

EVALUATING BLENDED FINANCE INSTRUMENTS AND MECHANISMS: APPROACHES AND METHODS

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Abstract

This paper provides an overview of how to evaluate different blended finance instruments and mechanisms, including equity instruments, debt instruments, first loss capital, guarantees and insurance, development impact bonds, performance-based grants, structured funds and syndicated loans. It is structured along the most important and common questions evaluators seek to answer, including how to measure the mobilisation of additional financial resources, and assessing results. It provides a description of the most appropriate methods and tools for answering these questions, highlighting their advantages and disadvantages, and discusses their application.

This paper contributes to a shared understanding of the methodological choices, opportunities and challenges in evaluating each instrument and mechanism, particularly amongst practitioners handling blended finance interventions. It offers practical guidance for implementing and strengthening evaluations in this area. This will also be a valuable resource for evaluators responsible for blended finance interventions of bilateral and multilateral development institutions.

Foreword

Many OECD DAC members are now engaging in blended finance and the number of new facilities is growing every year as a way of mobilising additional investment required to achieve the ambitious goals of the 2030 Agenda and the Paris Climate Agreement. However, along with the high level of interest in blended finance, there is some scepticism about the role of blended finance, its relevance and development impacts.

The OECD Development Assistance Committee's (DAC) *Blended Finance Principles* (2017) highlight the need to "Monitor blended finance for transparency and results". In its 2018 report, the OECD also emphasises the need to establish an evidence base for blended finance operations (OECD^[1]).

Evaluation efforts already underway have met a range of challenges. An OECD paper analysed the issue in more detail, stressing 1) the absence of a common terminology for evaluation of blended finance; 2) the lack of a joint understanding of different dimensions of additionality – not least of development additionality – and how these should be evaluated; and 3) the need for more clarity on how specific instruments and mechanisms (equity, guarantees, loans, etc.) should be evaluated (Winckler Andersen et al., 2019^[2]).

Recognising the benefits of a concerted approach to tackling these issues, the OECD DAC's Network on Development Evaluation (EvalNet) – independent experts with diverse evaluation experiences and a mandate to strengthen evaluation systems and practice – created a Working Group on Evaluating Blended Finance in February 2019. Its objective is to contribute to improved evaluation practice in this field, based on a shared understanding of concepts and issues. Ultimately, the aim is to support more effective blended finance operations for sustainable development.

The work, overseen by a Co-ordination Group comprising Denmark, Germany, Norway and the OECD Secretariat, is organised in three work streams:

1. the development of a shared understanding of the various concepts and terms linked to blended finance and evaluation and their use, including the implications of these different definitions for evaluation and development co-operation;
2. building on the definitions work, a clarification of how to evaluate development additionality or development impact (terms currently used to describe the contribution of blended finance activities to development) and financial additionality;
3. the development of a shared understanding on how to evaluate different blended finance instruments and mechanisms.

The findings of each work stream will be published as an OECD Working Paper. This paper presents the results of work stream three.

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This working paper benefitted from input from the members of the DAC Network on Development Evaluation (EvalNet), and in particular the Co-ordination Group of the EvalNet Working Group on Evaluating Blended Finance. The Co-ordination Group, led by Henning Nøhr, Ole Winckler Andersen, Ida Lindkvist, Magdalena Orth and Megan Kennedy-Chouane, shaped the overall work including this paper. The publication was co-ordinated by Autumn Lynch.

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Abbreviations and acronyms

CBA	Cost-Benefit Analysis
CGS	Credit Guarantee Scheme
CFLC	Catalytic First Loss Capital
CMO	Context-Mechanism-Outcome
DAC	Development Assistance Committee
DEval	German Institute for Development Evaluation
DFAT	Department of Foreign Affairs and Trade
DFI	Development Finance Institution
DIB	Development Impact Bond
FCAS	Fragile and conflict-affected settings
FLC	First loss capital
GLI	Gender lens investing
GP	General partner
IMM	Impact management and measurement
KPI	Key performance indicator
LP	Limited partner
MDB	Multilateral development bank
OECD	Organisation for Economic Co-operation and Development
PPP	Public private partnership
QCA	Qualitative comparative analysis
RCT	Randomised controlled trial
SDG	Sustainable Development Goal
SIB	Social impact bond
SIM	Social impact measurement
TA	Technical assistance
ToC	Theory of change
VfM	Value for money

Executive summary

Bilateral and multilateral donors are increasingly making use of blended finance instruments and mechanisms to address the need for the vast amounts of finance required to achieve the Sustainable Development Goals (SDGs). Official estimates put the financing gap to achieve the SDGs at USD 2.5 trillion per year in developing countries alone. However, the evidence base on the impact of blended finance interventions is still scarce. Typical evaluation challenges include access to data, the absence of a common terminology, as well as long and complex chains of blended finance interventions. This working paper is intended to serve practitioners and evaluators responsible for blended finance interventions by contributing to a shared understanding of the methodological choices and opportunities in evaluating individual instruments and mechanisms. It also offers a practical guide to implementing evaluations of blended finance interventions.

