which an investor may generate impact: he or she may provide additional capital, offer a lesser cost (through concessional financing or better terms over longer time horizons with greater flexibility), or present different sets of incentives. These may be organised through different financial instruments (debt, equity and guarantees) suggesting that financial structuring matters for impact and is not neutral.

Non-monetary impact “reflects the various contributions, besides financial resources, that investors, fund managers and other parties may make to the enterprise’s social value” (Brest and Born, 2013). This can be interpreted as the additional impact unlocked through explicit means, such as the provision of technical assistance, and implicitly through values and demonstration effects. A 2016 study funded

by the Danish government identified the following types of non-monetary impact (Koenig and Jackson, 2016):

- Signalling – providing a stamp of approval, providing credibility, attracting other investors, acting as an honest broker.
- Knowledge – strengthening the quality of the investment model and technology, sharing knowledge, building the capacity of local partners, facilitating technology transfer, publicly sharing experiences and learning (beyond project boundaries).
- Demonstration – supporting innovative pacesetters to de-risk new business models, attracting capital in lower income countries and frontier markets that are not (yet) able to attract significant levels of commercial capital.
- Aggregation – supporting projects at regional or global level for aggregation of opportunities, diversification of risk and cross-boundary sharing of experience.
- Standards – promoting high environmental, social and governance standards in investee companies, financial institutions, funds and at industry level.

Non-monetary impact can have “systemic effects” beyond the individual investee companies to influence wider sector and market performance. As Desai et al. (2017) note in their research, “individual firm activity can make markets in developing countries work better through improved competition, demonstration effects of a profitable business model that may not have been tried before in that context, or by spurring sector wide policy, legal, or regulatory reforms.”

Figure 2 adds another category of stakeholders, “knowledge brokers,” to recognise that producers of impact-related knowledge also belong to the impact generation chain. Impact assessments inform project design, implementation and results. The knowledge they create can inform project implementation as well as future investments, and can lead to better impacts over time and a better understanding of the relationship between activity and impacts. Evaluative research should be considered part of impact investing through the mobilisation of measurement systems, and the use of research to document externalities and inform the complex network of economic, social and environmental impacts. This is one of the rationales behind the EIB-GDN deep dives.

2.3. Does impact imply below-market rates of return?

Brest and Born (2013) ask whether investors can “both make money and make a difference.” One argument is that without making enough money to cover costs and invest in development, any difference they might have is likely to be unsustainable. The issue is the kind of financial return that impact investing can achieve, and the compatibility between maximising shareholder value through financial returns (Friedman, 1970) and targeting stakeholder value. Decisions to invest for impact are supposed to take place in private markets where investments respond to and compete on profitability requirements, and private returns need to be made commensurable. This relates to a central dilemma in welfare economics: perfect markets lead to pareto optima but generally not to social optima (and imperfect markets lead to neither). Could impact investing bridge the two⁷?

From a conceptual perspective, this may seem doubtful. Given the historical philanthropic inspiration, expectations of potential impact investors about financial outcomes may be less than for regular

⁷ Pareto optima deal with effectiveness: it is not possible to improve the situation of one actor without deteriorating that of another one. This clearly does not imply a socially desirable (not even mentioning optimum) allocation of resources.

investments (for example buying stocks or bonds to pursue profits). Why would adding objectives that are difficult to capture privately and that may incur additional costs not affect financial returns? Answers include benefits in terms of image, satisfaction and fidelity of the consumer base; returns in terms of capacity to innovate in new and promising market segments; and discovery of profitable investments that would have been overlooked. Visionary impact investors can then allocate resources to companies and push them toward impact-creating decisions⁸. Accordingly, “impact investing” would be good, competitive investing. Fundamentally, however, most environmental and social benefits have characteristics of public goods, however imperfect, and are therefore underproduced through market forces alone. Producing them should not be expected to systematically generate commercial returns.

Causality between commercial and societal returns can go both ways: environmental and social performance may contribute to profitability, and profitable firms may be better able to engage in ESG or impact investing (Desai et al., 2017). Ultimately, any trade-off between financial and non-monetary returns is an empirical question. However, the empirical jury is still largely out (Box 2).

If and when markets do not assign financial values to societal impacts, there must be some outside willingness to “pay” for them. The financial return of an impact investment can be abstractly thought of as an algebraic combination of a market return (for a typical investment) and the financial value assigned to the expected societal impact. Impact investments can be seen as synthetic vehicles that combine a traditional investment, producing market returns, and a commitment to societal impact, which has a market value that the investor or a third party may be willing to pay for. This provides an original model for thinking of impact investments as a virtual combination of public or private philanthropy – or socially oriented investors – and market-based investment decisions. This addresses the potential disconnect between financial returns and societal impacts by allocating them to different types of investor. Chowdhry et al. (2019) studied the joint financing between profit-motivated and socially motivated (impact) investors and argued that the latter’s financial claims counterbalance the former’s focus on profits. They describe a continuum of impact investments, from pure non-profit status for higher valued social projects, to pure commercial investment (when impact is fully compatible with market returns); typical impact investment thus becomes a contingent social contract between socially motivated and commercially motivated investors. For such a model to make sense, however, more knowledge is needed about societal impact and how to measure it and its value. Blended finance experiments have taken place in which public money (or money from philanthropic organisations, development finance institutions or individuals) nudges private investors, under the promise of a commercial return, towards producing public goods. This combination of differently motivated investors might create opportunities for new and promising models of public-private partnerships.

⁸ The example of “fair trade” labels shows that companies or consumers are willing to buy their inputs and products from providers who have fair labour practices, environmental safeguards, and so on, and that willingness can be reflected in accepting a significant premium. A Swedish study, for example, claims that the premium could be up to one-third of the price of a good (Schollenberg, 2011).

Box 2: Is there a trade-off between financial and societal returns?

Limitations of empirical studies include the following: uncertainty about what is covered by, and measured as, impact; endogeneity; selection biases; different characteristics of investment (in terms of sector, geography, timing, and so on); and diverging investors' expectations and objectives (between development finance institutions and private impact funds, for example). The dataset and sample of investors may be incomplete; it may include types of investment that belong to "softer" categories of sustainable, responsible or ESG investments; it may be biased by the fact that only willing respondents take part; it may fail to differentiate between investors looking for market returns and those satisfied with below-market returns; and there may also be omitted variables, such as the quality of fund managers.

Results on impact investment returns are mixed: some impact investors have achieved commercial returns, others have not. Desai et al. (2017) show that financial returns depend on the sector rather than geography and country income level. Rangarajan (2019) shows that public market investments yield different returns across different "impact" sectors. There may not be a general relationship between financial and social returns. Another empirical question relates to the sustainability of societal and financial returns. For example, the growth of societal benefits (through impact investing or ESG) may lead to declining societal productivity, which might translate into lower financial returns and remove any competitive advantage from impact investing.

Reviewing more than 2 000 empirical studies, Friede et al. (2015) find that roughly 90% reveal a non-negative relationship between non-financial (as measured by ESG) and financial performance, and that the large majority find a positive relationship. Moreover, the positive relationship appears to be stable over time. On average, the IFC's equity projects in impact investing have achieved financial results in line with or better than the evolution of the Morgan Stanley Capital International (MSCI) Emerging Market Index over 1988-2016, proving the possibility of being financially sustainable over long periods while investing for impact (IFC, 2019). These results suggest that it may be possible to invest for social impact while achieving reasonable financial returns. In the GIIN's 2019 annual impact survey, Mudaliar et al. (2019) find that most investors' financial performance was in line with expectations (14% over-performing, 77% performing as expected, and 9% underperforming). Using survey data, Castellás, Findlay and Addis (2016) find that financial returns met respondents' expectations (but an important caveat is that expectations are declared subsequently and are self-reported; investors may try to improve their image). Other studies, summarised by the GIIN, report average returns for impact funds seeking market rates and show that market rate-seeking impact investments can earn market-like returns in certain instances. Nofsinger and Varma (2014) find that socially responsible mutual funds outperform the market during crises and underperform during non-crisis periods.

However, Desai et al. (2017) find that there is no causal link between ESG and lower profits or any evidence that better ESG performance leads to higher financial performance. Using industry data and controlling for vintage year, fund size, sequence and geography, Barber et al. (2019) find that the internal rate of return of impact funds was 4.7% lower than that of all venture capital. They infer that investors in impact funds are willing to accept lower returns than traditional investors.

Kovner and Lerner (2015) find that community development venture capital funds are less likely to go public or to be acquired than traditional venture capital funds. A sample of social investments by the UK government yielded a -9.2% financial return (SIRC, 2015).

3. Assessing the impact of impact investing: Issues, methods and practice

3.1. How to assess the impact of impact investing

A hallmark of impact investing is the commitment of the investor to measure and report the social and environmental performance of their underlying investments (GIIN, 2020b). Unlike purely financial investments which have outcomes that are more easily assessed relative to markets, impact investments have benchmarks on which there is less consensus. Monitoring and evaluating the results of projects has been a core business activity of development banks for decades, drawing on well-established methods in the fields of development finance and international development more widely. These activities are usually housed in an evaluation function that is independent of the line management.

What final outcomes should be considered and measured in determining whether an investment has impact and how should they be judged? The objective behind impact investing seems to point towards effects that are beneficial to groups of individuals or to society. However, the notion of benefits is multipronged and subjective: one classically distinguishes social, economic and environmental benefits (see, for example, Bugg-Levine and Emerson, 2011); there may be debate on whether a given effect is a benefit (and for whom); there may be tensions and contradictions between outcomes in terms of positive value for society; and the overall effect (Bugg-Levine and Emerson's "blended value"), which is the net result of a variety of partial specific effects along various dimensions, cannot be directly observed and must be broken down into elementary effects that can be measured and interpreted within given value scales. How can these elementary effects be combined to get an overall sense? Such aggregation implies a scale of values that may differ among individuals, groups and societies, and be unstable over time. This value scale is not explicit at any given time. The aggregation problem involves questions of summation (how to add disparate elementary effects) and of scale of priorities (how to consider "positive" effects along some dimensions and "negative" effects across others). Impact assessments may be thought of as providing packages of disparate pieces of information that only ongoing public debate can sort out and transform into a tentatively, and possibly temporarily, shared perception of any overall "impact."

Shared perceptions may evolve over time, not maturing into any stable consensus. This might translate into difference and even incompatibility between the prior expectations of the benefits of the intended impact and the subsequent perception of their value, even when the intended impact has been achieved, because the focus and value perspectives may differ before and after. The aggregation challenge introduces the inevitability of a time consistency problem in impact assessment.

Impact assessments should document specific impacts – negative or positive – and avoid providing aggregate synthetic judgments. Ruff and Olsen (2018) argue that impact commensuration should be separated from the description of what happened. Impact assessments require further interpretation and judgment to evaluate whether impact investing has benefited society.

3.2. Broad challenges

Recent initiatives to increase the evidence base about impact often use experimental research techniques to isolate precise effects on incomes, livelihoods, health and well-being outcomes. Efforts have remained limited in scale and coordination. “Much of the industry’s reporting on impact has relied heavily on individual stories of successful entrepreneurs, enterprises, or employees, accompanied by input and output data (e.g., dollars invested, numbers of investee businesses, number of jobs created, etc.),” writes Jackson (2013a, p. 610). What is the benchmark for assessing impact? Reeder and Colantonio (2013) list nine challenges that evaluations should address⁹. For simplicity, they are reinterpreted here and grouped under three headings.

Identifying outcomes and moving to impacts

How does one move from outcomes to impacts? Development banks and impact-oriented private investors have arguably focused on tracking output-level changes such as the number of jobs created or microfinance loans disbursed: outputs are easier to measure directly and are often assumed to proxy potential positive impact creation. The links among inputs, actions and results have both prior and subsequent dimensions. Advance logical reasoning (also known as the “theory of change”) proposes a model of causal links between activities and outcomes (Hehenberger and Harling, 2018) using science- or evidence-based arguments that explain how activities will lead to outputs that lead to outcomes. A theory of change should be built in advance and encourage thinking about all potential (negative and positive) effects. It conceptualises an investment and inspires the choice of relevant indicators.

Jackson (2013b) notes the benefits of using a theory of change to evaluate impact investing:

- It is a cost-effective way to undertake a continuous systematic analysis.
- It helps investors understand their impact and adjust their strategies.
- If public, it can help engage stakeholders and sustain a virtuous circle of feedback, adjustments and impact.
- It is compatible with other dimensions and methodologies of evaluation.
- It helps shape the contours of subsequent impact assessments, which may be partly inspired by the original theory.

Reisman and Olazabal (2016) add that a theory of change increases the visibility of change processes and helps define the investment’s underlying assumptions that need to be tested.

Determining causality

The International Association for Impact Assessment (IAIA, 2009) defines the impact of an action as the difference between what would happen with it and without it. To have impact, an action must create additional effects over the counterfactual. This definition is conceptually clear and convincing but difficult to put into practice. The counterfactual is often implicitly described as the absence of investment, and impact is measured as the difference between investing or not investing in a project or company. This fails to recognise potential alternative uses of the invested money or that another investor might invest in the same project or company. The definition of a relevant, credible and valid

⁹ Their work builds on insights by Barrow (1997), Coccossis and Parpairis (1992), Hughes (2002), Vanclay (2003) and Hehenberger et al. (2013).

counterfactual is crucial to impact assessment, requiring research-based approaches, and sophisticated approaches and tools.

Establishing causality is central to impact assessment. It requires constant awareness that “correlation does not imply causality.” To establish causality, the assessor must control the biases that affect impact analysis, including the following:

- Selection biases (systematic differences between treatment and control groups that explain some of the observed differences in results).
- Contamination (exposure to factors other than the intervention under study).
- Attrition (withdrawal of people included in the groups).

Assessing value

Discussion about the overall impact and its value for society is generally incomplete. Communication of impact often focuses on an investment’s positive effects, ignoring potential conflicts with other sectors or the fact that an investment may benefit some groups but hurt others. Focusing on positive effects alone is inappropriate: the objective of impact investment is to have a positive impact on society as a whole. Assessments of impact investments are necessary inputs into a deliberation process that leads society to decide, over time and after potentially conflictual debates, in which direction to move.

Complete impact reporting relies on many impact-related indicators, the choice of which is an important part of the assessment. For example, “balanced scorecards” – a management tool frequently used by impact investors – assess a company’s performance along several dimensions, based on a variety of indicators for each. Analysis leads to the attribution of a synthetic rating for each dimension, which echoes the aggregation problem. The standard economic approach to facilitate aggregation relies on the monetisation of performance along each dimension; however, this alone cannot determine the choice of appropriate weights for each monetised indicator.

Beyond the value judgments attached to the synthetic rating, using multiple indicators faces two additional issues. The first is the choice of indicators. Spiess-Knafl and Scheck (2018) report broad agreement on the specific, measurable, attainable, relevant and time-sensitive (SMART) principles. Concerns should be over quality (the nature of the change), quantity (the scope of the change) and time (by when the desired change should have taken place). The second is the potential trade-off between clarity and precision. A small number of aggregated indicators is desirable for clarity, whereas a battery is preferable for precision. Grabenwarter and Liechtenstein (2011) discuss the limitations and shortcomings of one commonly used indicator – CO₂ emissions.

3.3. Who does what?

Approaches to measuring and managing impact within the impact investing market range from reports that describe observed changes without formally relating them to specific actions, to demanding scientific impact evaluations that detail causality and attribution.

Spiess-Knafl and Scheck (2017) report that more than 150 tools and methods are used for assessing social impact, with no consensus to guide choice among them. They argue that four factors determine the choice. Reeder and Colantonio (2013) draw a typology by distinguishing between two different cultures in the use of instruments: system builders are more likely to use statistical tools such as regression analysis, whereas case-by-case supporters tend to focus more on qualitative information.

The two cultures have different purposes and are based on different forms of human relationships. According to them, most impact investors belong to the case-by-case culture. Sophisticated analytical techniques are too technocratic to reflect the complexity and the special nature of the project being assessed, and of the link between investment and results (for example, the possibility that results may depend on an influential fund manager and not be reproducible).

In a landscape study carried out on behalf of the UK government, The Good Economy (2018) adopts a different typology of use and distinguishes between organisational-level and project-level approaches (which may co-exist within a single institution). At the organisational level, the general approach is to go beyond financial metrics and link organisational effectiveness indicators to project-specific results (EIB, 2019). Most investors have a results framework (for development finance institutions) or impact theses (for fund managers) in place which contain or are linked to a set of indicators reflecting desired changes occurring at the output and outcome level. Capturing these changes requires a degree of standardisation – of indicators, scorecards, processes and timelines – that allow investors to “roll up” data from individual investments to the portfolio/corporate level, which in turn allows them to report to the ultimate asset owners and in the public domain. Most multilateral development banks try to strike a balance between standardisation and flexibility (EIB, 2019): some use highly standardised indicators, allow for highly tailored indicators, or try to blend both approaches to fulfil the demand for consistent and comparable reporting. The EIB uses a results measurement framework, based on a logical framework approach, as part of project appraisal and to enhance the Bank’s ability to monitor and report on the actual results achieved in its operations outside the European Union (EIB, 2017).

At the project level, anticipated impacts are calculated by investors in order to make investment decisions, such as in investment committees or during due diligence, often using data provided by fund managers, investees, secondary data and assumptions, or sometimes by collecting primary data through site visits. Investors report their results based on data provided by their investees. There is a “value chain” of impact data flowing up from companies through to funds to the ultimate asset owners.

Reeder et al. (2014) identify two distinct approaches. “Evidence followers” rely on existing evaluation evidence of some particular links in their evidence chain; for example, “an investor in girls’ education would not need to conduct their own rigorous evaluation to establish the relationship between education and improved economic opportunities for women” (IFC, 2019). “Evidence generators” actively seek data and evidence that outcomes are occurring as expected. Most investors exhibit both behaviours, following evidence on some links of their evidence chain and generating it on others.

There are numerous ways in which investee businesses measure their impact. However, the Rockefeller Philanthropy Advisers (2020) note a “lack of transparency [...] on impact performance across the industry” as a key constraint to developing the field of impact measurement and management. There is an urgent need to improve the quality of impact data. However, resource-constrained companies often lack the time, expertise and budget to collect meaningful data on their non-financial performance. This leads to impact data of varying quality, “often either missing altogether, pulled together from third party research (of varying relevance), or based on poor proxies pulled from operational financial data such as sales figures” (IMP, 2019). Self-reported output data suffer from numerous biases, which range from over-inflating positive impacts to “halo effects” that underplay negative effects. The strength of the impact data chain would be improved by more reliance

on independent third-party data collection, notwithstanding biases always present in any measurement, notably in the selection and interpretation of indicators.

While impact measurement is a defining feature of impact investments, “the reality is that defining what to measure and, subsequently, defining how to collect the appropriate data are questions that many impact investors struggle with” (CDC, 2019a). Half of respondents in the GIIN 2020 Annual Impact Investor Survey view the sophistication of impact measurement and management as a “significant challenge” for impacting investing over the next five years (GIIN, 2020a). Such opinions are reflected in investor practices in the same GIIN survey. While 91% of investor respondents measured what outputs occur, and 78% measured outcomes, just 32% measured “contribution to the effect beyond what would have happened anyway,” introducing an element of impact in the more academic sense. These practices shape the choice of data collection instruments and methods most commonly used. According to a 2017 survey by the GIIN, specific to the field of impact measurement and management (IMM), 60% of respondents use surveys to collect impact data, 57% use interviews, but only 6% have attempted more experimental methods (GIIN, 2017).

Empirical studies (Loveridge, 2016; Edens and Lall, 2014) confirm that impact measurement practices hardly focus on “additionality” (in the sense of specific contribution by an investor). The IMP (2020b) also reports that “Having a strong focus on attribution favours rigorous [...] quantitative methods that [...] may limit the scope of an impact evaluation to only what can be measured under special conditions; are not always feasible or cost-effective given the complexity of the real world.”

Stakeholders in the impact investing ecosystem are increasingly asking for better evidence of impact (EIB, 2019). Development finance institutions have been under sustained pressure to demonstrate results and value for money, given their use of taxpayer money (Attridge et al., 2019). This requires better techniques as well as data provision to demonstrate to stakeholders that investors are managing (and delivering) for positive impact, to refute accusations of “impact washing” and to generate trust (IFC, 2019). Techniques that can objectivise outcomes – and ideally estimate attribution – help resolve the central “paradox within impact investing”: the prioritisation of “social impact” without prioritising “impact evidence” (O’Flynn and Barnett, 2017).

3.4. Methods

Research-based impact assessments should start with a comprehensive literature review to identify areas and questions for further investigation and build on existing knowledge. Researchers should then choose a metric to describe outputs or outcomes and to consider how to access relevant data. Depending on time and resources, they may use secondary (existing) data or collect primary data themselves. Quantitative data are based on numbers whereas qualitative data are based on words or are non-numerical. Data collection methods can be qualitative or quantitative, depending on how they are implemented (for example, closed vs. open questions in surveys). Some data collection methods have a quantitative or qualitative “flavour.” Interviews, open question surveys and focus groups are more appropriate for qualitative data collection. Quantitative approaches typically rely on direct observation and measurement, value estimates (derived objectively through economic arguments or subjectively through questionnaires), experiments and surveys.