This paper is based on a thorough review of relevant professional and scholarly literature. It presents the definitions and value propositions of the most commonly used blended finance instruments and mechanisms in development finance, followed by a detailed analysis of various approaches to evaluating them. The instruments and mechanisms were chosen based on the OECD classification for blended finance instruments and mechanisms. These include equity instruments, debt instruments, first loss capital, guarantees and insurance, development impact bonds, performance-based grants, and structured funds as an example of collective investment vehicles. The core of the research then focuses on how these blended finance instruments and mechanisms can be evaluated, providing a practical guide to answering three of the most important questions asked by evaluators: 1) how to evaluate the mechanisms and causal links in blended finance interventions; 2) how to evaluate front-end results; and 3) how to evaluate downstream results.

Main findings

- There is a rich diversity of methods and tools available and used to evaluate blended finance instruments and mechanisms. However, the current practice of blended finance evaluation is unsystematised, fragmented and compartmentalised across instruments and mechanisms.
- There is broad agreement among evaluators that analysing an intervention's theory of change or investment thesis is the crucial first step in any evaluation. The intervention's theory of change informs the selection of the most appropriate combination of research methods.
- Most practitioners and many scholars recognise the value of selecting, integrating, and sequencing methods drawn from both the theory-based cluster of research tools and the counterfactual cluster in ways that respond to the evaluation's terms of reference.
- Stakeholder engagement throughout the evaluation process is essential to optimising insights and utilisation.
- The confidentiality of information is a prominent challenge in collecting data on the performance of blended finance instruments and mechanisms, especially for front-end results. Strict privacy regulations in the banking and investment sectors often disallow the sharing or publication of certain types of data.

Recommendations

- **Practitioners and evaluators should apply harmonised standards, principles and results metrics** when undertaking evaluations of blended finance instruments and mechanisms. This will ensure better and comparable data for subsequent evaluations. Such standards, principles and results metrics include the OECD Blended Finance Principles Guidance, the OECD-UNDP Impact Standards for Financing Sustainable Development, the IFC Operating Principles for Impact Management and Measurement, and the IRIS+ metrics.
- **Theory-based approaches can help evaluators answer common evaluation questions.** When evaluating blended finance interventions, it is useful to articulate underlying mechanisms and pathways of change from intervention to outcome, including both front-end (i.e. financial sustainability, mobilisation, additionality and concessionality) and downstream results (i.e. effects on direct and indirect target groups) in the investment chain.
- **Experimental or quasi-experimental methods could be appropriate** when evaluating both front-end and downstream results. These can help in rigorously assessing not only the changes that have occurred, but the extent to which they can be attributed to the intervention. Other approaches, such as those analysing the theory of change, can also provide information on the plausibility of impacts and their attribution to the intervention.
- **A ten-step integrated approach is recommended for blended finance evaluations.** This begins with the alignment of the evaluation design with OECD DAC evaluation norms and standards, blended finance guidance, and other relevant standards and metrics. It then moves to a detailed interrogation of the intervention's theory of change or investment thesis, followed by a thoroughgoing gender-equality analysis. This process can be used for institutions or funds, portfolios and individual deals and investees. The next step is to embed stakeholder engagement, especially among downstream actors, and a learning orientation throughout the evaluation. Then, relevant methods are selected, integrated, and sequenced, ideally drawn from both the theory-based cluster of methods and the counterfactual cluster. Next, technology applications are integrated into the design if applicable to gain efficiencies and reach. The evaluation is then implemented and its reports are generated. Once the reporting on the blended finance evaluation is concluded, it is important to feed the lessons and recommendations that emerged from the evaluation back into decision-making processes within bilateral and multilateral donors as well as the development finance institutions to support learning on blended finance.
- **The way forward should be built on three priorities: pluralism, pragmatism and capacity building.** The pluralistic character of the various methods and tools examined is a strength in the practice of evaluating blended finance instruments and mechanisms, and as such should be valued and cultivated. However, increased connectivity and exchange across instruments and mechanisms, sectors, and cross-cutting issues is required. Pragmatism is also crucial, while setting the bar on accountability and transparency as high as possible. In a post-COVID-19 world, budgetary resources for evaluating blended finance instruments and mechanisms, as important as they may be for mobilising commercial capital for the SDGs, will be limited. Capacity building will be vital. Future research and collective initiatives can be used to increase learning and strengthen the methods and tools necessary to more effectively and efficiently evaluate blended finance instruments and mechanisms. Building such capacity is especially important in the emerging economies themselves and for fragile contexts.

1 The challenge of evaluating blended finance instruments and mechanisms

“Blended finance” has emerged as an opportunity to close the existing financing gap in achieving the Sustainable Development Goals (SDGs), with blended finance instruments and mechanisms being used by an increasing number of development actors. However, scepticism about the role and development impact of blended finance interventions persists. This is partly because evaluation practice currently lags behind in this field and faces many challenges.¹

A key challenge in evaluating blended finance interventions involves the use and application of different definitions for blended finance by various development actors. This heavily influences the scope and specificities of interventions that evaluations need to cover. Another challenge is related to the evaluation of long and complex value chains which are often inherent to blended finance interventions as well as to many other interventions in development co-operation. In these cases, evaluators need to integrate different methodological tools to answer their evaluation questions. Comparisons across different funds and investees are challenging due to differences in data collection quality and standards. Sometimes even minor differences in funding can have a significant effect on the performance of the blended finance intervention without always being obvious. Data collection is further complicated by privacy regulations in the banking and investment sectors which have strict confidentiality standards. This has serious consequences for building a control group or counterfactual which is often not possible in blended finance settings. Moreover, blended finance evaluations require evaluators with financial sector expertise, who are often difficult to find and more expensive.

This paper is based on a thorough review of relevant professional and scholarly literature. It begins by outlining the definition and value proposition of the most commonly used blended finance instruments and mechanisms in development finance. It then discusses how these blended finance instruments and mechanisms can be evaluated. To support this, the paper first describes common standards in blended finance. These include common principles in blended finance as well as standard metrics for results measurement. Their application is key for making better data available for blended finance evaluations and ensuring their comparability. The core of the paper then examines common evaluation questions related to blended finance instruments and mechanisms and provides a description of the most appropriate methods and tools to respond to these questions. It outlines the advantages and disadvantages of these methods as well as their application to the blended finance instruments or mechanisms described. Finally, the paper presents a number of conclusions and makes recommendations for possible ways forward.

This paper has been prepared particularly with practitioners managing blended finance interventions in mind, as it contributes to a shared understanding of the methodological choices, opportunities and challenges in evaluating individual instruments and mechanisms, and offers a practical guide to implementing evaluations of blended finance interventions. This information will also be a valuable resource for evaluators responsible for blended finance interventions of bilateral and multilateral development institutions.

This research has been undertaken during the global COVID-19 pandemic. The crisis has shed light on critical issues in both development evaluation and blended finance. For evaluators, it has become clear that new procedures, methods, and systems will be needed to ensure the effective continuation of evaluation activities and, most importantly, the collection of data. As certain data collection methods will not be feasible due to travel restrictions, evaluators will need to find new ways to tailor effective evaluation methodologies to current circumstances. Additionally, the crisis has shed light on the use of blended finance and its potential role in building back better. However, tightened public budgets and the increased risk aversion of private investors raise the question of whether blended finance instruments are the appropriate tool in the short run or would be better employed in the medium to long run. Given the uncertainties and complexities created by the crisis, more effective evaluation of blended finance interventions in the COVID-19 era and beyond will be needed.

2 Blended finance instruments and mechanisms

This chapter provides an overview of a set of blended finance instruments and mechanisms in development finance. This overview contains a definition of each instrument and mechanism as well as their value proposition and the potential risks for funders. The instruments and mechanisms were chosen based on the Organisation for Economic Co-operation and Development's (OECD) classification for blended finance instruments and mechanisms. The OECD classifies blended finance instruments as equity instruments, debt instruments, mezzanine instruments, guarantees and insurance, hedging, and grants and technical assistance (TA) (OECD, 2018^[1]). In addition, the OECD identifies four types of blended finance mechanisms: funds, syndication, securitisation and public-private partnerships (PPPs). For some of these clusters of instruments and mechanisms, specific instruments were chosen as examples in this working paper. For instance, for grants, the paper examines performance-based grants and for mezzanine instruments, first loss capital. The paper does not cover all the above-mentioned instruments and mechanisms. Instead, it focuses on those which have already been the object of an evaluation and where their assessment raised important questions.

2.1. Equity instruments

Definition: Equity describes an investor's share in the ownership of a corporation that gives the owner claims on the residual value of the corporation after creditors' claims have been met (OECD, 2021^[3]). Companies sell two main types of shares to investors: common shares, which carry voting rights, and preferred shares, which do not. However, the owners of preferred shares are paid dividends on company income before common shareholders. If the business fails, preferred shareholders are paid after creditors and bondholders but before the owners of common shares. Investors can also build equity indirectly by buying the shares of financial institutions or purchasing the units of investment funds; these entities, in turn, lend or buy shares in their portfolio companies, often small and medium-sized enterprises (SMEs). In the case of blended finance deals, public or philanthropic institutions make direct or indirect equity investments to help reduce risk and stabilise returns for commercial investors with the aim of crowding in additional private capital (OECD, 2018^[1]).