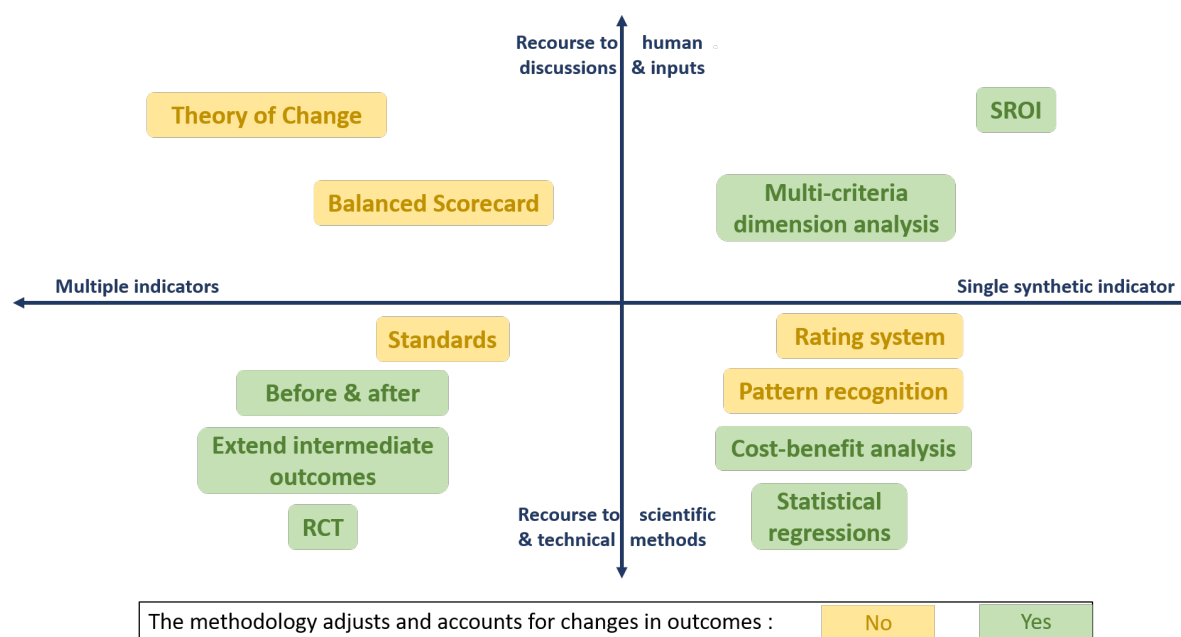
Part of the data collection challenge in assessing societal impact is valuing societal benefits that have no or highly distorted market prices. This leads to different approaches depending on the degree of objectivity and economic foundation sought: at one extreme, rigorous cost-benefit analysis estimates

shadow prices to reflect real resource costs accounting for opportunity costs (under alternative uses); at the other, more subjective and participatory methods may be used to derive the value given to goods, services and societal benefits by interviewees. For example, beneficiaries may monetise the value of the good or service provided. Expert opinions captured with techniques such as the Delphi method – in which a group provides structured estimates of likely changes in outcomes (Reeder and Colantonio, 2013) – are useful to assess an investment’s impact.

These quantitative and qualitative methods have different purposes and results. They require different time, financial and human resources. Choosing among them depends on what an impact assessment aims to achieve. The metric used to describe outputs or outcomes can allow before/after comparisons, and qualitative or quantitative comparisons of the measured impacts with a benchmark or with similar initiatives. The Best Available Charity Option (BACO), for example, compares the impact of one initiative with all options offered by other organisations (particularly in the non-profit and public sectors) on the same social issue (Spiess-Knafl and Scheck, 2017). The Acumen Fund, another example, compares the costs per unit to produce and distribute insecticide-treated nets across similar initiatives (Acumen Fund, 2015).

Another dimension concerns the issue of causality (between an activity and the observed outcome and impact) and attribution. Not all impact assessment approaches and methods allow for or involve causality and attribution. Reeder and Colantonio (2013) draw a typology of assessment methods along two clustered dimensions (Figure 3). The vertical axis depicts the degree to which a given technique relies on objective vs. subjective data. The horizontal axis shows whether measurement leads to a battery of indicators (“multiple indicators”) or a synthetic figure (“single synthetic indicator”). The assessment methods on the grid are further distinguished as relating outcomes to the intervention being assessed and identifying the changes in outcomes associated with the intervention (the coloured boxes in the figure indicate whether a method adjusts and accounts for changes in outcomes).

Figure 3: Assessing impact: diverse methods



Source: Reproduced from Reeder and Colantonio (2013, p. 23). RCT, random control trials; SROI, social return on investment.

To assess impact with attribution and causality, a range of quantitative impact evaluation methods as part of a well-specified theory of change can be used to set out causal pathways by which a programme or project influences final outcomes. Widely used quantitative methods to assess impact with causality include instrumental variables, regression discontinuity design, difference-in-differences, propensity score matching, randomised assignment and mixed methods (a combination of qualitative and quantitative approaches).

Causality can be determined using natural or randomised experiments, or quasi-experimental techniques. Such techniques enable the control of biases, notably selection biases, through randomisation or the careful consideration, or estimation, of systematic differences in the samples. One lesson from academic evaluation research is that there is no “ideal” method. Randomised control trials (RCTs) have been described as the “gold standard” of experimental approaches, because they provide unbiased estimators. However, they may lack precision (Deaton and Cartwright, 2018; Deaton, 2020) and relevance. Randomised control trials arguably rank at the top of available methods in terms of internal validity (that is, rigour in establishing causal relationships); however, they are less highly rated for external validity (that is, confidence that results can be generalised). Attempts at standardising impact assessment methods are likely to be self-defeating: choosing the appropriate evaluation method to measure the impact of a project is part of the process, and depends on data availability, quality and context¹⁰.

One ambitious project combining these approaches introduced the notion of a social return on investment (SROI), which aims to produce a quantitative (monetary) value. A consensus group¹¹ of stakeholders is asked: (a) what would have happened without the company’s actions (the

¹⁰ Akerlof (2020) describes the perverse effects of an obsession with methodological purity within the economics profession.

¹¹ Instead of voting to determine the majority opinion, a consensus group is committed to finding solutions that everyone can agree to: no decision is made against the will of any individual or minority.

counterfactual); (b) what did happen (what was added in terms of goods, services or other value for society); and (c) what was produced in monetary terms¹². Future impact is discounted to define the net present value (SROI Network, 2012); the result is divided by the costs to provide a monetary ratio. This subjective method is arguably a less rigorous cost-benefit/effectiveness analysis. SROI informs causality (at least perceived causality) but may lack precision (Reeder and Colantonio, 2013); the extent of perceived causality may be exaggerated (Clifford et al., 2013). The approach has been criticised for being too complicated, because it may be difficult to account for disagreements among stakeholders (Arvidson et al., 2010) and the process is resource intensive¹³.

There is an ongoing debate about the relationship (and compatibility) of social cost-benefit analysis with economic impact assessments. Recent research on environmental issues (for example, Joseph et al. 2020), indicates that benefits estimated through economic impact analysis using dynamic computable general equilibrium (DCGE) models are amenable to subsequent analysis in a social cost-benefit analysis framework, and combining the two approaches provides additional insights. The authors recommend that the environmental assessment process is reformed to include cost-benefit analysis complemented by economic impact analysis to provide decision-makers with more complete information. The relationship between social cost-benefit analysis and DCGE might have a broader relevance. Many approaches using rigorous impact evaluation techniques give insufficient attention to costs and cost effectiveness. This is important for guiding investment choices and identifying sustainable ways to produce impact. There is a good case for using a social cost-benefit analysis framework for evaluating impact investment.

3.5. Common principles

Impact investment funds may have an incentive to use their own approaches and metrics if the market is not standardised. By doing so, they will not contribute to any dynamic of standardisation. The lack of convergence on a method, framework or metric for environmental and social benefits is one reason why a market for impact investing has yet to reach maturity.

The conceptual case for convergence is questionable. Convergence may bring clarity. Many authors criticise the confusion that reigns in the impact assessment market. Convergence may also bring transparency and credibility, because it provides a framework and ensures conformity with a set of rules that, however imperfect, impose a reference of quality. Convergence also provides some comparability (of results), which is important for evaluating and ranking investments.

There is tension between standardisation and flexibility – and between standardisation and effectiveness. Big investors are reassured by standards, whereas social organisations may prefer assistance in developing their own methodologies (Reeder and Colantonio, 2013; Ógáin, Lumley and Pritchard, 2012). Standardisation has drawbacks. Fornaziere (2012) argues that potential negative consequences of standardisation include the distortion of capital flows towards easily measured sectors; the distortion of social companies towards easy-to-serve populations to increase funding; and an increase in pressure on social businesses to comply.

¹² The seven principles of SROI are as follows: “1. Involve stakeholders; 2. Understand what changes (for those stakeholders); 3. Value what matters (the “monetization principle ...); 4. Include only what is material; 5. Do not over-claim; 6. Be transparent; 7. Verify the result” (SROI Network, 2012).

¹³ Reeder and Colantonio (2013, p. 28) note that “methods such as ‘SROI-Lite’ have been developed. Sponsored by Santa Clara University, SROI-Lite asks enterprise managers to define the most important output they create, its unit cost, and the ratio of cost to successful output.”

Ruff and Olsen (2018) argue that there is no need for standard metrics to ensure comparability as they make things more rigid and complicated, and the absence of flexibility prevents comparability. They propose a “bounded flexibility” concept whereby for each issue area, companies can choose from a limited number of possible measures, enabling partial comparability. Full comparability can then be ensured by measuring success-to-target rates (a measurement tool also open to critique). They call for more professionalisation of impact assessments (of impact investing).

3.6. Measurement as management

Over the past decade, the evaluation conversation has shifted from debates about how to best measure impact to satisfy asset owners – an upwards accountability objective – to how to measure consistently to compare and benchmark across investments. This has included standardising elements of the results measurement infrastructure, such as developing ratings and assessment systems and catalogues of indicators like IRIS+ (a catalogue of metrics curated by the GIIN that investors can use to track results across portfolios and self-report on their achievements)¹⁴. The development finance institution community has made efforts to harmonise results indicators through the Harmonized Indicators for Private Sector Operations (HISPO) initiative, a collaboration of 25 development banks to set out 27 reporting indicators for international financial institutions’ shared clients, drawn from over 400 metrics that were reviewed^{15, 16}.

Typically, investors have focused impact activities on anticipating potential social and environmental impacts, risks and financial returns when deciding which companies they should provide capital to (Loveridge, 2016). This reflects the fact that the most important decision – and potentially the greatest determinant of the depth and breadth of positive impact creation – can be which companies to invest in. After the investment decision, outputs are tracked as a proxy for outcome achievement. Contribution, if factored in, is mainly considered before an investment is made, including through the requirement of “additionality” as articulated by the multilateral development banks to ensure their activities add to what is available in the market, and do not “crowd out” the private sector (IFC, 2018). In practice, additionality has proved difficult to measure, both conceptually and operationally (Kenny and Moss, 2020).

Recently, the measurement conversation has shifted from a “rear-view mirror” approach to proving impact to improving and supporting future impact. This is based on the realisation that expected impacts are often not attained, particularly as investee business models can change – especially for early-stage enterprises backed by venture funds – and there are uncertainties in stimulating positive social change. Various initiatives have promoted operating principles that partly or fully promote this more integrated approach between measurement and management¹⁷.

¹⁴ See iris.thegiin.org.

¹⁵ See indicators.ifipartnership.org.

¹⁶ The following initiatives have established and promoted common operating principles (alongside the IMP): the UN Principles for Responsible Investing (PRI), which focus on ESG risk management (UN PRI, 2013); the Principles for Positive Impact Finance of the United Nations Environment Programme (UNEP), which pushes investors to adopt an impact-based approach; the Global Impact Investing Rating System (GIIRS), developed by B Lab, a non-profit organisation that administers the B Corps’ fee-based certification of impact business models and performance; and the Operating Principles for Impact Management (OPIM) launched by the World Bank Group in April 2019, developed by the IFC jointly with asset and fund managers to promote transparency and discipline in the impact investing market as well as clarity about which investments can be called impact investment (IFC, 2019).

¹⁷ In 2017, for example, the IFC developed its own proprietary framework (IFC, 2019), called the “anticipated impact measurement and monitoring system” (AIMM).

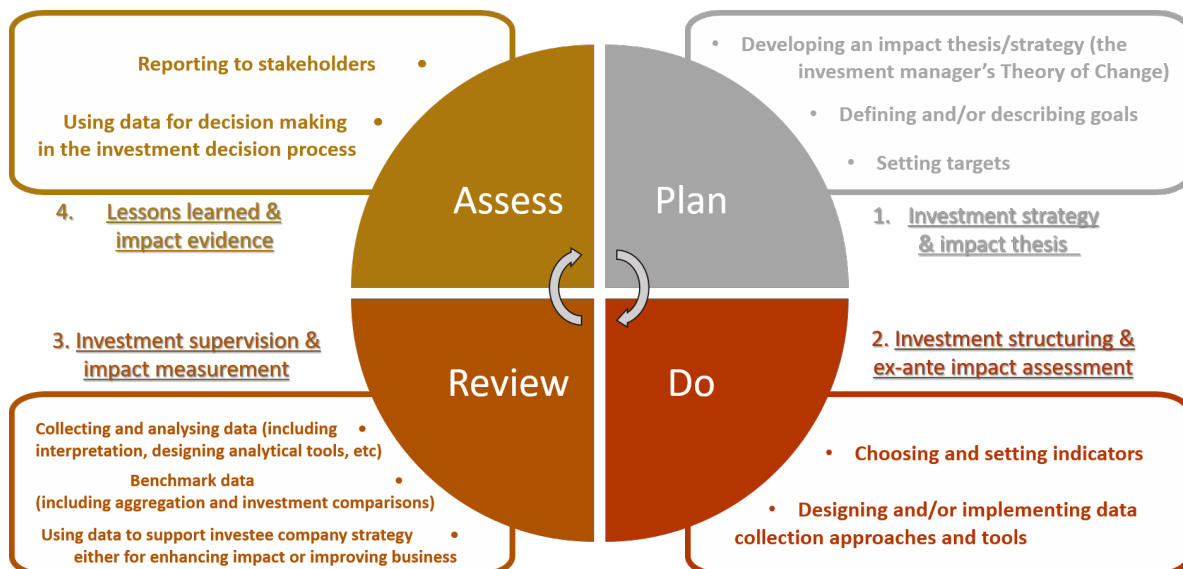
The term “impact measurement” is now generally used together with “impact management.” This shift represents an increasing demand to integrate social and environmental performance into operational and strategic decisions. Impact management is framed through the lens of continuous improvement: from New Philanthropy Capital “using your data to improve what you are doing” (Rotheroe, 2017) to Social Value UK “creating a culture [of impact] within an organisation” (Carpenter, 2020). There is no formal definition of impact management, but it is best seen as the practice of integrating impact at each stage of the investment and business decision-making process.

Impact measurement and management itself is defined as the process of selecting and embedding social and environmental performance considerations into the investment cycle, collecting data, and using the information to drive decision-making (GIIN, 2020c). An impact measurement and management system is a set of activities that broadly covers the following:

- Selecting goals and indicators that are mission-aligned.
- Setting targets and strategies most likely to achieve and reflect these goals.
- Measuring and analysing metrics to understand what is happening in reality. This can lead to full “monetisation” – attributing a monetary value to achievements across various dimensions – which the IFC (2019) considers as a “gold standard” among the integrated impact assessment frameworks because it enables credible internal and external comparability.

These are commonly expanded on and turned into a measurement “cycle” with four key steps: plan, do, assess and review (Figure 4).

Figure 4: The Plan-Do-Assess-Review cycle

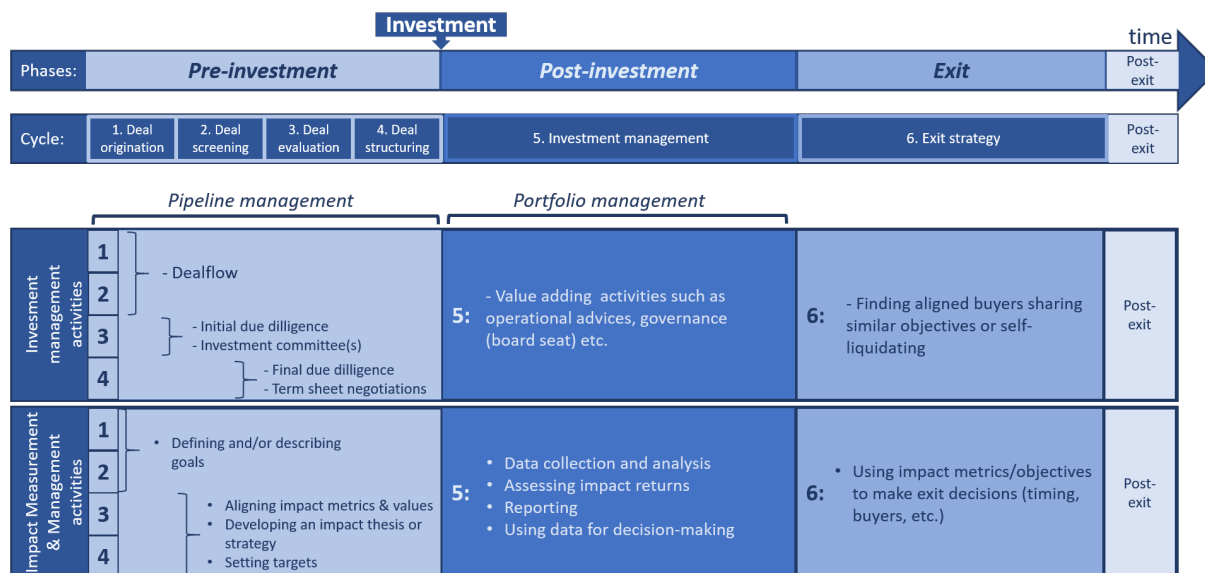


Source: Adapted from GIIN (2020a) and IFC (2019)

To be effective as a driver of continuous improvement, impact considerations need to be embedded within an impact investor’s strategy, structuring, supervision and, where relevant, within investment exits (IFC, 2019). Impact management is a discipline much like financial management: policies, processes and procedures are necessary to ensure active management of an investment’s performance.

Figure 4 shows how impact management is integrated throughout the investment process. Measurement takes place at two distinct stages: pre-investment (advance measurement), and post-investment (subsequent measurement). These are synonymous with the “plan-do” steps, where impact intentions are articulated, and the “assess-review” steps, where actual impact is tracked.

Figure 5: Impact measurement management across a typical investment cycle from deal screening to exit



Source: prepared by the authors

According to the GIIN’s latest impact investor survey (GIIN, 2020a), a majority of the 278 respondents pay significant consideration to impact before investing – during due diligence (81%) and screening (77%). However, this drops to 62% during portfolio management. Only 36% collected impact data during exit, and 21% post-exit. Impact data are given more weight in pre-investment decision-making (articulating intended impacts) than in post-investment performance (measuring actual impact).

3.7. Who pays for evaluation?

Rigorous impact assessments are expensive because they require time, accurate data and expertise (Ruff and Olsen, 2018; Glänzel and Scheuerle, 2016). It is unclear who should pay (investors, investees, funders or a third party) (Harji and Jackson, 2018). There is a potential conflict of interest when a stakeholder of the impact value chain pays to assess the impact of their investment or production. The relevance of this conflict of interest varies depending on the objective of the assessment: it is clear for proving accountability; leads to questionable credibility for reporting impact. It is less problematic for organising the learning function within the organisation. Beyond the issue of conflict of interest, stakeholders may differ in their abilities to bear the costs, perceptions of the usefulness of impact assessments, internal capacity to conduct rigorous assessments and willingness to acquire them. Depending on the process, the learning gain may only profit investors, so investees may be reluctant to undertake an evaluation. Who pays has a bearing on the nature of the impact assessment, and determines its motives and incentives (for example, scientific rigour, communication and accountability) and its credibility.

It is unclear what the potential trade-offs among feasibility, cost, usefulness and robustness are. The ability to bear the costs of a comprehensive scientific evaluation, with or without subsidies from foundations or development agencies, influences the design of the evaluative effort. Spiess-Knafl and

Scheck (2017) argue that the importance of the evaluation (time spent and degree of accuracy sought) is likely to be proportionate to the organisation's size and suggest that companies should acquire internal expertise on impact assessments. In contrast, Clifford et al. (2013) note that such capability can be independent of an organisation's size and complexity. Reeder and Colantonio (2013) consider that "gold standard levels of robustness are impractical for [the] vast majority of enterprises."

Scarce information is available on the money or resources investors allocate to impact measurement. A study by ANDE – a network of organisations supporting small and growing businesses – found that investors' median spending on measurement (calculating staff time and consultant fees) as a percentage of the operating budget is 2.2% and ranges from 0% to 25%. The 50% smaller organisations in their sample spent a median of 8.1% of their budget on measurement (Edens and Lall, 2014). No figures for impact measurement resources as a percentage of assets under management have been disclosed.

Covering the costs of rigorous assessments remains an issue and is one dimension of the "research gap" that underlies the EIB-GDN deep dive initiative.

4. Deep dives as a "bridge"

4.1. The research gap

It is useful to consider the motives and demand for impact assessments. Part of the demand is institutional. Evaluations play a broad governance role. For public investments, they have become part of due process; policy innovations and development projects require evaluation (both before and after). Private-sector evaluations (of impact investments) have been recognised as a condition for the structuring and expansion of the impact investment market. Regardless of their institutional nature, and whether they take place before (through evidence-based assessments relating potential investments to impacts through a theory of change, simulations of impact, and so on), during or after implementation, evaluations use and produce knowledge. This production of knowledge is useful for three reasons that in turn characterise three different functions of evaluations:

1. The accountability function: evaluations are needed to demonstrate that funds are used in conformity with the original intention or mandate, based on the prescribed rules of engagement, and are efficiently and effectively directed towards the intended purposes. Evaluations may also demonstrate to the general public and policymakers that resources are properly used, that impact investment works, and that it should be allowed and encouraged to expand.
2. The learning function: evaluations aim to improve decision-making (and future impact) through learning how project design and implementation relate to impacts (a learning-by-doing function). They improve the likelihood that a given idea and objective of impact may translate into such results. Moreover, evaluations improve understanding and documentation of the links between specific actions and impacts (a knowledge creation function). Thus, they also fulfil a global enlightenment function that extends the learning function to society at large.
3. The promotion function: evaluations provide communication material that can promote a set of actions or the image and reputation of investors, intermediaries or companies.

These various functions of evaluations may require different products and approaches. Accountability requires independent, credible, unbiased evaluations to be undertaken from the

perspective of the individuals or groups to which the various actors need to be held accountable. Learning requires the involvement of the actors under evaluation, who will not learn as much if they are not associated with the evaluation exercise. Independence may matter less for the learning function and may even be counterproductive. Knowledge creation requires open, unbiased minds; a critical approach to assumptions and results; a long-term perspective; and the ability to apply knowledge and methods from the literature. Promotion requires specific qualities including salience and the ability to tell powerful and easily transmissible stories.