Value proposition for funders: Equity investments provide long-term growth capital that private enterprises in developing and emerging markets often lack. Equity financing is risk-absorbing, so it allows companies to pursue riskier, higher-growth strategies. Moreover, equity financing provides investors the opportunity to influence the investee firm and its decisions from inside. In this sense, equity instruments deployed directly in companies, or indirectly in financial institutions or investment funds, can be efficient tools for raising and blending capital and achieving high additionality.

While equity financing is a promising instrument with a distinct value proposition, it is still a rather new instrument in development finance. Equity instruments entail high financial and reputational risks for the funder. Moreover, it requires enhanced assessment and governance to manage the portfolio and to determine the right time and conditions for an exit (IDB, 2017^[4]). Against this background, most investors (e.g. pension funds) are limited when it comes to providing equity financing.

2.2. Debt instruments

Definition: Private debt instruments are the most frequently used instruments in development finance (Kenny et al., 2018^[5]) and impact investing (Mirchandani, 2019^[6]; Mudiliar, A. et al., 2018^[7]). Development finance institutions (DFIs) and certain investment funds make loans to businesses, directly or indirectly through financial institutions, obliging the borrower to repay the principal plus agreed upon interest, at either a fixed or variable rate. A loan may be secured by property or other assets, cash, inventory, or receivables. Similarly, a line of credit, which is a flexible loan with an upper limit, enables the borrower to draw on it as needed and repay on flexible terms. A third debt instrument commonly used in blended finance is the bond, a fixed income instrument issued by governments, public utilities, banks or companies to raise capital for growth and development (OECD, 2021^[8]). Investors that buy bonds become debtholders or creditors of the issuer and are paid an agreed-upon interest rate over the term of the bond. Some bond products are also designed to achieve environmental, social and governance (ESG) objectives, such as green bonds, which may be purchased privately or on public securities markets. To spread their risk, some investors hold multiple bonds with different maturities, a practice called “laddering.”

Value proposition for funders: DFIs, banks and other lenders often prefer to use loans, lines of credit or bonds in structuring blended finance deals as these instruments are relatively straightforward to design, negotiate and enforce legally and administratively in most jurisdictions. While their financial returns are typically modest, they also are usually well secured and thus offer a manageable level of risk to investors. Moreover, for investor portfolios, which are likely to include equity, guarantees and other products, debt instruments can provide a solid option for investment diversification.

The provision of debt instruments is very popular among investors, which has resulted in a highly competitive market for solvent customers. Loan products are often subsidised through the provision of technical assistance and margins for investors continuously decrease. The loan volumes and conditions provided by the market address the needs of larger customers but are less attractive for smaller firms. The provision of small ticket sizes or favourable loan conditions can, however, lead to a high level of development additionality for the instrument.

2.3. First loss capital

Definition: First loss capital is an important mezzanine instrument that often appears in mainstream finance in the form of a first loss guarantee (Moles and Terry, 2003^[9]). In impact investing, catalytic first loss capital (CFLC), a term coined by the Global Impact Investing Network (GIIN), is used for achieving purpose-driven demonstration or leveraging effects. This instrument refers to a socially and environmentally driven credit enhancement provided by an investor or grant-maker who agrees to bear first losses in an investment in order to catalyse the participation of co-investors that otherwise would not have entered the deal (Bouri and Mudaliar, 2013^[10]). CFLC can be provided through four possible instruments: equity, wherein the provider takes the most junior equity position; grants, which may be converted into debt or equity; guarantees, to cover a set amount of the losses; and subordinated debt, wherein the provider takes the most junior debt position (Bouri and Mudaliar, 2013^[10]).

Value proposition for funders: The value proposition to providers includes accelerating impact, optimising resources and achieving better terms for investees. CFLC can be a way to demonstrate to other investors the viability of a deal, organisation, or sector for market development. It can also be a longer-term investment to gain leverage for impact. For their part, recipients benefitting from first loss capital can better meet their investment obligations and gain a competitive advantage over other funds or businesses.