Different actors expect different benefits from impact assessments. We infer that the evaluations that impact investors undertake are mainly driven by the accountability requirements and the promotion motive. Learning is a recognised goal of evaluations by institutions, although it is complex to achieve because it implies a transformational use of acquired knowledge to change methods, practices and organisation. Chapter 3 discusses how the EIB-GDN served a learning function for investees. The wider part of the learning function – enlightenment for society as a whole – relates to the gains for the overall community beyond the payer or the institution under evaluation, and often comes as a by-product rather than a driver of impact assessments. However, it may be crucial for the development and effectiveness of impact investing, because its expansion and social role depend on sound, rigorous knowledge about impact and how it is created.

Rigorous impact assessments, notably focusing on causality, can serve all these functions. However, while desirable from a credibility and knowledge perspective, they are expensive and time-consuming, and not perceived in the private sector as essential for accountability or promotion motives. The field of development evaluation has broadened over the last decade to include more impact evaluations, using academic research techniques to learn “what works,” including in the field of private-sector development (McKenzie, 2010). However, a typical impact evaluation by the World Bank or Inter-American Development Bank costs several hundred thousand US dollars, with some being as much as \$1 million. They can also prompt subsequent assessments (“what worked or did not work” vs. “what is working or is not working”) but these come too late to result in real-time learning.

Private investors have little incentive to call for full academic impact evaluations, because they do not correspond to their immediate needs. The challenge therefore is to find ways to encourage more academic research in the evaluation process. This is what we call the “research gap.” We believe that there would be substantial positive returns to filling the gap. Independent research-based insights and evaluations using sound methods provide tractability and credibility. For example, evaluative research has improved the design, implementation and effectiveness of conditional cash transfer programmes since the early 1990s. Similarly, the US government’s social experiments on housing assistance and negative income tax had major effects on social programmes. Using existing knowledge and methods, academic research introduces the possibility of rigorous, fact-based deliberation at all stages of the decision chain and related feedback loop, in the design and implementation of projects, and what can be learnt from their effects. This dynamic learning process is more important than the promotion of “results,” which cannot encompass the entirety of impact and are by necessity incomplete and potentially self-serving. Introducing academic research into evaluations brings rigour to impact assessments, providing a systematic, methodical approach to deal with biases, to interpret results with precision, soundness and credibility, and to build global knowledge.

4.2. EIB-GDN deep dives

The EIB-GDN deep dives aim to address this gap – generating new research-based knowledge of how to conduct impact assessments that can better meet the evidence and learning needs of the impact investing community – and were shaped as a proof of concept. Deep dives can be defined as a dedicated evaluative research exercise to collect and analyse data on the outcomes resulting from an investment, as well as any causal impacts. They focus on individual projects – not the performance of whole portfolios – and can be used to complement existing approaches to organisation-wide evaluation and result reporting.

Deep dives occupy the middle ground between fully fledged, rigorous impact evaluations (that are often not feasible in an investment context) and inferences from self-reported monitoring data. Several institutions, including the EIB, have begun to test different approaches to carrying out impact studies, partnering with academia and specialised organisations¹⁸. Among multilateral development banks, for example, the Inter-American Development Bank has closely integrated impact studies into its project cycle. The IFC has carried out a number of “rapid evaluations” (Box 3). Other investors, for example the agribusiness lender Root Capital, use impact studies on a representative sample of their portfolio to validate their theory of change and inform course corrections, taking a mixed-methods and “client-centric” approach (McCreless, 2015).

Box 3: A rapid evaluation approach in the IFC

In 2011, only 3% of the female population of Pakistan had access to a bank account, and women-owned businesses faced a credit gap of \$179 million. In 2015, the IFC made an equity investment and senior loan to Habib Bank Limited (HBL), the largest commercial bank in Pakistan. This was the first IFC investment made with the explicit intent to support finance for women-owned businesses. HBL has subsequently launched a sub-brand, HBL Nisa, to target women. HBL has also set up a women’s business unit, increased key performance indicators for women’s deposits, appointed a diversity manager, and trained staff in gender intelligence.

The IFC used quasi-experimental methods to conduct a rapid evaluation of the cause and effect of the gender intelligence programme. The evaluation examined the differences between employees who had undergone training compared to untrained employees. Over 13 000 HBL employees were surveyed, with branch-level data analysed for the years 2014 to 2016. This study showed that branches whose managers have been trained in gender intelligence demonstrated a 10% increase in the volume of deposits from women-owned accounts when compared to branches with untrained branch managers.

Adapted from: Creating Impact, the Promise of Impact Investing (2019)

The closest comparison to the EIB-GDB programme, and also a source of information, is the series of deep dives run between 2016 and 2018 by the Impact Programme, a UK government-funded initiative seeking to build the market for impact investing in sub-Saharan Africa and South Asia.

¹⁸ The EIB has concluded a study on the impact on central and eastern European small and medium-sized enterprises over a comparator group, based on EIB and ORBIS data. Efforts are ongoing to better coordinate and pool such activities among the multilateral development banks.

These studies focused on a selection of high-impact investments made by the CDC Group, the United Kingdom’s development finance institution (Box 4). The Impact Programme deep dives focused on generating rapid insights into impact that had value for investors and investee companies alike – rather than comparing outcomes between a “treatment” and a “control” group, they prioritised “lean” methods that provided evidence of outcome and were useful for company decision-making. The deep dive approach has since been integrated into CDC’s Rapid Insights Toolbox (CDC, 2019b).

Box 4: Impact Programme deep dives

The CDC Impact Fund invests in funds and other intermediated vehicles that deliver high development impact, particularly to underserved populations. In mid-2016, as part of the UK aid-funded Impact Programme, the fund began piloting a series of insight studies. These were called “deep dives” and aimed to complement existing data reporting and improve understanding of how people engaging with portfolio companies were experiencing change. Each deep dive cycle took two to three months. The aim was to deploy a measurement approach that was light-touch, in-depth and could generate value for investors, investees and end beneficiaries. In partnership with 60 Decibels, the studies used lean data principles, with each deep dive aiming to be:

- Bottom-up – helping companies listen to customers, communities, employees and suppliers to provide actionable insight on their needs and interests.
- Useful – yielding data of sufficient quality to support decision-making.
- Iterative – allowing learning, adaptation and replication.
- Light-touch – using low-cost tools and technologies that require a minimal investment of time and money.
- Dynamic – enabling rapid data collection within a fast-changing environment.

In the first year, deep dives into five portfolio companies took place in Ghana, Nigeria and Kenya, covering the agriculture, energy and information and communications technology sectors. The table below sets out the range of topics covered against the IMP’s five dimensions of impact.

| Dimension of impact | Example |
|---|---|
| Who experiences change, and how underserved are they? | A deep dive into an online news platform to understand the socioeconomic and demographic profile of readers |
| What outcomes does the change relate to, and how important are they to the people (or planet) experiencing it? | A deep dive into a low-cost urban Wi-Fi provider to understand the importance of in-home internet connectivity |
| How much of the change occurs in the time period in terms of depth, scale and duration? | A deep dive into a solar irrigation company to understand time and cost savings from moving away from manual/diesel pumps |

| | |
|---|---|
| <p>Contribution. How does the change compare and contribute to what is likely to occur anyway?</p> | <p>A deep dive into an animal feed mill to understand how the products create superior value for customers compared to the alternatives used by non-customers</p> |
| <p>Risk. How likely is the outcome to differ from what is expected?</p> | <p>A deep dive into a company's shea nut suppliers to understand future selling intentions and workplace safety concerns</p> |

EIB-GDN deep dives push the boundary of impact studies further to address questions about causality. Deep dives expand the range of methods and approaches used to assess the impact of investments. A more academic approach can yield higher quality impact data by including methods that unpack the causal relationship between observed changes and a specific intervention or investment.

The underlying premise is that the potential to use techniques drawn from more rigorous research methods as part of impact measurement systems has not been fully explored, and “the vast amount of [impact evaluation] literature and experience that exists on government or grant-funded programmes has [so far] not been properly adapted to the realities of private sector-focused impact measurement, neither from a resource nor process perspective” (CDC, 2019a). However, improving the evidence base is not simply a matter of duplicating research methods and designs in the context of impact investing, as “measuring the impact of investments in a private-sector context is different from independent impact evaluations of government- or grant-funded programmes [...] due to commercial, legal or logistical reasons” (CDC, 2019a).

EIB-GDN deep dives aim to generate knowledge on how to use impact research techniques that are rigorous but the “right size” for a private-sector context. The core challenge was to establish methods, techniques and processes to assess attribution with a “reasonable standard of robustness” (Reeder et al., 2014). Box 5 presents the main objectives and aspirations of the programme. Chapters 2 and 3 outline the lessons learnt on this journey and document the extent to which the initial goals were validated.

Box 5: EIB-GDN deep dives

The pilot programme initiated in 2016 seeks deeper insights into the profile of end beneficiaries and how they are affected by EIB operations, using primary data, in-depth analysis and academically rigorous methodologies. This box summarises the objectives and goals of the programme, which are detailed in Chapter 2. Some of these studies also address the question of causality – the extent to which any observed change in outcomes can be attributed to an operation under the EIB’s Impact Financing Envelope for Africa, the Caribbean and the Pacific, rather than to any other social or economic changes – via impact evaluation methods. The programme is using and enhancing capacity for impact studies by training a set of talented young researchers from African, Caribbean and Pacific countries.

The three overarching objectives of the programme are:

1. To give the EIB deeper insights into the results and impact of its investments, which it can share with its stakeholders, for example the committee members (representing the EU Member States) responsible for the African, Caribbean and Pacific Investment Facility. The funding for the projects under study and the EIB-GDN programme comes from this facility.
2. To bring added value through the research for EIB client companies (direct and indirect clients, in the case of intermediated operations such as investments in funds).
3. To build capacity for local researchers and foster a local research community. The GDN recruited talented early career researchers from Africa, the Caribbean and the Pacific for the programme, who received support from five global expert advisors.

To achieve these objectives, the EIB assigned four aspirations for the deep dives:

Aspiration 1: Answer questions that matter to EIB clients and other stakeholders.

The companies should ultimately drive the scope and focus of the deep dives: asking questions that they need to answer but have not been able to tackle using their own resources. This will be a two-way discussion: the researchers will work with the companies to identify which questions can feasibly be addressed. The findings should be relevant to other EIB stakeholders, particularly the committee responsible for the Investment Facility for Africa, the Caribbean and the Pacific, which funds the projects being studied and the deep dive programme.

Aspiration 2: Generate customer insights with commercial value.

The core of the value proposition is to improve understanding of customers/clients (and potential customers in some cases): who they are, what they want, how they use the investee's products and what motivates them. The specifics will vary by company, but better insights into customers should translate into a better understanding of how to strengthen a company's business model, particularly when the findings do not fit the company's pre-held assumptions. Insights into customers also translate into a better understanding of the company's social impact, which can be employed for marketing purposes with insights into the value added. This should be of interest for companies with an explicit social/environmental mission, and/or those aiming to attract resources from international financial institutions/multilateral development banks/donors.

Aspiration 3: Use methods that are rigorous, timely and right-sized.

Once the questions are defined, the researchers will work to identify appropriate methods, drawing on their academic training and the support of the world-renowned experts mentoring them. The methods should be chosen bearing in mind the timescale of the programme and the data needs of the companies. The depth of the engagement should be tailored to the size and stage of the firm. The rigorous methodologies ensure that the evidence informing the firm's decisions is accurate, relevant and meaningful. The core aim of using cutting-edge techniques is to avoid basing decisions on misleading findings. The researchers will need to adapt these techniques to be appropriate for the questions, hence the studies will differ from academic work.

Aspiration 4: Contribute to a new way of thinking about impact measurement.

The techniques used in the deep dives will generally not be new. However, it remains an innovative way of thinking about impact measurement – putting commercial value added via customer insights at the core, rather than starting with questions set by academics or donors. This can bring significant value to companies and is the only way to proceed – deep dives can succeed only if the company is fully engaged, and this will be achieved only if there is commercial benefit.

4.3. Concluding remarks

While remaining small relative to global volumes, the impact investing segment of financial markets is growing fast, focusing attention on measurement and assessment of results, including social returns. Three main messages emerge from this chapter.

First, impact assessments mean different things to different stakeholders. There is a gap between the private value of impact assessments (driven mainly by the desire to document and report success, and the requirements of accountability) and their social value (based on the extent to which they increase the conceptual and operational understanding of the economic, social and environmental nexuses). Bridging the gap requires analytical efforts, and external incentives and resources.

Second, rigorous academic evaluative research benefits all stages of the investment process (identification, conception, implementation, and assessment of results and impact). Substantive inputs cannot be reduced to measurement frameworks; evaluations should continue to consider several approaches and models and evaluators should cultivate strong connections with academia (Harji and Jackson, 2018; Ruff and Olsen, 2018). The EIB-GDN deep dive programme shows how rigorous research can provide insights into impact creation.

Third, the cost of increasing cooperation with academia for using more research-based methods to improve the quality of impact assessments is unlikely to be covered by private investors. This cost, which represents the public-goods dimension of impact assessments, is related to the “enlightenment” and “learning” functions of evaluations. Supporting the market for impact investing cannot rely only on investors’ engagement and generosity. Research-based evaluations applying rigour and control of biases should be promoted, and the focus should be more on knowledge creation than on the promotion and reporting functions of evaluations, while considering private stakeholders’ interests and motivations. It is hoped that the lessons learnt from EIB-GDN deep dives will lead to a new generation of research-based evaluations, thus filling the gap.

Chapter 2

Designing and conducting EIB-GDN deep dives¹

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Summary and key messages

The previous chapter introduced deep dive impact studies as a way to complement other evaluation efforts and combine methodological rigour with the time requirements of stakeholders in an impact investment. This chapter discusses the experience and lessons from a recent pilot programme, developed and funded by the European Investment Bank (EIB) in collaboration with the Global Development Network (GDN), which conducted 16 deep dives of investments in ten African, Caribbean and Pacific (ACP) states. It details the design and principal components of the deep dives, how they were implemented, their main outputs/outcomes (and the value added for stakeholders), and the lessons learnt about design, implementation, utility and use.

The deep dives were conducted by 30 research fellows from ACP states. The researchers were well-trained but relatively junior, as an important subsidiary objective was to build evaluative and research capacity. Expert advisors and EIB and GDN staff supported the researchers in completing studies that passed academic review in a limited time period, adding to general development knowledge, with some expected to be published in peer-reviewed journals. The deep dive exercise provided lessons on how research can be relevant for operational and policy concerns (Chapter 3).

Lessons have been learnt about conducting these programmes. First, deep dive research must take into account a lack of existing data. While trying to make the best use of data, researchers needed to plan and budget for primary data collection. Second, engagement with the company implementing the investment is key. Company buy-in is essential for research and to ensure successful cooperation and data sharing. Third, researchers must be flexible about research approach and methodology. Time and resource constraints, and the nature of the project being assessed, meant that randomised control trials planned in advance were not generally feasible. Other techniques to address attribution were needed. Fourth, conclusions need to be tailored to the limitations of the analysis. It is a challenge to draw firm conclusions that are not generic, that add value to the global community and that are operationally relevant. Fifth, reporting in the right presentational form is crucial; expert advisors, GDN and EIB staff and consultants supported the researchers in their communications. Sixth, research capacity can be built, but it is a slow process; technical capacity building was limited by the short time period available. Seventh, the costs of the deep dive, although significant, were not prohibitive and judged by the reactions of all stakeholders were outweighed by the benefits.

Increasingly, investors, financial intermediaries and private suppliers/providers need to consider, in addition to their financial returns, the impact (positive or negative) of their projects on people, the environment and governance of their economies. Most multilateral development banks², bilateral donors and the foundations that support them have established practices to understand the development impact of their investment programmes, including private-sector investments. Almost all have frameworks to track some of the direct “results” of investments, often measuring these impacts during implementation as well as after project completion. Most carry out evaluations of all or selected investments (some institutions evaluate each operation, while others take mainly a thematic approach, with detailed case studies of a sample of operations).

² See, for example, the Evaluation Cooperation Group (ECG)’s [Good Practice Standards for the Evaluation of Private Sector Investment Operations](#). The ECG consists of the independent evaluation units of the major international financial institutions.

However, as noted in Chapter 1, results measurement frameworks generally only capture the direct impacts of projects and focus on indicators that can be aggregated over different operations.

Evaluations can study particular investments or themes in more detail, but are generally only implemented after project completion, and look at impact as one of several criteria. Stakeholders often want a deeper understanding of the impact of particular investments, including during the implementation period. Furthermore, results measurement frameworks do not generally address the issue of causal attribution, which would need to be tackled project by project, even though some multilateral development banks and bilateral donors, such as the World Bank, the Inter-American Development Bank and the Millennium Challenge Corporation, undertake numerous rigorous impact evaluations. Few institutions have made extensive use of impact evaluations that meet the highest academic standards. This is partly because of cost considerations and partly because traditional impact evaluation studies yield results after the investment project has ended. Assessing the evolution of impact during implementation, rather than only after the investment has ended, can help institutions to adapt practices and strategies to maximise impact.

The previous chapter introduced deep dive assessments as a way to complement other evaluation efforts and combine methodological rigour with the time requirements of stakeholders in an impact investment. What has been the experience with EIB-GDN deep dives and what lessons can be drawn from them? Deep dives are relatively new in the evaluation field and vary in scope and character (Chapter 1). This chapter discusses the experience and lessons from a recently completed pilot programme, funded by the EIB and implemented by the GDN. It details the design and principal components of these deep dives, how they were implemented, their main outputs/outcomes (and the value added for stakeholders) and the lessons learnt in their design, implementation, utility and use.

1. What went into the EIB-GDN deep dive programme?

The EIB-GDN project was started in 2017 and ran for three years (organised in three one-year cycles). It was conceived through a series of discussions starting in 2014 between the GDN and the EIB. The EIB was interested in complementing its impact measurement framework by developing the research component of its operations and involving developing country researchers. It identified the GDN as a partner to build research capacity in developing countries, and initiated a partnership focused on understanding the development impact of the Impact Financing Envelope (IFE) for Africa, the Caribbean and the Pacific regions.

The project aimed to strengthen the capacity of young researchers in developing countries while producing research-based insights into the development impact of investments funded by the EIB under the Impact Financing Envelope. Specifically, the project designers wanted to:

- Answer questions relevant to EIB clients and other stakeholders.
- Be rigorous in methods.
- Contribute to a new way of thinking about impact measurement that combines the needs of academic research and investor interests.

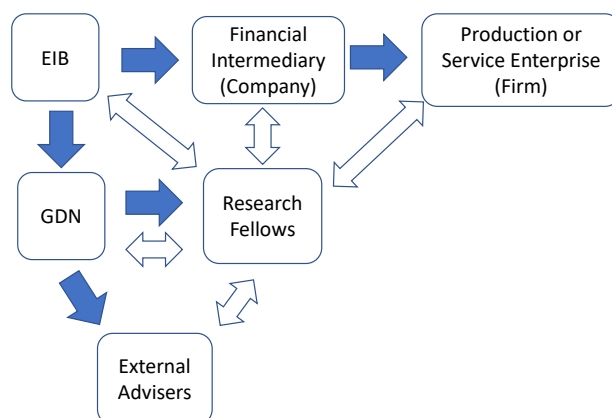
The programme aimed to match projects (in selected countries of Africa and the Caribbean) with researchers based in, or with a background in, those countries. The aim was to bring contextual knowledge and legitimacy by mobilising research fellows from beneficiary countries. This provided a unique opportunity for the researchers to acquire insights into projects financed by one of the biggest multilateral development banks in the world, while strengthening the pool of local experts.

To ensure that the studies met high standards of technical rigour, the GDN matched the researchers with a team of expert advisors. Chosen by the GDN for their experience, competence and high profile in the field, they ensured research met appropriate academic standards. This was particularly important given the innovative nature of the programme and the need to produce quality work in the fast-paced environment of the private sector in developing countries. Meeting quality objectives under tight time constraints and looking at complex investments requires skills, expertise and experience.

EIB staff were heavily involved in supporting the programme. The EIB had been expected to play a role in identifying the operations for analysis, making introductions to the relevant EIB clients, and ensuring strategic alignment between the studies and EIB objectives. In reality, the involvement of the EIB was more extensive (Figure 1 illustrates the key role of the EIB and the GDN among the stakeholders). Because the research fellows were relatively inexperienced, particularly in a private-sector context, the EIB team played an important role in explaining the nature of the investments and the underlying business models. They also acted as facilitators between the researchers and the firms, provided technical reviews of documents and edited reports, drawing on the technical expertise and subject knowledge of staff in the Bank's Economics Department and the Independent Evaluation Division.

Figure 1: Deep dive stakeholders

Deep Dive Relationships (shaded arrows indicate financial support; others indicate non-financial interactions, such as advice, consultation)



NB: This is an application of Chapter 1, Figure 2 to the case of deep dives.

The research outputs of the programme were called “deep dives.” They were expected to answer questions relevant to EIB clients and other stakeholders; to be rigorous in methods; and to contribute to a new way of thinking about impact measurement that combines the needs of academic research and investor interests. As shown in Figure 1, the deep dives were written by researchers, and benefited from interactions from various stakeholders. They provided in-depth insights into specific research questions, shaped through interactions between the researchers, expert advisors, EIB and GDN staff and the companies that benefited from EIB funding. They were developed under the practical constraints of data availability and a timescale of one year per study. The following subsections detail how the EIB-GDN deep dive programme was implemented.

1.1. Recruitment of research fellows

The first task for each cycle was to recruit the research fellows through a competitive application process in three successive cycles. The process was geared geographically to facilitate matching between the selected researchers and a preliminary list of projects to be evaluated, proposed by the EIB, attempting to target francophone as well as anglophone researchers to make it easier to carry out studies across most countries of EIB operations in the relevant regions. The call focused on candidates from low- and middle-income countries in Africa, the Caribbean and the Pacific, since the source of funding was related to the Cotonou Agreement, which covers those regions³. Given the location of the projects selected for deep dives, most of the research fellows (except one from Haiti in the Caribbean) were from countries in sub-Saharan Africa, and lived and worked in the region (Table 1). A total of 30 researchers were recruited during the programme (as listed in the “Biographies” section of the book).

³ [Cotonou Agreement – Consilium \(europa.eu\)](https://ec.europa.eu/eip/eip-efsd/cotonou-agreement_en).

The research fellows were aged under 40, with a median age just under 35. Though research fellows from a variety of disciplines were considered, there was a focus on quantitative skills that would be useful in programme and project evaluations. Most applicants were economists, with a strong grounding in the application of statistics and econometrics to the social sciences. There was a preference for those with or about to complete a PhD. Applicants had to take a test at the application stage, focusing on the understanding of, and ability to use, quantitative techniques. The test also checked data handling experience, strategic approach and communications. Quantitative analysis, while necessary, did not rule out the use of other techniques in deep dives – research fellows were encouraged to supplement their work with qualitative and institutional analysis.

Although female applicants were in a minority, the deep dive programme tried to ensure as much diversity as possible in the selection process. Among applicants with similar experience and training, women were preferred. Although gender parity was not achieved, the figure of 25% women among the research fellows is not insignificant, given the rate of female representation in the economics profession generally⁴ and the fact that recruitment was targeted at those from low- and middle-income countries. Both factors limited the female applicant pool.

Table 1: Characteristics of research fellows

| | Number recruited/number applied | Number of recruits with a PhD in economics (% of total) | Number with foreign degrees | Median years of age/work experience | % women | % sub-Saharan African nationals | % living/working in sub-Saharan Africa |
|---------|---------------------------------|---|-----------------------------|-------------------------------------|---------|---------------------------------|--|
| Cycle 1 | 10/128 | 8 (80%) | 8 | Under 35/ 3.5 | 30 | 100 | 70 |
| Cycle 2 | 10/158 | 8 (80%) | 6 | Under 35/ 3.5 | 20 | 100 | 60 |
| Cycle 3 | 10/189 | 10 (100%) | 7 | Under 35/ 4 | 30 | 90 | 70 |

The final recruits were chosen by a committee consisting of expert advisors, the EIB and the GDN. The candidates all had strong academic credentials. There appears to be a strong pool of researchers in sub-Saharan Africa with an academic background in quantitative microeconomics, who could be suitable to carry out deep dive studies. It was sometimes difficult to choose among the finalists. However, the researchers were relatively inexperienced in carrying out independent research, few had experience working in or with the private sector, or of analysing private-sector investments from an academic viewpoint, and few had experience of independently managing research projects.

Given the relative inexperience of the research fellows, they were allocated into teams to relieve the pressure and enable them to provide support to each other, especially because of the intensity of engagement and data work. Most of the research fellows formed teams of two (one worked alone) and there were 16 deep dive projects. This fitted with the number of projects funded under the Impact Financing Envelope that were at a suitable operational stage for analysis. The pairing provided a good

⁴ See <https://blocnotesdeleco.banque-france.fr/en/blog-entry/economics-where-are-women>.

geographical match, as pairs of research fellows were more likely to include at least one researcher originating in countries where the projects analysed were located.

1.2. Research support

Through EIB funding, the researchers were given a one-year fellowship that included a two-week induction course, financial resources to conduct the analysis and access to research support from the expert advisors. They received a stipend of €15 000 and a research allowance (for surveys and other research-related expenses) of up to €10 000, amounting to €20 000 per project where the researchers worked in pairs.

The principal research capacity support given to the researchers was through five expert advisors, who were chosen because of their background in development research, impact assessment and evaluation⁵. Their principal role was to mentor the research fellows during the design, conduct and write-up of the deep dives. Each expert advisor was given a notional research fellow allocation, although some assignments were shifted after project selection if a particular expert advisor had a comparative advantage in the project to be implemented.

The support from the expert advisors was supplemented by the logistical services provided by the GDN and a dedicated team from the EIB Economics Department, with input from the Evaluation Department and other EIB services. The EIB team managed the partnership for the Bank, especially in making links to EIB clients and acting as facilitators between the researchers and the private-sector counterparts. They reviewed documents from a technical perspective and to ensure that EIB operational practices and the business models of the EIB clients were appropriately reflected, drawing on their professional expertise and roles in the Economics Department and Independent Evaluation Division. They provided significant support in editing the studies to a standard acceptable for publication as an EIB report, and worked with the researchers to provide readable summaries that were circulated as blogs.

2. How were the deep dives implemented?

The steps in conducting the deep dives were as follows: project selection; identification of the evaluation questions by all stakeholders, taking into account the context of the projects, and development of an analytical framework to analyse these questions; write-up and review of the research plan including a literature review; data collection and analysis; write-up and review of the finished draft deep dive. This section describes each and summarises some of the issues confronted.

To facilitate the integration of stakeholder experiences and opinions concerning the various aspects of the interventions, a short survey was given at the time of writing this book to all the stakeholders of the programme, namely the EIB staff involved, expert advisors, research fellows, managers of the investment companies who acted as financial intermediaries, and managers of the firms who were the

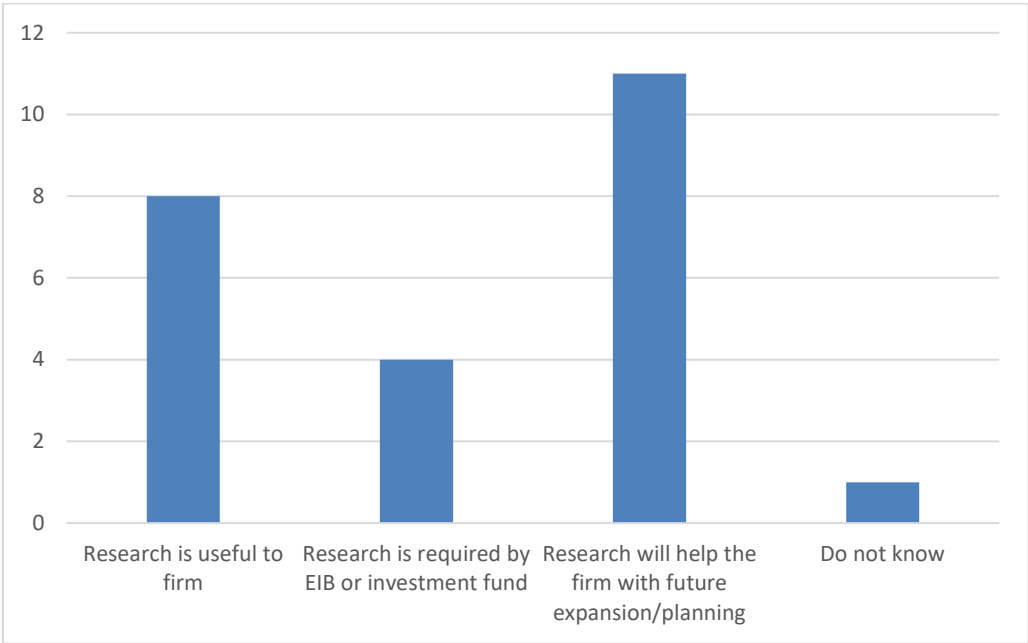
⁵ The five advisors, François Bourguignon of the Paris School of Economics (PSE), Shahrokh Fardoust of the College of William and Mary, Emmanuel Jimenez of the International Initiative for Impact Evaluation (3ie), Arianna Legovini of the World Bank, and Alexandros Sarris of the University of Athens, saw the project as an opportunity to build evaluative research capacity and to promote richer interaction between academia and the operations of a development finance institution such as the EIB.

ultimate recipient of the investment funds. These short surveys aimed at eliciting the opinions of all stakeholders involved with respect to the key aspects of the project. These included questions on the following: how the ultimate beneficiary firms were selected; who among the beneficiaries experienced change as a consequence of the financing and how; types of economic and social value created; the thoroughness of the theory of change produced; impressions about whether the various changes would have happened in the absence of the intervention; the extent of useful knowledge learnt by the firm managers; the research design of the deep dive; the implementation of the research including survey design and conduct; the clarity and robustness of the research results obtained; and the type of research capacity built. The answers to these short surveys were incorporated into this and other chapters of this book.

2.1. Project selection

The EIB proposed a preliminary list of projects before recruiting the fellows so that some geographical and capacity matching could occur. However, the list was intended to be amended and modified depending on the implementation stage of a project, the appetite of funds and companies receiving EIB support and implementing the projects to participate in the deep dive exercise, and the research potential of each project – that is, the possibility to address relevant and useful research questions. The research fellows reported that firms were willing to participate because it would help with future expansion and planning (Figure 2). This is roughly aligned with how firms viewed the deep dives, as discussed in the next chapter.

Figure 2: Number of deep dives on the elements that convinced firms to participate, as reported by the research fellows



Source: Survey of research fellows

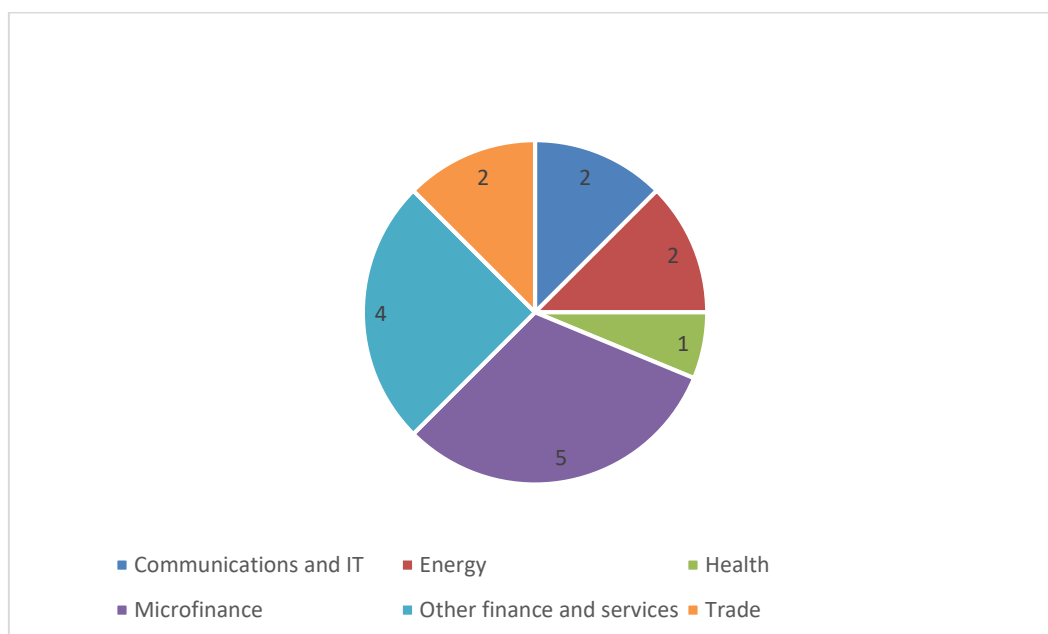
Initial projects were assigned by the GDN to the research fellows before the two-week introductory induction. They were required to study them on the basis of available information and to submit a provisional research work plan that would be discussed during the induction. These work plans were subjected to comments (by the expert advisors, other researchers, the EIB and the GDN). The

information provided by that discussion enabled the list of projects to be fine-tuned and allocated to research fellows. In the first cycle, the matching problem (based on capacity and geography) was dealt with by grouping research fellows in pairs. Given the range of projects under consideration, mentoring facilities were enhanced by grouping the expert advisors in pairs for each project, on the basis of their own interests and expertise.

During the first cycle, it took up to three months (Table 3) to select projects and finalise the allocations (2.5 months on average). Thus, most research fellows had less than ten months to identify the research questions and complete the analysis.

Most EIB investments analysed under the programme were undertaken via financial intermediaries (microfinance institutions, microfinance funds, and private equity and venture capital funds), which in turn funded firms (typically small and medium enterprises, or SMEs) in various sectors. The deep dive process initially chose the financial intermediaries that were willing to participate. In most cases, these financial intermediaries were not directly the subject of the deep dives. Instead, those intermediaries, together with the EIB and the researchers, selected firms that they had financed that could be interesting targets of the studies. These firms were then asked if they would be willing to participate in the deep dive research. They operated in a wide range of sectors, including microfinance, information and communications technology (ICT), education and health (Figure 3).

Figure 3: Sectoral breakdown of deep dives (number of deep dives)



The programme aimed to examine a variety of investments rather than providing a representative picture of the portfolio under the Impact Financing Envelope⁶. In most cases, the focus on the ultimate recipient of the funds also meant that the operation of the financial intermediaries was not a focus of assessment. This was a deliberate choice since various stakeholders, including the EIB, wanted to know the effect on environmental and social outcomes of actual investments.

⁶ The EIB has an independent evaluation group that examines individual projects, sector-wide policies, programmes, partnerships and financing instruments. External stakeholders, such as the European Commission, may also undertake evaluations of the mandates or investments that they support.

The choice of sectors for the deep dives (Table 2) was guided by practical criteria (willingness to participate) and feasibility concerns (for studies that could be completed under the resources allocated to the programme). This differed from a sector-based strategy, which could include a series of studies in a given sector and deepen learning about what works in different contexts.

The opportunistic approach also partly explains the wide geographic distribution of the deep dives. Twelve of the deep dives were in eight African countries: Benin (one), Cameroon (one), Côte d'Ivoire (one), Ethiopia (two), Ghana (one), Kenya (three), Nigeria (two) and Senegal (one). Two were in multiple African countries. Two were in the Caribbean (Haiti and Jamaica). None were in the Pacific. This precluded any strategic focus on certain sub-regions, but had the advantage of covering a diverse group of ACP countries.

Table 2: Characteristics of projects selected and research questions

| Country | Financial intermediary | Company to be evaluated | Sector of economic activity | Key research questions | Principal method of assessment | Mixed methods used? | Original data generated? |
|--------------------|-------------------------------|------------------------------|------------------------------------|---|---|---|--|
| Kenya | TCom | Ajua CRM | ICT | <ul style="list-style-type: none"> - What are the determinants of CRM software adoption? - What is the impact of CRM software on customer volume and sales performance? | <ul style="list-style-type: none"> - Theory of change (TOC) - Econometrics (with the use of two instrumental variables) | No (except the use of theory of change) | Yes (surveys) |
| Multiple countries | Direct | Currency Exchange Fund (TCX) | Finance and other related services | <ul style="list-style-type: none"> - In a given African country, how has infrastructure been financed (local or hard currency) and why? - How has foreign exchange volatility been? Is it costly? - What is the willingness to pay for hedging? | <ul style="list-style-type: none"> - Qualitative and quantitative analysis - Construction of a financial model | Yes | Yes (qualitative interviews) |
| Ethiopia | Direct | M-BIRR | Finance and other related services | <ul style="list-style-type: none"> - What is the average stated willingness to pay for mobile money use in utility bill payments? - How sensitive to price is the demand for mobile money use in utility bill payments? - How effective are non-price factors in affecting the demand for mobile money use in utility bill payments? | <ul style="list-style-type: none"> - Estimation of the willingness to pay (using stated preferences on random given attributes, the contingent valuation methodology and a probit model estimation) - Qualitative research (interviews) | Yes | Yes (surveys and semi-structured interviews) |
| Kenya | Novastar East Africa Ventures | SOKO Project | Trade | <ul style="list-style-type: none"> - For artisans, what are the main impacts of company affiliation on income, skills, access to healthcare and education, and poverty status? - Is there a differentiated impact of SOKO by gender? | <ul style="list-style-type: none"> - Theory of change - Econometrics (t-test, regressions, propensity score matching) - Qualitative research | Yes | Yes (surveys, interviews) |
| Cameroon | | Nachtigal | Energy | <ul style="list-style-type: none"> - The potential impacts of Nachtigal Hydro Power Company investments on vocational education and training. - Does the renovation or building of school infrastructure and the provision of quality training equipment lead to increased student enrolment and attendance in vocational schools? | <ul style="list-style-type: none"> - Theory of change - Econometric estimation | Yes | Yes (surveys, interviews) |

| Country | Financial intermediary | Company to be evaluated | Sector of economic activity | Key research questions | Principal method of assessment | Mixed methods used? | Original data generated? |
|---------------|------------------------|---|------------------------------------|--|--|---------------------|---------------------------|
| Nigeria | Energy Access Ventures | RenSource | Energy | <ul style="list-style-type: none"> - What is the profile of Solar_Co's customer base? - What drives some merchants to subscribe to Solar_Co solar energy? - How do Solar_Co customers benefit from the service? | <ul style="list-style-type: none"> - Theory of change - Descriptive statistics - Econometrics (including using propensity score matching and endogenous switching regression (ESR) approaches) | Yes | Yes (surveys, interviews) |
| Jamaica | | Development Bank of Jamaica (DBJ) | Finance and other related services | <ul style="list-style-type: none"> - What is the impact of DBJ loans on microfinance institutions? - What is the impact of DBJ loans on the performance of SMEs? | <ul style="list-style-type: none"> -Econometrics (instrumental variable and two-stage least squares (2SLS)) - Qualitative analysis and review of public quantitative documentation | Yes | Yes (surveys, interviews) |
| Ghana | | Baobab Microfinance Company (BMC) | Finance and other related services | <ul style="list-style-type: none"> - Has BMC been reaching the poorest women in its areas of operation? - Has microcredit impacted women's economic empowerment in the five districts of BMC operations? - Has there been a reduction in the poverty level of BMC's female clients? | <ul style="list-style-type: none"> - Theory of change - Econometrics (average treatment effect, including using propensity score matching and inverse probability weighting (IPW)) - Qualitative research | Yes | Yes (surveys, interviews) |
| Haiti | | Microfinance (ACME) | Finance and other related services | <ul style="list-style-type: none"> - Did the receipt of an ACME loan stimulate the expansion of Haitian microenterprises? - Did it help Haitian microenterprises acquire more fixed business assets? - Did it have an impact on the profits of microenterprises? | <ul style="list-style-type: none"> - Econometrics (using matching) | Yes | Yes (surveys, interviews) |
| Côte d'Ivoire | LMDF | Première Agence de Microfinance - PAMF-CI | Finance and other related services | <ul style="list-style-type: none"> - Understand the profile of beneficiaries and former beneficiaries. - Assess whether they have benefited, and if so how, from borrowing (in terms of business success, incomes, wealth and subjective well-being). - Measure customer satisfaction and draw strategic and operational lessons to inform the design and implementation of operations. | <ul style="list-style-type: none"> - Econometrics | No | Yes (surveys) |

| Country | Financial intermediary | Company to be evaluated | Sector of economic activity | Key research questions | Principal method of assessment | Mixed methods used? | Original data generated? |
|----------|------------------------|---|------------------------------------|--|---|---------------------|---|
| Nigeria | Partech | TradeDepot | ICT | <ul style="list-style-type: none"> - To what extent has the company's digital retail distribution platform lowered the supply price of a select basket of goods for small retailers? - To what extent do retailers who use the platform pass on the lower supply price of goods to consumers? - Which groups of small retailers benefit from the company's digital retail distribution platform (specifically women and young individuals)? | <ul style="list-style-type: none"> - Theory of change - Literature review - Quantitative methods | No | Yes (surveys) |
| Benin | PAMIGA | RENACA/ PAMIGA | Finance and other related services | <ul style="list-style-type: none"> - Which financial and output market and non-market mechanisms are associated with smallholder farmers' decisions to invest in agriculture in general, and in irrigation technology in particular? - How do these mechanisms explain differences in irrigation technology adoption among farmers? | <ul style="list-style-type: none"> - Theory of change - Descriptive statistics - Econometrics - Qualitative analysis | Yes | Yes (surveys, focus groups) |
| Multiple | | Africa Energy Guarantee Facility (AEGF) | Finance and other related services | <ul style="list-style-type: none"> - Review the case studies of the use of risk mitigation instruments for energy projects in Africa. - Demonstrate how such instruments improve the viability of energy projects by reducing the financing costs. | <ul style="list-style-type: none"> - Theory of change - Literature review - Reviews of former case studies (impact, costs and so on) - Realisation of a case study: cost-benefit analysis | Yes | Yes (interviews) |
| Senegal | I&P | NEST | Health, education and related | <ul style="list-style-type: none"> - Who are the NEST patients? - How willing are patients to pay for and to use midwife-led monitoring and delivery care services? Why? - Does the provision of information via short stories (that is, visualisation) influence patient demand for midwife-led care services better than basic information? | <ul style="list-style-type: none"> - Theory of change - Descriptive statistics - Auction methods - Field experiment - Qualitative analysis | Yes | Yes (surveys, focus groups and field experiments) |

| Country | Financial intermediary | Company to be evaluated | Sector of economic activity | Key research questions | Principal method of assessment | Mixed methods used? | Original data generated? |
|----------|-------------------------------|-------------------------------------|------------------------------------|--|---|---------------------|--------------------------------|
| Ethiopia | | Cepheus Growth Capital/ Novastar | Finance and other related services | <ul style="list-style-type: none"> - What are the main barriers to financial access for firms in Ethiopia? How do they influence the different types of growth-oriented investments? - Does a lack of access to finance constrain firm growth and investment decisions? | <ul style="list-style-type: none"> - Descriptive statistics - Econometrics (including using instrumental variable and propensity score matching) | No | Yes (online and field surveys) |
| Kenya | Novastar East Africa Ventures | poa! internet | ICT | <ul style="list-style-type: none"> - How did providing free internet access to schools in Kenya affect student outcomes (including internet skills, ICT skills, school attendance and access to e-education)? - Determination of customer satisfaction and related challenges. | <ul style="list-style-type: none"> - Non-experimental econometrics (including using inverse probability weighting and propensity score matching) - Qualitative research | Yes | Yes (surveys and interviews) |

Note: ICT refers to Information and Communications Technology

Source: EIB-GDN (2019, 2020, 2021)

2.2. Defining the research/evaluation questions

The programme demonstrated that deep dive studies could be valuable to companies and the EIB while appealing to the academic interests of researchers and expert advisors with technical rigour. This meant that the initial identification of a question by the research fellow was generally followed by iterative discussions with the EIB team, the project promoters and the expert advisors.