2.4. Guarantees and insurance

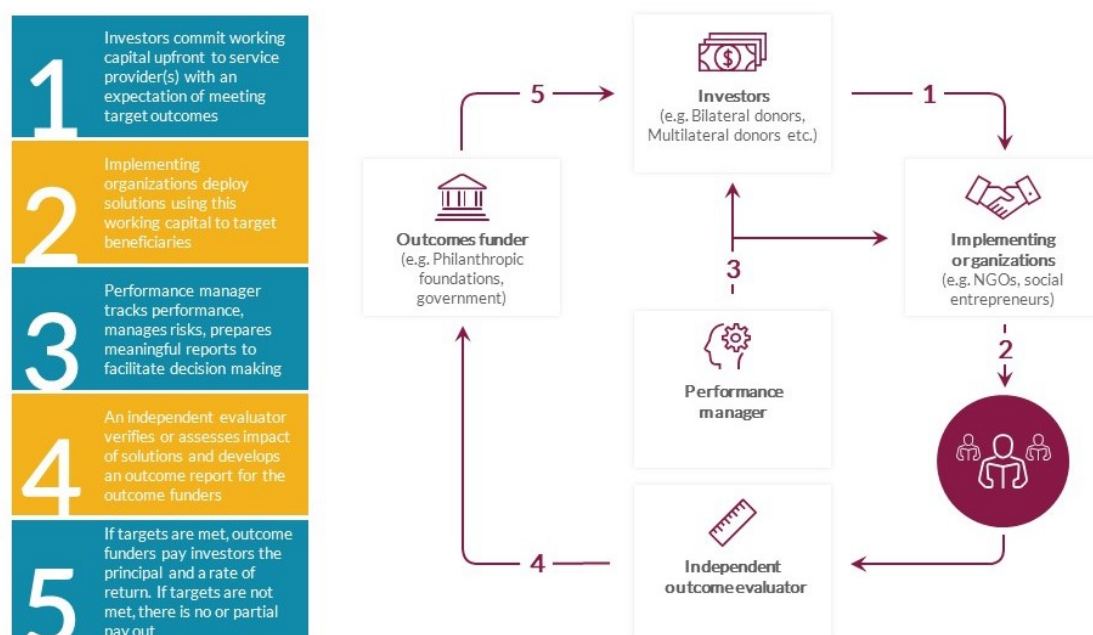
Definition: Another widely applied instrument in blended-finance practice (OECD, 2018^[11]), the development guarantee, involves a guarantor agreeing to “pay part of or the entire value of a loan, equity, or other instrument in the event of non-payment or loss of value” (Johnston, 2019^[11]; KfW, 2020^[12]). In addressing credit, technical or political risk, the resources underlying guarantees are only disbursed when the intermediary or borrower suffers losses. Through careful front-end design and due diligence, and sometimes syndication, creditor default rates and actual losses to issuers have tended to be manageable, even minimal, while development results have been perceived as significant (Manilla, 2018^[13]; Manilla, 2020^[14]; Schiff and Dithrich, 2017^[15]). Insurance as an instrument “can reduce specific types of risk in transactions by transferring the risk of loss to the provider for a predefined premium” (OECD, 2018^[11]; KfW, 2020^[12]). Insurance is used extensively in infrastructure projects and for mitigating climate risk.

Value proposition for funders: With guarantees, a guarantor agrees to pay part of or the entire value of a loan, equity, or other instrument in the event of non-payment or loss of value. By reducing risk, the instrument can attract more risk-averse investors. Guarantees can also be an attractive blended finance instrument because they optimise the use of public funds, as these funds are only disbursed in the case of actual losses. Guarantees do not involve cross-border flows unless the underlying investment fails and the guarantee is called upon. Hence, guarantees are not considered as an outflow of funds and cannot be counted as official development assistance (ODA) by public sector funders. If a guarantee is invoked, existing processes will specify that these payments are counted as ODA on a cash flow basis (OECD, 2021^[3]). Comparing guarantees and insurances, the latter is more flexible than the former. The elements covered by insurance can be defined as required. Insurance can cover a wide range of risks, including health, life, natural hazards, project risks or credit default (KfW, 2020^[12]).

2.5. Development impact bonds

Definition: One form of outcome-based financing that has gained prominence over the past five years is the development impact bond (DIB). “DIBs are results-based contracts in which one or more private investors provide working capital for social programs, implemented by service providers (e.g. NGOs), and one or more outcome funders (e.g. public sector agencies, donors, etc.) pays back the investors their principal plus a return if, and only if, these programmes succeed in delivering results” (Dalberg, 2019^[16]; KfW, 2020^[12]). Outcome targets are agreed upon by the parties and measured by an independent third party. Outcome funders, or “payers,” are usually donor agencies or philanthropic foundations. Figure 2.1 depicts the DIB model. However, while there are nearly 200 impact bonds worldwide, only 20 have been designed or implemented in low-income or lower middle-income countries, mainly in the education and health sectors (Gustafsson-Wright, 2020^[17]).

Figure 2.1. Example of a development impact bond model for education funding



Source: Dalberg (2019^[16]), *How Development Impact Bonds work, and when to use them*, <https://dalberg.com/our-ideas/how-development-impact-bonds-work-and-when-use-them/>.