Based on these discussions (and in line with the objectives of the deep dive programme presented in Box 5 in Chapter 1), the research fellows adjusted the research focus to meet the expectations of the EIB and its clients and to fit with the particularities of the business models. In many cases these were not initially fully understood by the researchers, who were not experienced with private-sector operations. The iterations between the companies and the research fellows helped to fit the research ambitions with what would be practically feasible in terms of timeline and data availability. Several iterations were often needed, with many of the discussions facilitated by the EIB team. Few of the research fellows had experience communicating with private-sector companies, and often presented their ideas in a highly technical and academic manner. It was sometimes hard for the private-sector companies to see how the research could be of interest to them. The EIB team and, in some cases the expert advisors, acted in many cases as “translators” between the young researchers and the private-sector counterparts, particularly at the initial stage.

Table 2 shows the research questions that were the focus of the assessments. Many of the questions were of clear interest to the company as well as to the EIB, such as more information about the customer base. This spanned a wide range of services, including take-up of microfinance loans, midwifery services or use of telecommunications for mobile payments. Collecting this detailed profile information, which went beyond the information the project promoters could reasonably collect on a regular basis, gave the EIB deeper insights into its social impact, particularly whether the customer base served relatively poor and disadvantaged groups. The profile information was also often useful for commercial purposes, and in some cases more detailed commercially relevant information was collected, including the willingness to pay for services that would affect the companies’ bottom line materially, or the degree of satisfaction with the service the company has provided (see Chapter 3 for further information about the use of deep dives).

In many cases it was relatively easy to identify overlapping interests. In most cases, however, the research ambitions of the research fellows had to be narrowed to fit with the availability of data, time and financial resources. As noted in the earlier chapters, the other stakeholders sometimes had objectives that differed markedly from research fellows’ original proposals⁷. While some shared the research priorities initially identified by the research fellows, most had more immediate operational questions in mind, which required different research methods. For example, in one of the studies, the research fellows initially proposed using satellite data to study the effect on economic activity in the area over time. Since this aspect was already being assessed by another investor, the company asked the researchers to focus on a relatively small sub-component – the upgrade of training programmes in the affected communities – to see if their social investments were helping to improve the lives of people in the affected communities. This required a reassessment of the research proposal.

⁷ For more than ten deep dives, firms reported that they had accepted to take part in the deep dive exercise because they were convinced that it would help later expansion. In four of the deep dives, research fellows had to use the argument that the EIB required an evaluation.

This process of interaction to identify suitable research questions proved essential to ensure both operational and academic relevance for the studies. The average time from the choice of a project to the start of relevant research activities was two to four weeks.

2.3. Development and review of the research plan

Once the research questions were defined, the research fellows wrote up their approach, defining what data and methods were going to be used to address them. This document was then reviewed by the expert advisors and the EIB, who typically raised questions about whether the methodology selected would enable the research questions to be answered, the likely availability of the data to implement the methodology, and the realism of the implementation plan. The research plans were typically revised at least once after the initial round of comments. The research fellows were responsible for keeping the private-sector companies updated on the research plans.

A key part of the review centred on recreating the theory of change of the intervention, which was key to understanding the pathways through which the companies' inputs would affect the outcomes. A theory of change presents which assumptions are key to ensuring that project inputs will lead to stated outcomes. It discusses how inputs, such as materials or staff bought with loan proceeds, are combined through activities (production processes) that lead to outputs such as products. Assumptions include the availability of factors of production and efficiency of implementation. A theory of change outlines how such products are marketed and sold, thus generating outcomes such as increased revenues, and impacts on the incomes and well-being of those who benefited from the loans. Key assumptions are the demand for the products, the marketing skills of the sellers and how they manage the revenues generated. Such a theory of change can be used to identify the key assumptions that connect inputs to outcomes and can thus be the subject of the most relevant research questions. A theory of change is also important for understanding the reasons behind quantitative research findings regarding impact.

The managers of the companies that benefited from the loans envisaged a logic chain when interviewed, and the research fellows reconstructed the theory of change in conjunction with EIB staff and the expert advisors. About one-third of the survey responses of the expert advisors expressed the view that the project did not have a fully articulated theory of change. A similar percentage felt that economic theory could have been used more by research fellows in crafting the theory of change. This was an area where the expert advisors showed their value added to the process and made suggestions to clarify key assumptions critical to determining outcomes.

Box 4: How do interactions between research fellows and expert advisors affect the preparation of research work? Assessing the impact of SOKO

The EIB supports investment companies and funds in African, Caribbean and Pacific countries, which in turn have invested in local small and medium enterprises. SOKO is a Nairobi-registered firm that has been financed by Novastar, an investment fund company based in Kenya and Nigeria. It designs ethically sourced fast-fashion jewellery and accessories, which are produced by a growing network of low-income artisans in Kenya, and sells the products online to consumers in the West through hundreds of fashion boutiques, large established retail chains and direct online channels. SOKO's central innovation is its variable cost "virtual factory" of artisans managed by a proprietary

mobile technology platform. It uses smartphones to connect independent artisans and global customers directly.

The project undertaken by two research fellows of the GDN and supervised by two expert advisors investigated the social impact of SOKO membership in Kibera, a suburb of Nairobi. The initial research questions formulated by the research fellows asked whether SOKO membership enhanced income and sustainable skills, as well as investments, children’s education, family health and labour market participation. The methodology proposed was to compare SOKO members (lead artisans who are workshop owners and workers) with a counterfactual group of potential SOKO members through a propensity score matching (PSM) technique.

After a first round of review and suggestions by EIB staff and the expert advisors, the proposal was amended. First, with the help of expert advisors, a sound theory of change between the SOKO inputs and the impacts was formulated based on human capital theory. In SOKO’s case, the human capital investment consisted of on-the-job training for lead artisans and workers. Second, on the suggestion of expert advisors, the research questions were modified to be more specific and to include the following: the impact of SOKO affiliation on lead artisan and worker income, access to health and education, skills, poverty status, issues of income diversification and whether women were motivated to participate.

A survey was designed with the support of the expert advisors in framing the questions and administered to the treatment and control groups. Problems arose in achieving the required number of interviews for the treatment and control artisans, because the sample frame was incomplete. Various techniques were employed to amend this, particularly “snowballing,” whereby an artisan was asked for contacts with other artisans.

The initial method employed for the analysis was comparison of means for diverse variables among SOKO- and non-SOKO-affiliated artisans. This method cannot provide attribution for the differences, so the expert advisors recommended using econometric techniques. This was done, and a propensity score matching methodology was used to select the most similar non-SOKO artisans to those who were SOKO members. The result was a sounder analysis of impact on economic and non-economic aspects of artisans’ well-being, and a more detailed analysis of the social impact of SOKO.

As a measure of welfare and living conditions, a Poverty Probability Index was used, despite recognised weaknesses. Several other variables thought to be correlated with welfare were tested. The end result was that workers with SOKO affiliation seem to enjoy higher welfare levels, and SOKO seems to have had a positive social impact on lead artisans and workers. With some caveats, these conclusions appear to be valid, although more robustness checks are needed.

There were other areas where expert advisors contributed, such as the feasibility of methods, the adequacy of data and the write-up of the results (Boxes 1 and 2). Some initial drafts overreached in writing up conclusions when the methods to establish causality were imperfect. In several projects, expert advisors provided guidance on the proper wording of what constituted programme “impacts.”

An important issue was what method to use. The programme aimed to employ rigorous methods using counterfactual analysis. In most cases, however, the so-called “gold standard” of randomised controlled trials could not be employed. Only one deep dive implemented a field experiment (Table 3). The short time frame, and the fact that many of the supported businesses had been operating for

several years and some time had passed since the receipt of support from the EIB or the funds, made it difficult to implement a randomised controlled trial. Most deep dives used quasi-experimental causal analysis and four relied on correlations to make their conclusions. A key lesson is that deep dives need to identify a protocol for what would constitute a “satisfactory” causal analysis under practical constraints.

Table 3: Distribution of methods and cost of research across cycles

| Research cycle | Average duration of project selection (months) | Average duration of defining research questions (months) | Number using randomised controlled trials | Number using other quasi-experimental techniques | Number unable to do causal analysis | Average cost of research including researcher’s stipends (in thousands of euro) |
|----------------|--|--|---|--|-------------------------------------|---|
| Cycle 1 | 3 | 3 | 0 | 2 | 3 | 25.0 |
| Cycle 2 | 3 | 2 | 1 | 4 | 0 | 26.5 |
| Cycle 3 | 2 | 1 | 0 | 4 | 1 | 28.5 |
| Total | 2.5 | 2 | 1 | 11 | 4 | 27.0 |

Another issue was the availability of data to conduct the analysis. Expert advisors often warned about the difficulty that researchers would have, and they could not assume that data would be readily available. Primary data collection had to be worked into the budget and the available timeline. Researchers had to explore all possibilities to exploit secondary data. This is detailed in the next section. Box 2 provides examples of how criteria were used to adjust research designs.

Box 2: Alternatives to complete counterfactual analysis when experimental or quasi-experimental methods are unfeasible

In the deep dive of the TCX investment, the original research design, besides providing information about major energy projects involving foreign providers, was an elaborate economic modelling of the social willingness to pay for hedging against exchange rate volatility in a power plant operated by a foreign provider in Tanzania. Application to real data was disappointing, because Tanzania's exchange rate had been relatively stationary, with little short-run volatility over the recent past, whereas domestic prices showed limited fluctuations around a stable inflation trend. Hedging proved of little interest based on past exchange rate behaviour. The expert advisors guided the focus away from present conditions so that the deep dive evolved towards a full simulation analysis of the social willingness to pay for hedging against varying levels of exchange rate volatility. This analysis provided the hedging company with an estimation of the full demand function for its services and the public energy supplier with an instrument that would help evaluate

the contracts offered by the hedging company, depending on key policy parameters like the extent of the pass-through of exchange risk to end users, risk aversion or time discount rate.

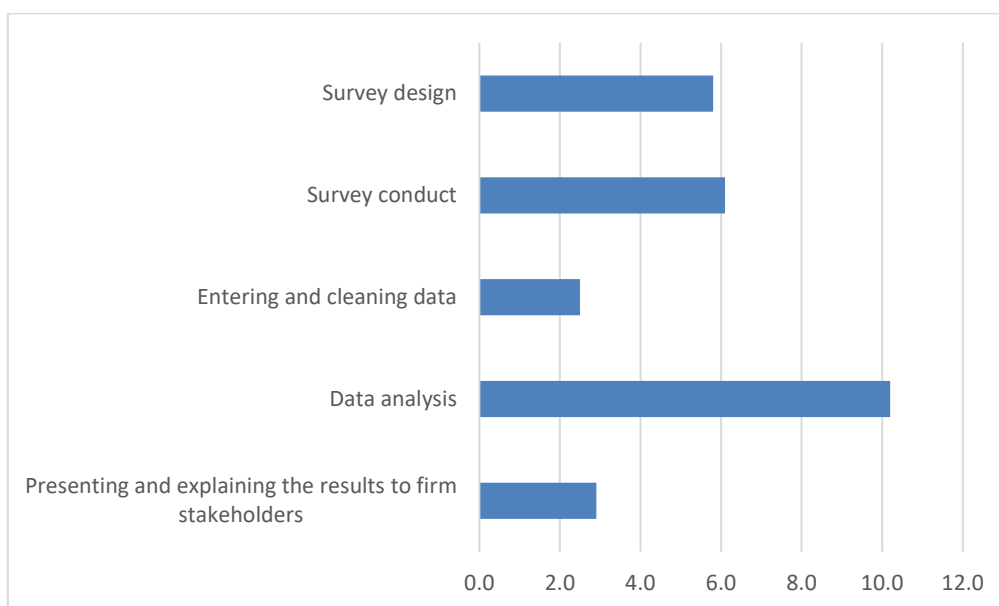
Source: EIB-GDN (2021)

Researchers also had to be aware of the limited budget, which allowed for a maximum of two field trips. Research fellows were invariably overoptimistic in their plans and had to adjust them to fit reality.

2.4. Data collection and analysis

All the deep dives had to supplement the data provided by the companies with primary data gathered from surveys and interviews. Survey design, data collection and data entry collectively took over 14 weeks on average (Figure 4). The survey questionnaires took an average of 25-35 minutes to conduct. In some cases, administrative data were helpful to identify basic client characteristics (such as data on gender from the client bases of telecoms providers), but did not have the requisite information on outcomes needed to address the research question. Deep dives invariably needed to build in a significant time period for surveys, interviews and focus groups to amass a sufficient database for analysis. The research fellows were generally able to achieve this within their time and resource constraints, despite the further restrictions imposed by the COVID-19 pandemic during 2020-2021.

Figure 4: Average number of weeks by phase



Source: Survey of research fellows

Expert advisors and the EIB were able to comment on most of the questionnaires and survey guides. Some research fellows conducted interviews, but most employed local survey companies. Some conducted in-person interviews while others carried out interviews by phone or online, particularly as a result of the COVID-19 crisis. Research fellows reported generally being satisfied with the data collection. Pilot surveys were done in some cases. Expert advisors were not usually able to check on the quality of the data, except when the research fellows flagged anomalies. Expert advisors assumed that the research fellows had done the requisite due diligence to assure reliability.

Data analysis, which lasted just over ten weeks on average, was undertaken by research fellows. They often sent work in progress to be reviewed by expert advisors. An initial report describing the data was usually circulated prior to a draft final report that tested the research hypotheses. The research fellows were generally responsive to addressing the issues raised during the reviews, according to the expert advisors. The research fellows reported that they received useful feedback from the expert advisors.

The EIB and GDN recognised the importance of active engagement with the companies that were being assessed. At the recommendation of the EIB, a “data note” was produced after the data collection phase and before the final reports. This kept momentum, ensured companies were properly informed about the status of the research, and was an opportunity to share preliminary insights of the research.

2.5. Review

The draft reports were reviewed by the expert advisors and the EIB. This progressed faster when the initial data descriptions had been shared earlier. The review process generally took a relatively short time, usually four to six weeks, thanks to the responsiveness of the research fellows.

Most of the issues raised by the expert advisors and the EIB during review were technical, many dealing with the robustness of the causal claims in the report. Data limitations (such as the lack of an adequate baseline or control) meant some final reports had to include substantial caveats. Many comments concerned the logical structure and readability of the report. The reviews required an average of two to three iterations to produce a draft final report.

After the technical review, companies were asked to comment on the final report: many provided suggestions or factual corrections. The research fellows reported these comments to focus on clarifying and simplifying the write-up to make it understandable to a general audience. The firms’ reactions are detailed in Chapter 3.

3. What was produced by the deep dives?

Table 4 lists the final reports that have been shared and discussed with the companies and other stakeholders. These are the outputs of the deep dives. Chapter 3 reports on the results of that sharing. Here we consider the products for each research cycle in terms of reports and databases and discuss whether and how they met initial expectations.

16 research studies were completed: ten of these reports are publicly available and six are expected to be shared publicly by April 2021. Most of the reports reached a conclusion of potential commercial value to the relevant businesses. These included information on the nature of their client base and the demand for their services.

Many of the reports addressed the social returns. For example, there was much interest in findings related to the client base, particularly the income groups that the company reached. This sometimes led to considerations of how to reach less wealthy market segments (see Chapter 3 on the uses of the deep dives).

Table 4: Deep dive summary

| Report title and author names | Research cycle | Databases generated (availability and storage of data sets) | Journal article prepared | Main conclusion |
|---|----------------|---|--------------------------|--|
| <i>Potential Impacts of the Africa Energy Guarantee Facility (AEGF)</i> Oluwasola Omoju | 1 | No | No | <ul style="list-style-type: none"> - Risk mitigation instruments have been used to mitigate energy investment risks in Africa with success. - These instruments need to be provided alongside other forms of support such as technical assistance. - Major demand-side factors limit the adoption of these instruments. - Evidence from similar instruments for small and medium enterprises points to significant positive effects. - The AEGF has good potential to reduce financing costs, which would have a major impact on development indicators. |
| <i>M-BIRR: Mobile Banking in Ethiopia</i> Yesuf Awel & Eleni Yitbarek | 1 | Yes | Submitted | <ul style="list-style-type: none"> - Determination of the social value of providing utility bill payments by mobile money. - Proof that the willingness to pay is higher than the marginal cost and that there is potential business demand. - Determination of technical, legal and regulatory needs. |
| <i>Première Agence de Microfinance (PAMF): Promoting Financial Inclusion in Côte d'Ivoire</i> Uwingabiye Gloria & Guylaine Nouwoue | 1 | Yes | Submitted | <ul style="list-style-type: none"> - PAMF is actively contributing to financial inclusion in some of the poorest areas of Côte d'Ivoire. - Clients are highly satisfied with the products and services. - Most loans invest in business activities. - Successive borrowing has a positive impact on the economic and financial performance of microenterprises. - No evidence could be found of an impact on longer-term fixed asset accumulation. - Women make up over half of the client sample, although the impact on business outcomes is less pronounced for female entrepreneurs. |
| <i>poa! internet: Community Internet in Low-income Areas of Kenya</i> Charles Yaw Okyere | 1 | Yes | Submitted | <ul style="list-style-type: none"> - Improved access to unlimited data has changed the way students and teachers use the internet. - Students in poa! internet's partner schools are more likely to benefit from ICT training during school hours than their peers in comparable schools and make more use of the internet for private purposes, including accessing educational content. - There was no evidence that the internet was being used to enhance learning outside of ICT training. - Improvements in school ICT infrastructure may be needed to translate better internet access into enhanced student achievement. |

| Report title and author names | Research cycle | Databases generated (availability and storage of data sets) | Journal article prepared | Main conclusion |
|--|----------------|---|--------------------------|---|
| <i>Irrigation Technology Adoption and Microfinance in Rural Benin: RENACA's Agricultural Loan Programme</i> Mariam Sangaré & Bassirou Sarr | 1 | Yes | Submitted | <ul style="list-style-type: none"> - Farmers in rural Benin find it difficult to access finance to improve agricultural productivity (although most respondents are financially included, only a minority have accessed a formal loan). - RENACA is contributing to financial inclusion, in particular by providing investment assets and working capital (fertilisers, seeds and so on), which appears equally important to farmers. - Lack of collateral reduces the ability of farmers to access finance and to invest. - Farmers who rent or borrow land indicated a lower willingness to invest in their activities and adopt advanced technologies, including irrigation equipment (they invested in transport, which allowed them to get perishable products to markets in time but did not improve productivity in the long run). |
| <i>Impact of Customer Relationship Management Software on Firm Performance in Kenya</i> Abdi Yuya Ahmad & Laura Nelima Lalampaa | 2 | Yes | Submitted | <ul style="list-style-type: none"> - Information technology infrastructure, firm size and informal competition are positively associated with the adoption of CRM software. - CRM software has a positive and significant impact on two measures of firm performance (customer volume and sales). - Government investment in ICT infrastructure could play a critical role in fostering firm performance and overall economic growth in a sound investment climate. |
| <i>Provision of Quality and Affordable Maternal Health Care in Developing Countries: A Case Study of NEST in Senegal</i> Hamidou Jawara & Gilles Quentin Kane | 2 | Yes | Submitted | <ul style="list-style-type: none"> - Clients are middle-class women (although few are among the extremely poor), including those without health insurance coverage and those working in the informal sector. - Providing information via visualisation raises both willingness to pay and use of the service more effectively than providing basic information. - Overall, participants are satisfied with the services offered but highlight some possible improvements. |
| <i>Finance Access and Growth-oriented Investments by Manufacturing Enterprises in Ethiopia</i> Muhammed Abdella Usman & Seid Hassen Mohamed | 2 | Yes | No | <ul style="list-style-type: none"> - About 27% of the surveyed enterprises obtained a bank loan, whereas 10% relied on informal sources. - Bank collateral requirements are one of the main causes of loan applications being rejected. - A large share of debt money is directed to investments aimed at improving products and industrial processes. - Enterprises rarely obtain finance from private equity or venture capital firms - Overall, firms that use debt capital show a capital growth rate at least 7.6% higher than that of firms with no debt capital. |

| Report title and author names | Research cycle | Databases generated (availability and storage of data sets) | Journal article prepared | Main conclusion |
|--|----------------|---|--------------------------|---|
| <i>Microfinance Loans, Women's Economic Empowerment, and Poverty: A Case Study of Baobab Microfinance Company</i> Franklin Amuakwa-Mensah & Edgar Cooke | 2 | Yes | Submitted | <ul style="list-style-type: none"> - Data suggest that BMC clients experience lower poverty. - This is consistent with focus group discussions with control respondents and BMC clients. - Clients are not always among the extremely poor, and female clients are more economically empowered. |
| <i>Understanding the Sustained Impact of SOKO on Artisans in Kenya: Empirical Evidence from Kibera</i> Timothy Kinoti & Soazic Elise Wang Sonne | 2 | Yes | Submitted | <ul style="list-style-type: none"> - On average and across different socioeconomic outcome indicators, worker artisans, including female artisans, affiliated with SOKO do better than their non-SOKO counterparts. - In SOKO and non-SOKO workshops, female worker artisans are more vulnerable to poverty than male worker artisans. |
| <i>The Impact of Microfinance on Business Investment and Outcomes in Haiti</i> Boaz Anglade | 3 | Yes | No | <ul style="list-style-type: none"> - Receiving subsequent loans from ACME had some positive impact on Haitian businesses. - There was a positive impact on business expansion through a different set of outcomes. - The firms that had received more than three cycles of loans had a higher probability of hiring new workers in 2018, a higher probability of opening new branches, and a higher likelihood of increasing merchandise stock as a way of expanding their business. |
| <i>Development Bank of Jamaica</i> Jacob Novignon | 3 | Yes | No | <ul style="list-style-type: none"> - The credit amount received had a positive impact on the performance (particularly profits) of microenterprises and small and medium enterprises. - The impact of the loan amount on performance was significant for firms that received the loan at least one year before, those that were older (over 40 years) and those owned by males. |
| <i>Impact of Rensource Solar Energy on Subscribers in Selected Markets in Nigeria</i> Esther Leah Achandi & Enoch Owusu-Sekyere | 3 | Yes | No | <ul style="list-style-type: none"> - Subscription to Rensource solar energy has a positive impact on monthly earnings, sales volumes and merchant profits. |
| <i>Cost of Funding Infrastructure in Hard Currency</i> Nnamani Alexander Uchenna & Kebba Jammeh | 3 | Yes | No | <ul style="list-style-type: none"> - TANESCO can record positive net benefit from hedging starting from the effective date of an off-take agreement and this benefit increases with the lifespan of the power purchasing contract. - The results reveal TANESCO's low willingness to pay for currency hedging. |

| Report title and author names | Research cycle | Databases generated (availability and storage of data sets) | Journal article prepared | Main conclusion |
|--|----------------|---|--------------------------|--|
| <i>The Impact of Digital Consumer Goods Distribution on the Small Retail Sector in Nigeria: The Case of TradeDepot</i> Matthew Townshend & Jaison Chireshe | 3 | Yes | No | - ShopTopUp users internalise lower supply prices to reduce consumer prices for selected products. - The usage of ShopTopUp is associated with a reduction in both the gross profit margin and the duration of product stockouts. |
| <i>Deep Dive Report on the Impacts of Nachtigal Hydro Power Company Investments on Vocational Education and Training in Cameroon</i> Nantongo Mary Gorret & Mireille Ntsama | 3 | Yes | No | - The results show that the activities of Nachtigal Hydro Power Company were unable to improve enrolment but increased school attendance among students. |

Source: EIB-GDN (2019, 2020, 2021)

It is difficult to say whether the conclusions that had commercial and social ramifications can be generalised more broadly for development. All of the studies are of interest to those who have a specific stake (investors, companies and firms whose operations are being evaluated). Moreover, some of the conclusions will be of interest to other investors who may wish to consider the social impact of investments in the same sectors. The expert advisors felt that six of the ten studies completed in cycles one and two could have results that would be of interest to the wider development community because of their generalisable findings or methods. The deep dives were implemented in a varied set of contexts and were not case studies purposefully selected to provide generalisable conclusions. Applying the conclusions to other contexts would need to be done carefully to ensure that the comparisons are appropriate.

Expert advisors felt that the final outputs were the best that could be achieved under the circumstances – the relative youth and inexperience of the research teams, the fact that they were “parachuted” into ongoing operations, and the time and budget constraints of the process. The work has been thoroughly reviewed. Eight of the papers from the first two cycles have been scrutinised by blinded external referees, and a special issue of the *Journal of Development Effectiveness* will publish about half of the deep dives. As of March 2021, most of these papers are at the “revise and resubmit” stage. If enough papers are accepted for a special issue of the journal, this is a good indicator that the overall quality of scholarship meets academic standards.

Another principal outcome of interest was the building of research capacity. A survey of the research fellows at the conclusion of the project showed that the following were most valued:

- Methodological skills: many research fellows felt more confident and have been using the methodology in their projects or teaching.
- Soft skills and communication: some research fellows feel more confident in their relationships with colleagues and other stakeholders (including private-sector firms and companies).
- Completing a research project from beginning to end: some research fellows learnt a lot about the different steps, and now feel more confident and better able to guide students.

Most of the research fellows are continuing their careers as researchers.

The EIB, expert advisors and GDN largely agreed with the research fellows’ conclusions. If properly supported – in terms of budget and mentoring – relatively young researchers at the beginning of their careers can produce reports that are relevant to many impact investing stakeholders and are rigorous enough to meet academic standards. Implementing such deep dives is a powerful way to build the capacity of talented young researchers. Substantial support was required to make these studies a success: a programme of deep dives structured in this way would likely be attractive only to implementers with an explicit mandate or objective of capacity building.

4. Main lessons

What were the main lessons learnt about how to conduct these types of programme? This section draws on the findings of this chapter.

First, deep dive research must consider, from the outset, the general lack of existing data. The research should make the best possible use of data available. Deep dives may be easier if monitoring

data collected and stored by project promoters are available (respecting relevant confidentiality concerns); if the projects assessed are operationally advanced enough to generate data on outcomes and impact; and if the opportunities offered by new data sources and data analysis techniques (for example, machine learning) can be exploited. However, in most cases researchers will need to plan and budget for primary data collection.

Second, diverse perspectives and needs must be considered and addressed. Company stakeholder/investee engagement is key. The buy-in of the small business, for example, that has secured financing is essential to ensure successful cooperation and data sharing. Early and frequent interactions between companies and researchers are needed to build trust.

Researchers, on the other hand, have careers to build and manage and most are aiming for academic positions. When studying development impact, they want to mobilise their academic knowledge and instruments to investigate economic and social returns to a given investment and to produce academic studies recognised by their peers. Researchers and expert advisors tend to focus on this and on building local capacity. EIB operational staff want to determine the likelihood that their project will be a success, and what the implications might be for similar future investments. Investment funds and firms do not have time to spend on studies that do not bring them useful business-related insights.

An ongoing issue is how to formulate research questions that will be most relevant to the investment funds and the companies in which they invest. Defining the right research questions implies a productive tension between research objectives driven by academic ambition and feasibility, and firms' operational concerns driven by practical relevance and importance in terms of business and financial objectives. As discussed in Chapter 1 (aspirations 1 and 2 in Box 5), deep dives should align stakeholders' interests. That tension is at the core of the connection between research and operations, and the deep dive programme has explored the connection.

Getting stakeholders to allow and actively participate in projects was a priority, especially given the innovative nature of this first deep dive exercise, so the choice of projects was relatively opportunistic. To broaden their contribution to impact measurement, it will be useful to focus several deep dives on the same sector and to choose the sectors strategically. Another limitation of ensuring meaningful stakeholder buy-in is that the choice of projects may be liable to self-selection bias (volunteering projects that are more likely to be successful for a deep dive). This was not an issue in our programme given the objective of demonstrating the potential of a research-based approach to assessing impact, but should be considered when scaling up the approach.

Third, researchers must be flexible about research approach and methodology (aspiration 3 in Box 5). Researchers, especially those with less experience in operational matters, can allow the research methodology and related empirical techniques to drive the research question, indicating a need to develop capacity in defining issues of interest and shaping policy or operationally relevant research questions. Acquiring such flexibility was an important aspect of the capacity that research fellows built throughout this programme.

One way to ensure that technique does not overshadow relevance is to develop a clear analytical framework to clarify a theory of change that identifies the assumptions used in linking investments to outcomes. Such an initial framework was available for the majority of the projects and would have helped focus the work in all others. Another approach is to be flexible on technique. It was challenging

to choose an appropriate methodology for the evaluation work, knowing there is no “gold standard” and that conditions for a methodological approach are not always met. There may be a trade-off between technical “purity” and feasibility when studying an operationally relevant research question in a time- and process-bound context.

Fourth, conclusions must be tailored to the limitations of the analysis. While the research fellows could conduct technical analysis of the data, it was more of a challenge to draw firm conclusions that are not generic and add value to the global community, as well as being operationally relevant. Some conclusions that are useful operationally may not seem notable in terms of changing the broader development discourse. Other conclusions may not be deemed sufficiently operational by the company clients, financial intermediaries or the EIB. Researchers must be realistic about the conclusions they can draw and what is justified by the analysis and data.

Fifth, reports must be communicated in the correct form for accountability, learning and promotion (see the three functions of evaluations in Chapters 1 and 3). The importance of this dimension can be underestimated. EIB staff had to invest a significant amount of time to make the studies fit for publication and to produce comprehensible summaries that could be shared with stakeholders or as blogs. Although they received some communication training, the research fellows struggled to connect with non-academic audiences. This area of capacity building needs greater weight in future programmes.

Sixth, building research capacity is a slow process (objective 3 in Box 5). A limited amount of technical capacity could be built in the short time period available. The preparatory seminar on methods and research design helped but could not prepare research fellows for deep technical embedding. The deep dives exposed the research fellows to new areas or engaged them further in familiar areas, exposing them to operational constraints in the “real” world. The research fellows and expert advisors noted that capacity had been successfully built in terms of discussing research plans with non-researchers (companies) and negotiating appropriate research questions (that met academic standards and other stakeholders’ needs and interests). The induction seminar included two days of communication training, which exposed research fellows to some of the challenges of negotiating a work plan with third parties, and eventually framing and reporting their results.

Seventh, the costs of the deep dive were neither insignificant nor prohibitive and were lower than those of typical impact evaluation work. Beyond the production of deep dives, researchers from low- and middle-income countries had the opportunity to apply their technical expertise to real-world problems and gain experience in dealing with practitioners and policymakers, especially in the private sector. In many cases, the EIB, the firms and the intermediaries judged many of the findings useful. Despite the budget and time limitations, this exercise showed that, with proper management, research can productively combine operational concerns and technical rigour.

Chapter 3

Understanding deep dive use: How can investors maximise the usefulness of impact studies¹?

Author: Matt Ripley (The Good Economy)

JEL classification: C00, D22, D81, G23, H43, O22

Keywords: use of research, evaluations, private sector investment, impact investment, impact measurement, deep dives, capacity building, use of data

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Summary and messages

Deep dive impact studies address questions about the social and environmental outcomes generated by an investment, and can contribute to organisational accountability, learning and communication objectives.

Drawing on a framework for evaluation use, this chapter sets out four ways in which the European Investment Bank (EIB) and Global Development Network (GDN) programme deep dives were used.

First, the EIB and its private-sector partners used the studies as an input into future tactical and/or strategic planning (instrumental use). Some companies used findings to make or validate key business decisions, mainly related to marketing and operations functions. Investors (the EIB and fund managers) primarily used deep dives to verify and evidence their impact thesis, and for promotional purposes.

Second, the deep dives laid the groundwork for building knowledge about the effectiveness of private-sector investment in Africa, the Caribbean and the Pacific (conceptual use). While deep dives did not have a thematic focus, with over 15 individual studies completed, they can be considered a body of knowledge that can be used and further developed over time.

Third, the deep dives fulfilled the requirement to do an impact study, therefore providing a proof of concept that more rigorous data collection and analysis approaches are suitable in the context of private-sector-focused impact measurement (symbolic use).

Fourth, the deep dives provided an opportunity for the EIB and other stakeholders to learn whether this was a useful approach and how best to implement it (capacity building use). The deep dives generated replicable process knowledge on aspects of impact measurement, particularly how to arrive at a plausible but practical approach to the question of causal change.

This chapter addresses whether, and to what extent, knowledge resulting from the deep dives conducted by the EIB-GDN programme was used². The value added for researchers is covered in previous chapters, so the focus here is on use by the companies subject to deep dive research and the investors that provided them with capital, including departments within the EIB.

The chapter has three sections. First, we introduce a conceptual framework to understand possible deep dive uses and related user needs, drawing on literature from the field of evaluation. Second, we present empirical data showing how deep dive information was used, based on stakeholder interviews. Third, we summarise the factors shown to influence deep dive use.

² Deep dives comprise the set of studies produced under the EIB-GDN Programme in Applied Development Finance.

1. A framework for deep dive use

The EIB-GDN programme deep dives were impact studies – the initiative was a systematic exercise in applying rigorous research techniques to understand the social and economic impact of private-sector investments. This section begins with the intended use of deep dives as an important starting point to see whether they met user needs. To achieve this, we have developed a framework for deep dive use that builds on the extensive literature on evaluation use.

While deep dives are not evaluations, they fulfil an evaluative function in that they address questions of the effectiveness and impact of a given investment. They meet four out of the five criteria proposed by O’Flynn and Barnett (2017) for a more evaluative approach to understanding social impact as follows: impact (what is the effect on society and the environment?); differential impact (who benefits and who does not?); accountability (for impact to different stakeholders); and plausible causality (has the investment made a difference, and if so, how?)³. Evaluation literature offers the richest set of documents and discussions related to the topic of use.

Although there is strong recognition “that use is central to the reasons for doing evaluations” (McDavid et al., 2013), there is little academic consensus on a formal definition of evaluation use. A functional definition emerges from the work of Alkin and King (2017) that “evaluation information must have consequences of some sort – hence, use.” They argue that use means examining the “extent of actions taken or thoughts crystallized as a result of an evaluation” (ibid.). Three key messages from evaluation literature can inform our understanding of deep dive use.

First, use is in the eye of the beholder. Understanding use means understanding user needs and the context in which deep dive information can be deployed. This requires a focus on primary users: “the stakeholders most closely associated with the program who are potentially in a position to make decisions based upon the information” (Alkin and King, 2017). The concept of utilisation-focused evaluation (UFE) developed by Michael Quinn Patton stipulates that evaluations should be planned and conducted in ways that enhance the likely utilisation of both the findings and the process itself to inform decisions and improve performance (Patton, 2012). Utilisation-focused evaluation identifies the intended users and documents their primary intended uses.

Second, a distinction may be made between two dimensions of use. Consequences may arise from the results of the evaluation and the conduct of the evaluation⁴. Use may therefore be derived from “evaluation findings as well as from the process, that is, the actions involved in engaging in an evaluation” (Alkin and King, 2016).

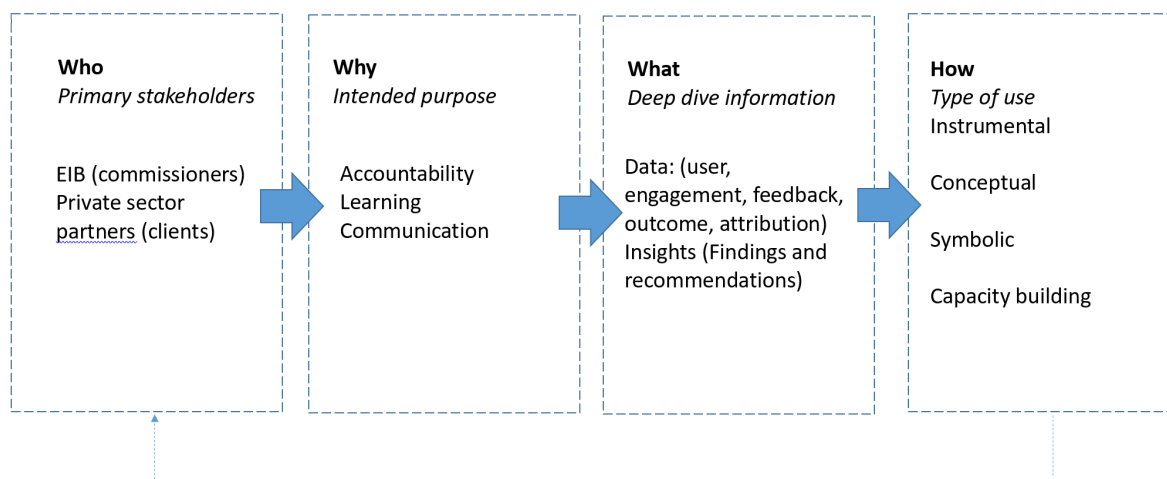
Third, a broad definition of evaluation use should take into account the actions or decisions concerning the subject of the study following an evaluation (direct use), and the wider indirect effects the evaluation may have on other interventions, strategies or on organisational behaviour. This latter category has been labelled “evaluation influence,” with academics having long noted the potential for evaluations to have a wider impact beyond the individual programme under review (Weiss, 1972).

³ The other criteria being “aggregation” (O’Flynn and Barnett, 2017).

⁴ We use the term “use” to also cover aspects of evaluation “influence” resulting from the findings of the deep dive and the process of taking part in a study.

Figure 1 outlines a conceptual framework to understand deep dive use. This distinguishes between different stakeholders in the deep dive value chain (“who”); the reasons for conducting a study (“why”); the types of deep dive information that can be useful (“what”); and the ways in which this information was used in practice (“how”). The remainder of this section explains the framework with reference to the EIB-GDN programme deep dives and relevant concepts in the fields of evaluation and impact investing.

Figure 1: A conceptual framework to understand deep dive use



Pillar 1: Who are the intended primary users of the deep dives?

The EIB funded the deep dive programme to deepen understanding of the impact being generated by the Impact Financing Envelope. The EIB and its shareholders are therefore both a commissioner and a client (user) of deep dive information. Each study took place on a project under the EIB’s Impact Financing Envelope for Africa, the Caribbean and the Pacific, focusing on a particular investment made through one of the envelope’s four financing instruments.

Private-sector companies (investees in the terminology presented in Chapter 1) were the subject of the deep dive research and expected to benefit from participation. For companies supported via financial institutions (such as banks offering microfinance) or through investment funds (such as venture capital or private equity funds), these intermediaries and fund managers were also potential users. Collectively, we term these “private-sector partners.”

The two user groups – the EIB and private-sector partners – are far from homogenous. Within the EIB, different directorates and departments were involved in the deep dives. The private-sector partners varied in terms of enterprise size and stage of business cycle. More granular “use pathways,” reflecting these different institutional priorities and perspectives, are explored in later sections.

Pillar 2: Why carry out a deep dive study?

The EIB, like other international financial institutions, monitors the extent to which its work delivers development impact. As explained in Chapter 1, the deep dives complement the impact measurement framework of the EIB to assess whether a given investment – or a part thereof – generated a specific

impact as intended, using rigorous research methods. The value of deep dives resides in being able to provide high-quality evidence on “what is working and what is not” to the EIB. The findings of deep dive studies are aimed at helping the Bank to enhance its contribution to sustainable and inclusive development, as well as to enhance its capacity for impact studies.

From a private-sector perspective, the range of motivations and intentions for engaging in deep dives can be captured by proxy, using results from an annual survey run by the Global Impact Investing Network. The “reasons for measuring and managing impact” given by respondents to an annual investor survey include to better understand impact; to proactively report to key stakeholders; to manage or improve impact; to create business value; to communicate impact for marketing and fundraising; and because of requirements to measure and report (Global Impact Investing Network, GIIN, 2020a).

For both user groups, a “useful distinction can be made between evaluation done for learning and that done for accountability” (Loud and Mayne, 2014; see also Chapter 1, Section 4.1).

An accountability objective for the deep dive focuses on the need to report “fairly and accurately on performance results vis a vis mandated roles and/or plans” (OECD, 2002). Another way to put this is measuring in order to “prove” impact. According to the Rockefeller Foundation, the aim is to understand whether the short-term changes and long-term effects are occurring in ways that were anticipated (Rockefeller Philanthropy Advisers, 2020). A further distinction can be made between upward accountability – towards funders and investors – and downward accountability towards affected populations.

A learning objective uses the deep dives as a basis to enhance the relevance and quality of future actions. Impact investors are trying to prove impact and, much like financial performance, are interested in increasing it over time (Rockefeller Philanthropy Advisers, 2020). This objective focuses less on the historical results of the project, and more on the conclusions, recommendations and lessons that inform forward-looking action. It covers content learning, dealing with the issue or theme at hand, and process learning, such as on how to conduct a rigorous study.

Finally, deep dive studies also contribute to objectives related to communication. Communication cuts across both learning and accountability purposes, and often serves a purpose by disseminating either specific (that is, on individual studies) or more generalised information (synthesised across studies) to internal and external audiences, serving purposes such as institutional promotion to funders or public information campaigns.

Pillar 3: What types of deep dive information can be used?

Each deep dive generates different types of information, which are used in different ways. Academic and business literature make a distinction between data and insights (Brown, 2020).

Data are facts and statistics that are usually in the form of numbers and text. Based on a typology by New Philanthropy Capital, each deep dive can be considered to have covered up to six distinct types of data (Noble, 2017):

- User data – characteristics of the affected populations, such as socio-demographic data (for example, age and location).

- Engagement data – extent to which people use or interact with products and services, such as uptake (for example, number of loans).
- Feedback data – what people think of the products and services, such as satisfaction data (for example, net promoter score).
- Intermediate outcome data – changes in user knowledge, attitudes or behaviours, such as financial literacy (for example, number reporting being able to better manage finances).
- Long-term outcome data – mental, physical and economic well-being, such as financial well-being (for example, change in savings/debt).
- Attribution data – the difference made by the intervention, such as degree of change in financial well-being (for example, extra savings that would not have occurred in the absence of the intervention)⁵.

Insights are generated by using the data to accumulate knowledge and drawing conclusions, and then using them to influence decisions and drive change. Insights refer to the specific findings and recommendations of each deep dive study, as well as the knowledge built by engaging in a deep dive. From a user perspective, insights need to be feasible – that is, geared towards probable future activities. Insights also need to be contextually appropriate and grounded in the business reality of the subject of the deep dive.

Pillar 4: A typology for understanding deep dive use

A utilisation-focused approach looks at the real and specific ways in which evaluations have been used, rather than their abstract and theoretical uses. Experience from evaluations shows that people tend to use information in four broad ways: first, to make or validate decisions; second, to establish or alter attitudes; third, to justify the existence of a project; or fourth, to build an individual’s or an organisation’s evaluation capacity (Alkin and King, 2016). In evaluation jargon, each deep dive corresponds to four different categories of use: instrumental, conceptual, symbolic and capacity building (Box 1). Each of these use typologies has potential to form part of the “feedback loop” that uses the results and lessons learnt from the study to inform organisational strategy and/or future project design.

Box 1: Four ways in which deep dive information can be used

Instrumental use involves turning deep dive information into implications for action. This is perhaps the clearest and most straightforward category, for example where deep dives are used to improve projects. Instrumental use does not necessarily involve taking direct action, rather it means a “serious discussion of findings” and a consideration of the recommendations (Cook and Pollard, 1977). The result of these deliberations can be taking or not taking action with regard to a future decision or justifying or reversing a past decision (Alkin and King, 2017). Instrumental use takes place when deep dive results are “considered seriously by persons in a position to act on our information if they choose to do so” (Hendricks, 1990). There are two types of potential action.

⁵ The EIB distinguishes between the question of attribution (the difference that can be attributed to the service or product in question) and contribution (the contribution of the EIB finance to achieving that change).

First, measurement is one of the four core characteristics of the practice of impact investing (GIIN, 2020b). Investors have a commitment to report on the social and environmental performance of investments, which requires underlying businesses to measure and report on their own social, as well as financial, performance. Marketing uses – such as including the findings of deep dives in pitch decks or promotional material – is included here, as information is being turned into a concrete “call to action” for fundraising.

Second, knowledge and insights from the deep dives can be used to fuel data-driven decision-making (GIIN, 2016). From an EIB perspective, this can be to manage overall impact performance and inform future portfolio construction under the Impact Financing Envelope. From a private-sector perspective, learning can inform business decisions and investment approaches “in a way that can create tangible business benefits, such as better understanding customers, streamlining deal sourcing, or improving interactions with important stakeholders in the communities in which they invest” (GIIN, 2016).