Value proposition for funders: Advocates of DIBs and social impact bonds (SIBs), their advanced-economy counterparts, argue that this approach is a means of mobilising private capital, fostering collaboration among stakeholders, enabling innovation, increasing accountability, and driving better performance toward results. “DIBs, like other results-based financing mechanisms, aim to align development funding with improved outcomes, but also to increase the accountability of development spending” (Nemzoff, Clarke and Chalkidou, 2019^[18]).

2.6. Performance-based grants

Definition: Performance-based grants (PBGs) – known variously as outcomes-based funding, pay for performance or results-based financing – have been used increasingly in recent years to mobilise private capital for blended finance and impact investing in support of the Sustainable Development Goals. Grants can be critically important for the development of a project pipeline, especially in less mature sectors and riskier geographies, creating significant crowding in of private capital (Blended Finance Taskforce, 2018^[19]). In using PBGs, “a funder makes payments conditional on achievement of pre-agreed outcomes. The full payment is only received if the agreed-upon outcomes – i.e. measurable and independently verifiable social or environmental impacts – are achieved” (Climate Technology Program, 2017^[20]; KfW, 2020^[12]). PBGs can be used for project preparation to bring a project to bankability. This can increase, directly or indirectly, the return realised by other funders. Three prominent interventions using PBGs are the impact investment component of the Investing in Women initiative in Southeast Asia, funded by Australia’s Department of Foreign Affairs and Trade (DFAT), the Green Outcomes Fund recently launched in South Africa and the international REDD+ framework. The latter has recently been explored by a synthesis study which provides evidence-based insights into the results and impact of REDD+ measures that have been designed, financed, and implemented by or on behalf of German actors (Reinecke et al., 2020^[21]).

Value proposition for funders: PBGs can be used as matching or first loss capital to attract additional investors, for more extensive due diligence on prospective investees, or to provide business advice and training to enhance the success of investees. By providing these grants, funders seek to catalyse leverage, additionality, business growth, job creation and targeted developmental outcomes such as reduced waste, increased renewable energy or expanded gender equality. In this sense, the partner investment funds using the grants can serve as tools not only for accelerating and scaling capital placement, but also for multiplying taxpayer-funded contributions enabling financial and policy gains.

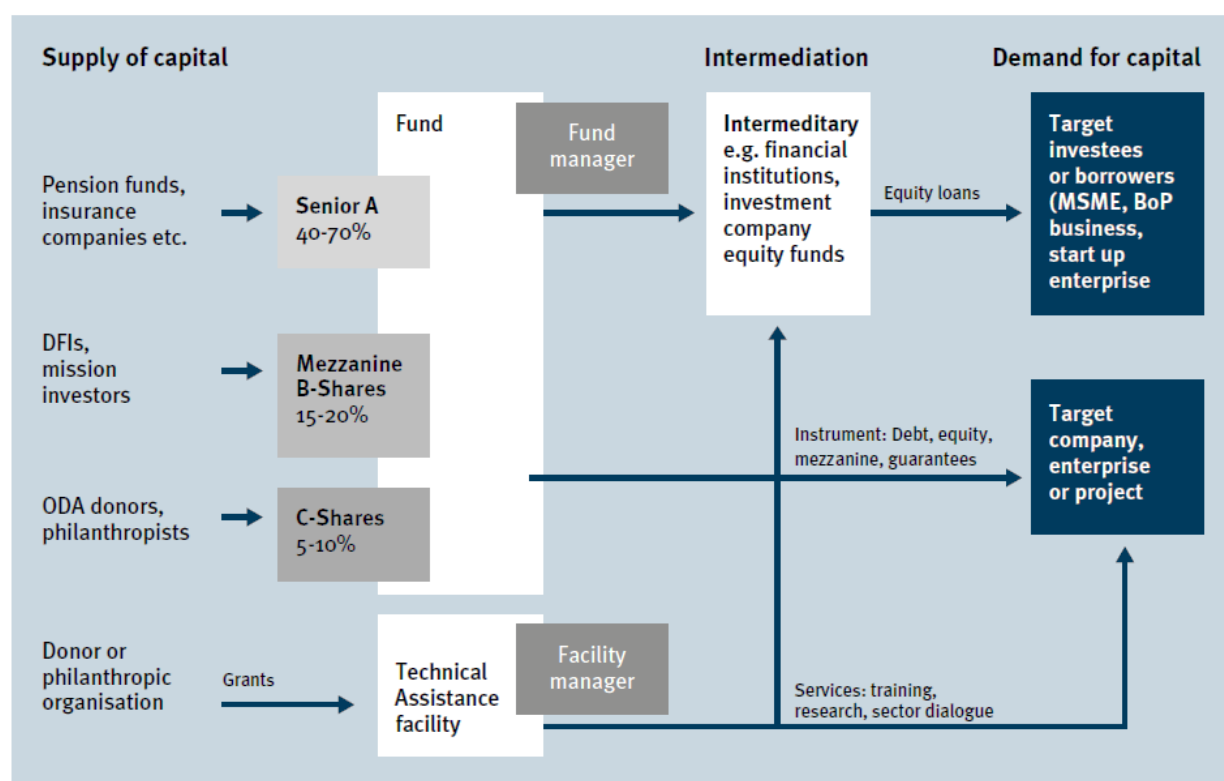
2.7. Collective investment vehicles: structured funds

Definition: Collective investment vehicles pool financial resources from different investors in financial or nonfinancial assets or both (OECD, 2021^[8]). They have a defined legal statute and can be divided into funds and facilities.