The conceptual use of deep dives enhances knowledge about the type of project under study in order to influence thinking about issues in a general way on a particular topic (Mayne, 2014). Information can be used internally around a thematic focus or externally to help existing and aspiring investors who are working on related impact issues, including by adding to a global evidence base (Rockefeller Philanthropy Advisers, 2020).

Symbolic use fulfils a requirement to do evaluation or to show support for an intervention area. This is also called “tokenistic use,” but this term can hide the value inherent in conducting an evaluation exercise. The act of carrying out impact evaluation can be important in contributing to an impact measurement culture and signalling that an organisation is serious about impact. Literature shows that positive changes in organisational behaviours and practices can result simply from the plan to carry out an evaluation, independent of the findings (Mayne, 2014).

A capacity building use comes through engaging in a deep dive process and obtaining a better understanding of when, how and in what ways more academic research techniques are suitable to measure the impact of private-sector investments. This contributes to the overall management of the organisation through institutional learning and development (Alkin and King, 2017).

The conceptual framework rests on a number of assumptions. First, that the deep dive is of reasonable quality. The study needs to be technically adequate and credible such that “its findings warrant using” (Alkin and King, 2017). If technical aspects of the deep dive have not been conducted properly – for example, incorrect statistical analyses – this can be referred to as a “misevaluation.” Misevaluation can also take place when the deep dive researchers fail “to understand the [...] context properly and therefore misdirects the evaluation” (Alkin, 1990).

Second, “use” is framed only in positive scenarios. There are potential uses of evaluations that seek to deliberately misrepresent or unethically exploit impact data. For example, companies might break data protection and confidentiality promises to contact customers who have given them negative feedback, or to cherry-pick the best findings to promote on their website. The field of evaluation calls this “misuse;” however, it is not considered further here, mainly due to difficulty in uncovering such practices (Mayne, 2014). The “use continuum” extends from use to underutilisation to non-use.

Third, instrumental use assumes that the deep dive was one of many sources of information considered when making a decision. It does not presuppose that the deep dive was the only – or even principal – motivating factor for any actions taken following the study. Evaluation literature extensively discusses the “multiplicity of potential inputs to decisions” and the futility of attempting to attribute decisions made back to evaluation information, rather than simply recognising their contribution (Alkin and King, 2017).

2. How the EIB-GDN programme deep dives were used

This section summarises how deep dive information was used by the EIB and private-sector partners. It is based on stakeholder interviews, covering a sample of companies that were subject to deep dive research⁶. All EIB members of the EIB-GDN Advisory Committee, four fund managers and six companies were interviewed. Three companies did not respond to the request for interview or declined to participate. As this chapter focuses on use, only those organisations that had experienced a full deep dive – and where at least preliminary results were available – are considered. This excludes companies in the 2019-2020 cohort. Names of individuals and partners have not been mentioned as all were offered anonymity. Some company examples have been included where information was already in the public domain or explicit consent was given.

2.1. Instrumental use: Making use of deep dive findings for programming

This use category covers programming in the broadest sense: making decisions about individual projects or company activities, as well as the use of results in reporting, including for promotional and fundraising purposes.

At the **company level**, three distinct uses emerged.

First, to plug data gaps. For some companies, this was the first structured data collection they had undertaken on impact. While others already collected some impact data, they recognised that they “always have gaps in understanding even when we try to measure impact.”

Most companies already had access to user data – on who their customers were and socioeconomic profiles – even if this was not recognised as impact data per se, but collected for business marketing or strategic uses such as customer segmentation. Only one company felt it is “important for us to know our clients’ profile and it was something that we didn’t have any survey on before [the deep dive].” Most companies also had access to engagement and feedback data, but the deep dive helped to substantiate and scale this dataset. Beyond the resource constraints preventing companies from doing more customer-facing engagement, it was felt that using external researchers helped bring in independence, which increased the “weight” of the findings. Few companies already had data at the level of outcomes and attribution – covering higher-level changes and causality – and as such were areas where companies had been making large assumptions, which the deep dive helped to confirm or reject by generating evidence.

⁶ At the time of research, nine companies had completed a deep dive and received the results of the exercise. The sample for this section therefore represents 66% of the population. However, given the small number of companies subject to deep dives overall, findings should not be generalised beyond the particular context of the EIB-GDN deep dives.

Second, the deep dives helped companies make or validate tactical decisions⁷. Data on the profiles and behaviours of key business stakeholders, such as customers, suppliers and communities, can help management make decisions about the way they operate their business. This includes deciding who they sell to, source from or employ, and learning how to maximise the value of these relationships. Several companies mentioned that the data helped finalise decisions already made concerning, for example, price points (the cost of the service) and marketing strategies (which product features to emphasise); the deep dive helped them move from intuition to more evidence-based decision-making (Box 2).

Box 2: An example of tactical decision-making

Two researchers worked with M-BIRR, a mobile money service provider in Ethiopia, to look at willingness to pay for an expansion of services to cover utility bill payments. An experimental technique – randomising hypothetical price offers – allowed the researchers to help M-BIRR understand the demand for this service. The main finding – that the willingness to pay is high and well above the cost – has strengthened M-BIRR’s interest in offering this service.

Source: EIB-GDN (2019)

Third, a smaller number of companies mentioned using the deep dives to inform strategic decisions. This included decisions about future business strategy, such as type of business model and which target markets to reach. Strategic decision-making also relates to how to strengthen a company’s social mission, including what partnerships to pursue (Box 3).

Box 3: An example of strategic decision-making

poa! internet provides wireless broadband in low-income communities in Kenya. As part of its business model, poa! provides unlimited free internet access to selected community institutions, including schools, in return for these facilities hosting the infrastructure used to provide its “street” internet service. The EIB-GDN study confirmed poa!’s view that access to unlimited data has changed the way students and teachers use the internet for teaching and learning. However, there was no evidence that provision of poa! internet had increased the probability that students received educational internet content at school outside of information and communications technology (ICT) classes, and students in schools with poa! access were not more likely to improve their ICT skills and knowledge. Although more work would be needed to identify the reasons behind these findings, poa!’s management suspects that the full benefit of improved internet access can be felt only if appropriate hardware and capacity to manage the information technology system are in place. Responding to these findings, poa! is seeking ways to continue developing its schools service, potentially involving partnerships with non-governmental and other philanthropic organisations. Such partnerships could make it possible, in addition to providing free Wi-Fi, to cover some of the relevant infrastructure and capacity needs of the schools.

Source: EIB-GDN (2019)

⁷ Tactical decisions concern the detailed implementation of a strategy and are usually more focused on day-to-day operations.

From a company perspective, the deep dives uncovered little “new” knowledge, instead reinforcing what businesses knew – either intuitively or based on observation – but had lacked supporting evidence to demonstrate more empirically. Companies subject to deep dive research found the results and findings largely in line with what they were expecting. In the words of three interviewees, the studies “confirmed what we already knew,” were “findings that we hoped would come up,” and “backed up and quantified what we knew already.” Only one company did not anticipate the socioeconomic profile of its customers uncovered by the deep dive, but was “surprised in a positive way with the numbers.”

It is unclear whether the deep dives largely confirmed existing assumptions because business models were already built on a solid commercial and impact case. A convincing argument can be made, for example, that entrepreneurs starting businesses and backed by experienced venture funds selected by the Impact Financing Envelope would already have had significant experience or a track record of business success on which to develop robust assumptions. There may have been bias inherent in the deep dives (covered in the next section) that led studies to focus on the most successful companies or on aspects of businesses that were already best known.

Overall, there were few examples of businesses making concrete changes to the way they deliver value or measure impact as a result of the deep dive findings. According to companies involved in the final cycle of the projects, this was in part because major disruptions such as the COVID-19 pandemic meant that businesses had to shift to prioritising survival actions instead of those related to performance improvement. Another reason was that companies were, by their own admission, not systematic or consistent enough in putting in place an action plan to respond to the findings.

There was one notable exception, where a company changed how it markets its product by shifting to more audiovisual methods. This company has seen 20% customer growth since the deep dive study shared its findings, although it is not yet possible to assess whether this is correlation or causation. Two companies said they would like to conduct a study again in a few years to see changes in impact, as a before/after study would provide a more solid foundation for strategic decision-making. However, both questioned whether they would have the financial or technical resources to be able to carry out such a study. One other company was planning to collect some of the same feedback data collected by the deep dive themselves so they could track changes and improvements over time.

Two companies reported using the findings of the deep dive to engage with local stakeholders such as legislators and policymakers. They used the studies to convince these stakeholders that their operations were socially acceptable and legitimate; in other words, to cement their social licence to operate (Raufflet et al., 2013). For these companies, the value of the deep dive approach was when it was geared towards an external audience to help “influence public policy and decisions.” Here, deep dive learning took place at an industry level and companies felt “it would [have been] helpful to have other industry participants involved [...] not just the narrow focus on a company.” This higher level of instrumental use focuses on building a supportive business environment for companies introducing new products and services in the market.

A small number of companies noted disappointment that issues they had thought were critical to making operational and strategic decisions were not covered in the report, or were covered in insufficient depth, mainly due to the study attempting to cover too many topics.

In terms of how the companies communicated the deep dive information within their own organisations, none shared the full deep dive report internally (within the company) or externally (to shareholders and stakeholders). Rather, the deep dive summary or the presentation made by researchers was circulated amongst the management team, and in one instance to the company's board. Sharing summaries rather than the report was necessary, according to one respondent, so that findings could be understood by "anyone who was not a statistician." One company put together a bespoke one-page slide deck on findings, with the help of the researchers. The company reported doing "a presentation to the entire office [...] [and then] extracting one slide and working [it] into marketing team [materials]," which was used for external promotion. Two companies integrated selected deep dive data points and findings – so-called "snippets" – into their investor pitch decks.

Investment funds echoed that, as expected due to the early-stage nature of many of the companies they invest in, entrepreneurs would have many "hunches" about impact but lack data and evidence. As well as the intrinsic value for company decision-making, the deep dives were primarily useful for investors in confirming an investee's impact thesis/hypotheses. As one fund manager noted: "Sometimes when investing in companies we make estimates about impact – [we are] very happy to have those challenged or confirmed through research." Deep dives help reconfirm the rationale of the investment from a social impact perspective. There was one example of a fund using the results of the deep dive study in a brainstorming session about their new theory of change, thus feeding into portfolio-level decision-making. A number of other funds took highlights from reports and used them for annual sustainability and/or impact reporting, saying this allowed them to go into "more depth than normal" on impact.

From the perspective of instrumental use, deep dive information helped reinforce the "feedback loop" between the EIB and the investment funds and companies receiving direct financing – "project promoters" in EIB terminology. Respondents felt that sharing deep dive results strengthened dialogue between the EIB, project promoters and investee companies on impact. No specific examples of using deep dives for decision-making were given, mainly due to the type of financing provided: three of the four Impact Financing Envelope instruments are indirect financing, so the EIB does not always have a direct line of sight into company operations, meaning that company-level decision-making is largely the job of a fund manager or financial intermediary.

There was a strong promotional purpose for the EIB in conducting the deep dives. They have been used to illustrate the Impact Financing Envelope's impact based on data and evidence, in the form of blogs, working papers and conference presentations⁸. This helped the EIB show what is achieved in terms of project-level outcomes, which goes beyond outputs – largely the focus of the results framework – in a way that is backed up by "academic credibility." The audience for these pieces is mainly external, supporting the wider EIB communications work and demonstrating that the Bank is not just about lending money, but can lead to concrete, credible and externally verified results. As one respondent noted, "part of the [deep dive] story was trying to demonstrate the impact of [the] EIB."

The findings of the deep dive studies were presented to various governance bodies of the institution, including the committee of the ACP Investment Facility, made up of the Member States who oversee the Impact Financing Envelope. Feedback from these "shareholders" was noted as extremely positive, according to an EIB stakeholder, especially since members welcomed the opportunity to see more

⁸ All published outputs of the programme can be retrieved at: [The EIB-GDN Programme in Applied Development Finance](#).

granular, project-specific results of EIB financing. The deep dives therefore fulfilled an “institutional positioning” function to help strengthen the EIB’s reputation as a “proper development finance institution” that can successfully operate outside of the European Union. Internally, studies were circulated to individual loan officers and technical colleagues such as economists. An international conference, co-organised by the GDN and the EIB in partnership with the Campbell Collaboration, was held on 2 to 4 December 2020, titled “Assessing the Development Impacts of Private Sector Impact Investments.” It reflected on various lessons from the deep dive experience. Two webinars were held on 24 and 26 March 2021 to discuss “Assessing Impact Investments,” co-hosted by the EIB and the GDN.

One limitation for instrumental use within the EIB is that the deep dives focused on impact on end beneficiaries such as micro, small and medium enterprises, customers and communities. Here, the impact is being created by companies and is facilitated by investment. Much of the financing under the Impact Financing Envelope is indirect (via intermediaries) – and deep dives do not directly cover the role of EIB financing and support, aside from any assumed pooled capital effects. This “investment impact” – a particular investor’s financial contribution to the social value created by an enterprise (Brest and Born, 2013), as summarised in Chapter 1 – is an important part of the EIB’s contribution but was not covered by the deep dives. This underlines the importance of aligning deep dive findings with those emerging from more formal evaluation exercises, which often take the fund level as the unit of analysis and ask questions about investment impact and additionality so that “impact studies” can be designed to complement the findings emerging from an organisation’s own evaluation work, which is often commissioned or carried out by independent evaluation departments⁹.

2.2. Conceptual use: Enhancing knowledge about the type of intervention under study

As expected, this user pathway was more relevant to financiers – the EIB and intermediary funds – than individual companies that are more focused on their specific business model than generalisable learning.

The deep dives were never intended to have a thematic focus. While discussions at early EIB Advisory Committee meetings grouped shortlisted projects under major themes, these covered different types of Impact Financing Envelope instrument, such as risk sharing, social impact funds and direct financing, rather than specific thematic areas. In part this is because the EIB Evaluations Operations function already has an established process for thematic evaluations, including for operations outside of the European Union, covering topics such as financing water and sanitation projects, and climate action¹⁰.

One of the benefits EIB stakeholders perceived about the deep dives was the ability to complement thematic evaluations, which by design provide “wide but shallow” strategic insights, by focusing on individual projects to allow for “narrow but deep” operational insights. A granular focus was therefore “an advantage [in] that it could shed light on project-specific results.”

A lack of a thematic focus was also partly because of feasibility. The deep dives were drawn from a relatively small pool of projects – those funded by the Impact Financing Envelope – so there was not a

⁹ For example, the independent evaluation of the 250m Africa-focused impact fund-of-fund FISEA, the French Development Agency: <https://www.stewardredqueen.com/what-we-do/fisea/>.

¹⁰ <https://www.eib.org/en/publications/evaluation-of-eib-financing-of-water-and-sanitation-projects-outside-the-european-union> and https://www.eib.org/attachments/ev/ev_activity_report_2019_en.pdf

large pipeline of new projects each year to choose from. The Impact Financing Envelope was also a new initiative and the deep dives started alongside it, meaning that the initial pipeline of projects was small. Companies were selected not by criteria but purposively, based on the project promoters and companies that were available and willing to participate. Sometimes it was a significant challenge to find enough projects “willing and able” to participate in a deep dive study, so no real choice between companies was possible. However, an attempt was made to achieve a coverage of different Impact Financing Envelope instruments and geographies, particularly the Caribbean and anglophone and francophone Africa. The selection of projects was constrained by the location of the researchers and their backgrounds and expertise. The researchers were recruited and then assigned to companies, rather than being hired on the basis of their experience and skills match to carry out a specific study.

However, one EIB stakeholder noted that “a thematic focus would have helped [the deep dives] be a more useful exercise,” even if it was around crude groupings such as off-grid solar, financial technology and digitalisation, rather than specific thematic research questions. They noted a thematic focus would have helped generate more internal knowledge to feed deep dive learning into future operational decisions, such as by informing due diligence for other deals in similar thematic areas.

There are questions as to the generalisability of knowledge generated by deep dives. Even if a strong intentionality for conceptual use was built into programme design, it was unlikely to go much beyond broad categories such as “microfinance.” This echoes the experience of other development finance investors such as CDC, which found limitations in turning insights from individual deep dives – however useful for the company in question – into replicable learning for other investees and investors (Castro and Ripley, 2019).

One fund manager interviewee expressed a strong desire to extract generalisable learning from the deep dive studies and thought that the programme had missed an opportunity to share learning across studies to help private-sector partners see results from those they were not directly involved in. It was suggested that a smart grouping of themes could be done against topics likely to attract maximum interest by private-sector partners, such as by business model typology. For example, as that investor tends to back business-to-business (B2B) companies – business models that focus on selling services to other businesses – they would be interested in what other B2B-focused deep dives were learning about how to measure and maximise impact.

There is currently little evidence of conceptual use, but it may happen in future. With 15 studies soon to be completed, the deep dives can be considered a “body of knowledge” that can be tapped into and built on over time. Conceptual use can take place after the fact, in that it is possible to code and synthesise thematic knowledge even after a study has been completed, should there be a critical mass of studies from which to extract learning.

2.3. Symbolic use: Fulfilling a requirement to do a deep dive or to show support for an intervention area

The act of completing a deep dive study partly fulfils the “use” requirement for the EIB, as it shows that rigorous methodologies are suitable for applying to private-sector investments. One EIB stakeholder explained the whole programme could be thought of as a “proof of concept” establishing that deep dives can be carried out. Another interviewee highlighted the importance of “demonstrating [...] [and] showing to colleagues that undertaking these studies is possible – providing some conditions

are met.” The process of doing a deep dive has important value that goes beyond the specific technical learning, which is covered in the next category on capacity building.

Funding deep dive studies has a symbolic use in that, according to another respondent, it “shows the EIB is serious about impact.” This underlined the importance of bringing in renowned experts in the field of impact assessment and development evaluation. It was felt to provide a signalling effect, showing that if “people with international reputations from respected organisations” were involved, that this was a “serious and professional” exercise. Coupled with this was the credibility from collaboration with academia: “trying to use more rigorous [methods] and most recent tools.”

There was an element of symbolic use in private-sector partners, as a small number of respondents expressed that they agreed to participate in a deep dive because they felt obliged to, given their investors were supporting it. For these companies, the first objective was to “do no harm” by not allowing the study to “get in the way” of running the company or, in the words of one fund manager, not to “distract” the company. The objective was thus to minimise potential burdens.

2.4. Capacity building use: Strengthening the management of an organisation or project

The type of use covered here focuses on organisations rather than on individuals, which was covered in Chapter 3 on the value created by training a set of talented young researchers from the sub-Saharan African, Caribbean and Pacific regions. A number of respondents questioned the efficacy and effectiveness of focusing capacity development at the level of researchers. Rather, they thought, efforts should have been focused at the institutional level where outcomes could have been scaled and stood a better chance of being sustained. One respondent believed the best “approach would [have been] more about building institutions rather than targeting individuals.”

From an EIB perspective, there was considerable process knowledge generated through the deep dives, which contributed to wider organisational learning. The EIB’s current approach to evaluation is largely theory-based contribution analysis, with little or no use of counterfactual methods. The intention in this programme was to apply impact evaluation techniques and see if they could complement other tools such as macromodelling or “traditional” evaluation using the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) criteria (OECD, 2002). This was an opportunity for the EIB to learn whether the deep dives were a useful approach and how to go about doing them. EIB respondents felt that deep dives “generated replicable process knowledge [...] on very practical aspects of impact evaluation.” This included on issues such as how to clarify an intervention logic, how to produce a solid baseline, and how to demonstrate a credible causal relationship between an investment and observed outcomes. “These are lessons of use for all projects,” noted one EIB stakeholder.

EIB respondents felt that deep dives had contributed to spreading a culture of evaluation across the organisation, and that the programme had successfully made the case for why it was important to consider rigorous methods. However, respondents were realistic that deep dives were one small contribution in a large institution, and it was a bit early to see the difference. It was also felt that, currently, knowledge rested more at individual rather than institutional level. Process knowledge took place through more informal mechanisms, such as by commenting on studies, rather than any formal or codified capacity building targeted at the EIB.

There was no evidence that deep dives contributed to strengthening company management from a content or process knowledge perspective. There was little interest from private-sector partners to learn how to deploy more rigorous impact measurement techniques, mainly because they lack the budget, expertise and incentives to, in the words of one company, “invest in academic rigour.” The companies did make use of deep dives – there was considerable instrumental use – but had low interest in developing their own internal capacities to collect impact data, beyond limited topics such as user, engagement and feedback data that do not require the application of academic research techniques.

3. Factors influencing deep dive use

This section identifies key factors influencing deep dive use, focusing on the quality of use. The emphasis is on “appropriate use rather than just greater use” (Alkin and King, 2017). The aim is to link the question of “how” deep dives were used to the “why” reasons for participating (as set out in the conceptual framework in Section 1 and Figure 1), with reference to the operating and organisational context of deep dive user groups.

Evaluation literature categorises use factors into the following four groupings (Alkin and King, 2017), which can be applied for the purposes of understanding factors influencing deep dive use: (1) user factors; (2) evaluator factors; (3) evaluation factors; and (4) organisational factors.

3.1. User factors

The work of evaluators such as Michael Quinn Patton identified the “personal factor” as an “important element in determining whether people used evaluations” (Alkin and King, 2017). This topic covers how user “attitude[s] towards evaluation, both in general and specific to the current evaluation” can influence use. These attitudes, in turn, are thought to derive from how meaningfully users are involved in the evaluation; user predispositions about evaluation, based on past experiences (both positive and negative); and innate user interest in the topic and process of evaluation. Each of these are examined from the perspective of deep dives.

The involvement of user groups

Patton (2008) argues that “intended users are more likely to use evaluations if they understand and feel ownership of the evaluation process and findings [and that] they are more likely to understand and feel ownership if they've been actively involved.”

The deep dives were participatory and involved both EIB and private-sector partners. The extent to which user groups were meaningfully involved varied across studies and within organisations. From an EIB perspective, a small number of staff were involved in actively supporting the framing of research questions, providing comments on research plans and instruments, and undertaking significant editing of final reports. However, broader EIB organisational units were only marginally involved, at most in commenting on draft deep dive reports¹¹.

¹¹ Greene (1988) highlights the importance of stakeholder involvement, distinguishing among the “very involved person,” “the somewhat or sometimes involved person,” and the “marginally involved person.”