Structured funds are a good example of a collective investment vehicle. Structured funds are a financial approach that combines different asset classes with distinct risk and return profiles (also known as a waterfall structure). Public donors generally invest in the riskiest junior tranche, or Class C shares, which are tapped first if the fund experiences financial losses (KfW, 2020^[12]). DFIs typically invest in the mezzanine tranche, or Class B shares, which are drawn upon second. Private investors can buy Class A shares (the senior tranche), which are the least risky because they are protected from losses by the Class C and Class B shares. Class A shares are first to receive dividends and last to cover potential losses. The funding provided by structured funds is often accompanied by technical assistance, which is usually funded by grants from public donors.

Value proposition for funders: By offering different asset classes, structured funds cater to the development objectives of public donors and DFIs, and to the investment objectives of private investors. Private investors benefit from the reduced risk that the waterfall structure provides, enabling them to invest in sectors and regions with high development potential and higher perceived risk. Publicly funded donor agencies benefit from the revolving, or continuous, use of their funds for sustainable development. Further, structured funds pool money from a variety of sources to invest in many different countries and sometimes sectors, which enables risk diversification and reduces the risk of losses. For example, a fund that invests globally will only be affected to a limited extent by an economic downturn or a currency devaluation that solely applies to a specific region or country. Such risk diversification also allows the funds to invest in a number of very risky countries, sectors or financial intermediaries with high potential development impact as the associated risks are offset by economically more secure investments. Figure 2.2 shows the elements of the structured fund model.

Figure 2.2. Elements of the structured fund model



Source: Koenig and Jackson, (2016^[22]), *Private Capital for Sustainable Development: Concepts, Issues and Options for Engagement in Impact Investing and Innovative Finance*, www.convergence.finance/resource/5zik8CqnWEMCAgQ0eQiY0k/view.

2.8. Syndicated loans

Definition: Syndicated loans are defined as loans provided by a group of lenders (called a syndicate) who work together to provide funds for a single borrower (OECD, 2020^[23]). The main objective is to diversify the risk of a borrower default across multiple lenders and thereby encourage private participation. The lenders can provide the loan as a fixed amount of funds, a credit line, or a combination of both. The syndicate typically consists of two groups of lenders, i.e. the lead arrangers of a loan and junior participants. Lead arrangers establish the relationship with the borrower, negotiate the terms of the contract and set the price of the loan. The arrangers typically retain a portion of the loan and sell participations in the remaining portion of the loan to junior participants. The number of junior participants may vary according to the size, complexity and pricing of the loan. In development finance, loan syndications typically come in two different forms, involving different actors and different types of loan agreements. Firstly, the A/B loan structure which typically involves multilateral development banks (MDBs) as lead arrangers (A loan), who sell the remaining portion to commercial banks (B loan). In this case, the borrower only signs a contract with the lead arranger. The second model is where lead arrangers may seek to syndicate parallel loans from other multilateral development banks or sovereign entities. In this model, the lead arranger negotiates with the borrower in co-ordination with all parallel lenders. Every syndicate member then has a separate claim on the debtor, although there is just one single loan agreement (OECD, 2020^[23]).

Value proposition for funders: Syndicated loans aim at a more efficient sharing of risk, both in geographical as well as in institutional terms. In development finance, multilateral development banks often act as lead arrangers, aiming at encouraging private participation in the loan. The implicit assumption is

that private investors would not participate without the involvement of a MDB or other sovereign entities. Private investors are assumed to benefit from a range of de-risking measures, better monitoring systems and the preferred creditor status of MDBs (IMF, 2018^[24]). Lenders and borrowers are further expected to make savings in cost and time through this streamlined approach. Borrowers are not required to meet all the lenders in the syndicate to negotiate the loan agreement. Rather, the borrower only needs to negotiate the terms of the loan with the lead arranger. The arranger then mobilises other lenders, discusses the loan terms with them and determines how much each lender will contribute to the loan. In this regard, lenders must ensure that the loan portions will not be subject to double counting when measuring the ODA elements of the loan.