In general, fund managers were hands-off, in part because they did not want to take ownership of the process away from investee companies. However, this may have contributed to funds playing a less proactive role in the instrumental use of deep dive information or understanding the depth of insights being generated.

The investee companies subject to deep dive research were all involved, as would be expected in any research exercise focusing on their business performance and impact. In most instances this was “occasional” involvement, coming in at strategic points such as the selection of the research focus to ensure the “study covered subjects that really mattered” (company interview). In some instances, companies were deeply involved, especially when they designated a counterpart to work closely with, or even alongside, the researchers. This was often a staff member in charge of in-house analytics or market intelligence, such as a data science lead. Indeed, the strongest examples of use – where feedback from private-sector partners indicated the deep dives were most useful – came from studies where a knowledgeable counterpart was appointed.

Views on impact measurement

Impact Financing Envelope investments, like impact investments more widely, flow into businesses that create impact in different ways. Some companies are more mission-driven with an explicit social purpose, such as a social enterprise whose motivation is the double or triple bottom line of financial, social and environmental performance (so-called “investing for impact” strategies) (West, 2019). Other companies may be more mainstream commercial operations, but still expect to create social impact due to the nature of the products and services they sell (so-called “investing with impact”). The enthusiasm for impact data varies depending on, in the words of one respondent, “how much social impact is tied to the commercial engine.” Mission-driven enterprises will see impact as fully aligned with the commercial engine, while others are “pretty much for a profit [...] [and] tack a little bit of impact on the side” (company interview). For the former, deep dive information may be “need to know,” while for the latter deep dives generate “nice to know” information, unless the impact data can be commercialised for business value purposes.

A small minority of more commercially oriented private-sector partners cited negative experience with other impact measurement exercises in the past as the reason why they were initially sceptical of the deep dives. In the words of one investee respondent, the “excessive weight [being placed by the impact investing industry] on impact measurement [...] is a gigantic waste of time.” These private-sector partners did also end up deriving instrumental use of the deep dive, using findings to inform marketing and business decisions. However, in their mind “impact” data was synonymous with “top-down” reporting metrics set by investors that do not align with “on the ground” business data needs.

Business model context

Companies subject to deep dive research spanned the business life cycle, from more “early-stage” start-ups still refining their business offer, to more “growth” stage companies seeking to expand their reach and penetrate new markets. The type of products and services also varied from those with long histories (for example, microfinance) to others developing more innovative products and services (for example, solar-powered micro-utilities).

The differing company contexts shaped demand for different types of impact data, and how useful these companies found the deep dive. Studies were always most useful when they were future-looking – that is, aligned to the company growth strategy not just their historical impact – and there was a clear distinction between companies that emphasised the need for speed versus those prioritising the importance of rigour.

Two separate groups of needs can be identified for private-sector partners: those that wanted more “academic” evidence and those that wanted more “actionable” insights.

The “academic” group

These companies primarily sought to use deep dive information for marketing and fundraising activities, or to engage policymakers. These companies had often built their business model around anecdotal or secondary data; for example, where research conducted by other companies and in other countries had shown the value of using mobile wallets, but empirical data did not yet exist in the company’s own context.

For these companies, achieving the highest level of rigour possible in the study was paramount. The deep dive, in one company’s words, had to be “really good to have some potential for fundraising for [the] company in future.” There was a clear value added in the approach taken to the deep dives, as the most rigorous methods were never “something that would be able to justify spending time and budget doing ourselves.”

The independent nature of the study was important, especially when used to validate aspects of the business model for an external audience. As one respondent noted, there is a significant difference in being able to confidently state in marketing materials that “this is what the customers/the market stands to gain from working with company X (and it’s not company X saying that).”

Even though these companies recognised that the research process needs to be thorough, many felt the exercises were too open-ended and studies took too long to finalise. Two years on, one company said it “didn’t feel like [the deep dive] ever finished.” As a result, some private-sector partners were unsure when the exercise was completed, and when they could start to use the results.

The “actionable” group

Venture-backed companies sell more innovative products and services, and have less fixed business models. In the jargon of the start-up world, these companies are agile (continually iterating products/services to better meet user needs) and pivot often (shift their business strategies). As one respondent noted when reflecting on methods for measuring impact, “academic models [that assume a fixed treatment] are not so useful.”

These companies have various types of information needs, but tend to value user, engagement and feedback data in order to make rapid decisions about customer segmentation, satisfaction and willingness to pay/use more than outcome and attribution data. While wanting data to have a degree of rigour – in the sense of being thorough and carefully collected (ILO, 2014) – the entrepreneurs and decision-makers guiding these companies prioritised the speed of data. As one said: “Quicker and faster is better than deep academic rigour.” For them, deep dive findings do not have to be perfect, but do have to be timely.

Because start-ups move quickly, there is a danger if deep dives are not timely that insights arrive too late: the business might have already had to make decisions, so there is no chance to implement or act on findings, or worse still the companies may have pivoted and the subject of the deep dive study is no longer relevant. As one EIB stakeholder reflected, “in terms of companies evolving quite rapidly, [our] approach was too slow. It wasn’t delivering real-time info that these early-stage companies wanted.”

3.2. Evaluator factors

The profile and performance of the evaluators has long been emphasised in the literature on evaluation use. Relevant factors identified include the dedication and commitment of the evaluator, interpersonal skills (“developing rapport and a good working relationship with those users”), political sensitivity and credibility in terms of experience, technical expertise and contextual knowledge (Alkin and King, 2017).

One objective of the EIB-GDN Programme in Applied Development Finance was to provide a “training and mentorship programme for local researchers” (EIB, 2021). By definition, the researchers leading the deep dives were relatively inexperienced, even though their technical expertise was assured during the selection process and they had the support of a panel of expert advisors. Few researchers had previously been exposed to business operations, and few of the expert advisors specialised in impact investing or private-sector development.

All user groups interviewed for this volume provided positive feedback on the individual researchers they engaged with as being professional, and there was a high degree of satisfaction on the part of the private-sector partners. There was a question as to how local the researchers were, given few were based in or from the project countries. In one example where the deep dive findings were used extensively by the company, the lead researcher was based in the same city and was teaching at the same university from which a number of company staff had graduated. Another company based in East Africa, however, noted significant cultural clashes with their West African researcher, who had different expectations about how fast people and processes move in-country, which initially “created tensions” (company interview).

Adapting academic techniques to a private enterprise context is complex. It requires situational leadership – the ability to change language and style to meet the needs of different user groups. The researchers needed to engage in deep technical discussions with expert advisors, but also communicate sometimes complex ideas with companies in a business-friendly way. There was a sense, according to one respondent, that this “was two different worlds coming together.” Sometimes researchers and businesses “were talking two different languages [...] and things got lost in translation” (company interview). This led to gaps between what the company was thinking and what researchers were doing. This led one company to conclude the “for-good lingo and for-profit lingo are mutually exclusive.”

In the words of one investee respondent, for the vast majority of researchers this was the first time they were doing a survey in the business world. Undertaking a survey of paying customers engaged in a chain of commercial transactions is different from surveying “beneficiaries” in an international development project accessing a grant or a free service. Different power dynamics introduce different biases, and research has shown the potential for the research process itself and the type of questions

being asked to influence customer behaviour (Brooks and John, 2018), having a potential impact on a business's ability to attract and retain customers. As one company mentioned, researchers need to be more mindful that "these are customers not participants in a project," and so the "social capital of the company is expended" in any contact with them. The researchers were largely learning by doing, which is pedagogically effective, but less so in terms of generating the highest quality insights.

Structurally, some EIB stakeholders felt that researchers were pulled between meeting company needs and the researcher's own interests (for example, as PhD candidates), and the expert advisors (who often had a more rigorous mindset). Private-sector respondents suggested several improvements to the approach, including researchers obtaining a more solid grounding in how businesses work and ensuring researchers did earlier field visits¹². A number of companies believed that too much time was spent planning the deep dive from afar, but researchers were hit with field reality when they came to the country and had to correct course quickly. Companies also cited communication as a challenge when researchers were working remotely (even prior to the COVID-19 travel restrictions), particularly during the early planning stages and later data analysis and report writing stages.

3.3. Evaluation factors

This set of factors distinguishes between the role of the individual evaluator and the process of evaluation and the activities within it (Alkin and King 2017). From a use perspective, "while technical excellence and necessary rigour are important, what is most relevant is the appropriateness of the methods employed and their credibility with potential users" (ibid.).

These factors can be grouped under the heading of relevance (Yarbrough et al., 2010). Four aspects are examined with reference to the relevance of deep dives: the overall approach, choice of methodology, timing and presentation.

Deep dive approach

The deep dive programme was funded by the EIB to deepen understanding of the results and impact of operations under the Impact Financing Envelope. In the hierarchy of user needs, the intention was primarily to benefit the EIB and researchers through capacity building. The fact that private-sector partners (companies and funds) could also derive benefit was largely of secondary consideration. As one EIB member noted "the user-centric expectation was not really there [at the beginning] – or at least central."

To attract company participation, every deep dive was pitched to companies as also being needed. Over time the deep dives did evolve more of a "bottom-up" user focus to complement the top-down investor perspective. However, as company needs were always one of many (sometimes competing) objectives, private-sector partners did not always see the deep dives as tailored to their interests, or fully aligned with information needs. As one company questioned: "Who was the real audience?" The EIB was open that the primary private-sector audience was "probably not really

¹² Companies also felt that researchers would have been more effective if they could have "teamed up" with someone with knowledge of the reality of business operations, and if there was a better matching of researcher interests to company data needs.

companies themselves, but maybe the wider community of [...] investors and fund managers in SMEs in developing countries.”

A fund manager respondent noted that “starting from the field [reality] is a fundamental driver of encouraging, adopting, demand and use.” Instead of a centralised approach that sought to structure a programme and then get private sector “buy-in,” they suggest a more decentralised model to “ask what problems companies [have] and [then] put together [a] programme,” more akin to a flexible technical assistance facility.

Methodology

EIB stakeholders highlighted the importance of the high-level academic expertise that the GDN and the expert advisors brought to the programme in ensuring that rigorous methods were used and in giving the studies a “quality stamp.” The EIB believed that the credibility gained through this approach would lead to increased use of the studies and findings.

However, EIB stakeholders also noted that the methodology used in the individual studies had to be selected pragmatically to fit with the various constraints discussed in this volume, such as timing and funding. The EIB saw the aim for each study as arriving at an “appropriate degree” of rigour. Given the programme constraints, the objective was to do “the best out of what was possible,” in some cases where it was a challenge to even start the research, “even if [the study was] not perfect; it is better to have something than nothing.” For example, it was not always feasible to estimate the counterfactual using a control group, so alternative methods such as comparing different customer segments (between newer and older users) or trend analysis were explored. In other cases, budget limitations and the need to minimise the burden on private-sector partners made it difficult to implement more than one round of data collection. This limited the depth of the conclusions that could be drawn from the study. EIB staff suggested that acknowledging the practical constraints and adopting a narrower, more realistic focus from the start of the research process could have helped, in some cases, to make the final studies more useful: many studies “tried to do [...] [and] to answer too much” (EIB interview).

The vast majority of private-sector partners greatly appreciated the participatory nature of the deep dive methodologies. In the words of one partner, it allowed companies to get hands on to ensure that studies “covered subjects that really mattered.” The rigorous element of the research was, as mentioned above, something that companies lacked capacity to carry out themselves, so such an “academic” lens was seen as a distinct value added.

However, a small number of partners expressed concerns about methodology, particularly frustration with the difficulty of understanding the methods chosen, and that the “overly econometric approach [...] [was] hard to understand.” Some also expressed concerns about the reliability of data on topics like increased income, which they knew were difficult to measure, or about the appropriateness of inferring causality based on the findings – a concern that was echoed by some EIB stakeholders. There were also isolated cases in which the studies delivered did not fit the standards the private-sector partners had expected in terms of quality of the analysis or where partners believed that specific methodological concerns affected the usefulness of the work. Issues raised included the potential for respondent biases to arise, particularly when the researchers introduced themselves as surveying on behalf of the company, the representativeness of the samples and the framing of some survey questions.

Timing

Evaluation literature states that “information [...] must be timely, or it may be of no use to potential stakeholders” (Alkin and King, 2017). The time it took to complete the deep dives was an issue for all companies, particularly the earlier-stage enterprises. In part this was an issue of managing expectations. As noted by one respondent, the “initial timeline was way too optimistic.” For other companies it “wasn’t clear up front how long it would take” and “in our mind [we were] thinking about something shorter.”

Presentation

Literature on evaluation use is unequivocal about the importance of “communication quality, including evaluation reporting” as a factor affecting use (Alkin and King, 2017). Evaluating findings “must be in a form that users can understand” (ibid.).

Reflecting on the overall programme, an EIB stakeholder believed the standard for what could be considered good quality should reference both the rigour of the study itself and its readability. For this EIB user, in some studies it was difficult to understand whether what was being presented was a positive or negative finding, and that the “simplicity of messaging [was] often not there.” Interesting insights and important findings were therefore being obscured as the deep dive was not, in the words of one company, “properly presented,” making the study hard to share.

This was echoed by some private-sector partners, who critiqued a “highly theoretical research paper” and questioned whether it was “written for [a] business audience or [...] peer reviewers.” One company stated they were “not a scientist” and so did not understand the full report; another stated that the study was “not the most exciting piece of work to chew through” and as a result, “the format buries any interesting findings.”

Over time, shorter summaries and slides presenting the key insights from the deep dives were prepared. This goes some way to meeting key criteria to make reports readable, understandable and useful, as set out by McDavid et al. (2013):

- Rely on visual representations of findings and conclusions where possible.
- Use clear, simple language in the report.
- Use more headings and subheadings, rather than fewer, in the report.
- Prepare a clear, concise executive summary.
- Be prepared to edit or even seek professional assistance to edit the penultimate draft of the report before finalising it.

In conclusion, a small number of evaluation factors led to occasional “poor product quality” (Mayne, 2014), minimising the chance the deep dive was useful. Deep dives were frequently “not timely” (did not produce findings when they were needed for decision-making) and “not clear” (findings not well communicated, with no communications strategy and no recognition of different stakeholders’ interests). In a few isolated cases, users believe that a deep dive was “not credible,” in that the evaluation findings, conclusions and recommendations were not seen as high-quality enough to be used in decision-making, due to weak data and/or analysis.

3.4. Organisational factors

This wider set of factors covers both the organisational and social contexts underpinning deep dives. Evaluation literature shows that “the history, nature and value of the organisation in question also clearly will have an impact on the use” (Mayne, 2014). This topic, however, is too broad to cover in any detail beyond some broad observations.

First, the nature of the organisation in which the evaluation is being conducted has a substantial impact on the successful achievement of deep dive use. This includes the characteristics of the programme in question – in the deep dive case, the Impact Financing Envelope – as well as the larger entity that encompasses that programme (Richard et al., 2009). The EIB is a large international financial institution, and any contribution the deep dives make to cultural change has to be understood in this wider organisational context. An EIB respondent noted that deep dives were aimed at helping colleagues to “better describe and learn from not just where [they] put their money but what the results are.” This view was echoed by a private-sector respondent who saw the value in the deep dives helping to give the EIB concrete insights into the effects of the products and services of the businesses receiving funding, allowing it to see whether, in practice, the impacts matched those that the Bank had expected to see based on theory. Some of the private-sector respondents held the view that the “EIB is a development and an investment institution – not an academic one. They shouldn’t produce books but [learn how to achieve] better outcomes on the ground.”

The nature of the organisation on which the evaluation is being conducted also has a substantial impact on use. Corporate cultures are diverse, but as shown earlier, there were a set of private-sector partners deploying a start-up mentality that emphasised rapid, quick and dirty data, which is the antithesis of the slow and careful academic research techniques favoured by deep dives¹³. In terms of instrumental use, the most significant set of organisational factors shaping decision-making were likely to be sources of information other than the specific deep dives, but these are outside the scope of this volume (Patton, 2012).

4. Conclusion

“At its simplest, judgments about an evaluation’s utility are made based on the extent to which programme stakeholders find evaluation processes and products valuable in meeting their needs” (Yarborough et al., 2010).

Rockefeller Philanthropy Advisors, part of the foundation that first coined the term “impact investing,” recently reissued its seminal handbook with a chapter on impact measurement. Good measurement, it writes, should help organisations “manage forward” to improve impact over time, rather than just look back at what impact has occurred (Rockefeller Philanthropy Advisers, 2020). This way, impact measurement and management can be viewed not as a necessary cost, but rather as a practice that can inform many aspects of business performance.

The recent focus on measuring impact to drive better decision-making is analogous to the utilisation-focused evaluation approach developed by Michael Quinn Patton over a decade ago. The core

¹³ An exception is where the EIB-GDN deep dives partners with the DFID Impact Programme deep dives. The Impact Programme supported less rigorous but more real-time telephone surveys on customers over a six-week period, while the EIB-GDN deep dive carried out a quasi-experimental study over the course of one year.

principle is that any evaluative exercise should be judged on its usefulness to its intended users. “If the evaluation information collected does not meet the perceived need of users, then, not surprisingly, they are not likely to use it,” however technically robust the exercise (Alkin and King, 2017).

Historically, many academics believed that “the quality of an evaluation rests on its methodological defensibility, and that short term, specific uses are not that important” (Fitzpatrick, 2002). Most evaluators now recognise that use is central to the reasons for doing evaluations. However, a tension remains between use and methodological defensibility; that is, achieving the highest levels of rigour and user-centric needs such as speed and practicality. This tension was felt throughout the deep dives; it shaped the issue of whether, and to what extent, the studies were useful.

The EIB-GDN deep dives focus on methods as a “systematic exercise in applying academic research techniques to understand the impact of private-sector investments,” according to one EIB interviewee. From an instrumental perspective of utilisation, rigour matters only up to a point to ensure the data and insights are accurate enough as the basis for decision-making. For specific user groups like the companies being studied, academic rigour does not need to be maximised, but should be employed to a level appropriate for the intended use of the information. A company will not require a control group, for example, if its needs are simply to find out what existing customers think of its product.

Multiple use pathways existed within the EIB and among the EIB’s private-sector partners. While the EIB derived broad conceptual and symbolic use from the deep dives, most private-sector partners found instrumental use in terms of validating business decisions, marketing and strengthening stakeholder engagement. These differences meant that different user groups sometimes had opposite experiences of the same study; for example, the deep dive cited as most interesting and useful to EIB stakeholders was the least useful from a company perspective¹⁴. This reflected the structured feedback given by private-sector partners, which was split between those who said the deep dive they experienced was moderately useful (40%), and those who said it was very (50%) or extremely (10%) useful¹⁵. For the EIB, a greater thematic focus and a broader pool of projects to choose from could have strengthened the use case. For the private-sector counterparts, on the other hand, particularly for earlier-stage companies with rapid product cycles, timelier findings that were easier to act on would have boosted use.

Given the mixed use made of these studies, decisions about increasing the usefulness of the deep dives should be made based on clear decisions about how the studies might be used, and which of these uses should receive priority. The core challenge, as noted by an EIB interviewee, is to “adjust [the level of] rigour to show really useful results depending on the audience.” Striking the balance is hard, especially when there are competing user priorities. Placing too strong a focus on methods and seeking to apply “the highest academic standards and rigour” is unnecessary if user needs are for simpler and more actionable insights. Yet a too utilitarian view of impact studies that prioritises use over methods risks turning deep dives into pure market research. As one fund manager felt, this would bring into question the additionality and value for money of the deep dive approach, as for all data

¹⁴ As measured by a standard question asked to all private sector participants on the usefulness of the deep dive.

¹⁵ The Net Promoter Score (NPS) is a standard score that measures satisfaction and likelihood to recommend a product, service or approach to peers. Private sector partners gave the deep dive experience a relatively low NPS of 10: with 20% classified as detractors (not satisfied), 50% as passives (undecided whether they valued the exercise), and 30% as promoters (who value the deep dive and are likely to speak positively about it to others).

points aside from outcome and attribution, “companies can make decisions themselves [...] or if they need data they can hire in a local provider much more quickly.”

The objective of increasing the usefulness of the studies also has to be balanced with other objectives, such as those connected to capacity building, and with the varying perspectives and experiences of researchers and their expert advisors. One stakeholder wondered whether it is too much to expect significant deep dive use, and that the programme may have been “over-ambitious.” As another respondent noted, it is “never good to [try to] achieve two objectives at once.”

Overall, the deep dives were, in the words of one EIB respondent, a “fantastic exercise” in learning about impacts and how best to measure them. The experience of implementing and improving three cycles of deep dives has provided a clear framework for use, and a typology of different uses based on their real-world application. Furthermore, the experience has taught staff and management a number of practical, methodological and conceptual lessons about how to implement this kind of research. As one EIB interviewee noted, this process knowledge was as important as the findings of the studies themselves.

Deepening the extent to which future cycles of deep dive information is used, particularly for private-sector partners, would likely require an adjusted approach. This would start by identifying clear and specific user needs and breaking the broad concept of use down into its component parts: why undertake a study; who are the primary users; what information do they need; and how will they use findings to prove or improve their impact. Deep dives would then be designed to “ensure that these intended specific uses [...] by the primary intended users guide all other decisions that are made about the [...] process” (Better Evaluation, 2012).

Biographies

Contributors

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François Bourguignon co-authored Chapter 2. He is chairman of the Global Development Network (GDN) Board. An emeritus professor of economics at the Paris School of Economics, France, he was director of the school from 2007 to 2013. Before that, he was chief economist and senior vice president of the World Bank in Washington D.C., United States. He spent most of his research career as a professor at the École des hautes études en sciences sociales in Paris. His work focuses on the distribution and redistribution of income in developed and developing countries, and he has authored many academic papers and books. He is active in the international development community, lecturing and advising leading international agencies and governments. He was an expert advisor in the EIB-GDN programme.

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EIB-GDN research fellows and deep dive authors

Upon validation of the final version of the deep dives by the expert advisors and the advisory committee of the EIB-GDN programme, the participants are formally distinguished as EIB-GDN Fellows in Applied Development Finance. As of the end of March 2021, the validation had been completed for cycles 1 and 2, and remained pending for cycle 3, as the deep dives were being finalised.

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MEASURING IMPACTS

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