Loan syndications typically allow borrowers to attain large amounts of funds to finance capital-intensive projects, which a single lender would not be able to provide. The syndicate can structure the loan in a series of tranches, offering different types of interest, such as fixed or floating interest rates, or offer the various loan tranches in different currencies. This can be useful as it can provide greater flexibility for the borrower or reduce the borrower's risk of currency fluctuations.

3

Evaluating blended finance: Standards, principles and metrics

This chapter outlines common standards for collecting data in the blended finance and impact investing sphere. While these standards primarily pertain to impact measurement and management of blended finance interventions, they are also key to obtaining better and harmonised data for evaluations.

3.1. Common standards, principles and metrics

In recent years, there have been efforts by the evaluation community as well as from development finance institutions (DFIs), multilateral development banks (MDBs) and impact investors to harmonise the different ways in which impact is measured and to align respective standards, principles and result metrics accordingly. The alignment of evaluation designs with common standards, principles and metrics for data collection allows for a comparable way in which the impact of blended finance instruments and mechanisms can be assessed. This section provides an overview of common standards, principles and metrics in the field of blended finance.

3.1.1. Sustainable Development Goals

An increasing number of blended finance actors, both public and private, are aligning their data collection and analysis systems with the targets of the Sustainable Development Goals (SDGs). In late 2020, SDG Impact, a global initiative of the United Nations Development Programme (UNDP), released its SDG Impact Standards for private equity, venture and debt funds (SDG Impact, 2018^[25]). This guidance provides investors with a tool for assessing a fund's contribution to the achievement of the SDGs through the demonstration of responsible business practices and effective impact management and decision making. Funds are judged on four standards: strategy, management approach, transparency and governance. The guidance document provides a detailed list of specific performance and compliance indicators for each standard.

3.1.2. Evaluation criteria

Each evaluation of blended finance instruments and mechanisms should be guided by the evaluation criteria of the OECD DAC Network on Development Evaluation (EvalNet). The OECD publication, *Applying Evaluation Criteria Thoughtfully* provides a good starting place, explaining the criteria and outlining how they can be used for different types of evaluation (OECD, 2021^[26]). The OECD has defined six evaluation criteria – relevance, coherence, effectiveness, efficiency, impact and sustainability – and two principles for their use. The criteria describe the desired attributes of development interventions: all interventions should be relevant to the context, coherent with other interventions, achieve their objectives, deliver results in an efficient way, and have positive impacts that are sustainable. The use of the evaluation criteria should be linked to the purpose of the evaluation and can also be used to help identify evaluation questions. The criteria and principles were refined in 2019 to improve the quality and usefulness of evaluations and strengthen the contribution of evaluations to sustainable development (OECD, 2019^[27]).

3.1.3. Blended finance principles

In September 2020, the OECD issued the final version of its Blended Finance Principles Guidance (OECD DAC, 2020^[28]), which provides detailed advice on each of its five blended finance principles, including how to collect and analyse the data to ensure the principles are adhered to. For example, the guidance emphasises the need for a robust theory of change (ToC) to ensure that interventions target the achievement of specific SDGs. The ToC should also include a clear path toward both developmental and financial additionality. The guidance further highlights the need for regular stakeholder consultation throughout the investment cycle, the importance of transparency, data and capacity in the partnership, and ongoing monitoring of the intervention for transparency and results.

3.1.4. Impact standards for financing sustainable development

In March 2021, the OECD and UNDP published their jointly proposed Impact Standards for Financing Sustainable Development. The standards primarily aim to act as a reference point for public donors, helping them to ensure a high level of accountability on development impact when working through DFIs, as well as private intermediaries. Nevertheless, the standards were designed to be universally applicable and as such can also be used by private sector actors who want to measure the development impact of their SDG-related investments. The standards are framed around four interconnected and interdependent areas: impact strategy, impact management approach, transparency and accountability, and governance.

3.1.5. IRIS+ System of metrics

The IRIS+ System of metrics (GIIN, 2021^[29]), hosted by the Global Impact Investing Network (GIIN), has also been widely adopted. These metrics are typically used alongside customised, often proprietary measurement indicators. Over the past year, the GIIN has issued a series of reports aimed at documenting and understanding the performance of impact investments in four sectors: clean energy (GIIN, 2019^[30]), housing (GIIN, 2019^[31]), agriculture (GIIN, 2020^[32]), and financial inclusion (GIIN, 2020^[33]). Working collaboratively with investors, networks, and standard tools, the GIIN research team examined eight to twelve metrics for each of these sectors. In the case of agricultural investments, for example, these include increased sustainable farming practices, improved agricultural yields, increased rural income, and increased rural employment. In addition, the GIIN and the impact working group of the Tri Hita Karana (THK) Roadmap worked collectively to align the IRIS+ metrics with the THK checklist for assessing the impact of blended finance interventions on the poor. The aim is to harmonise the way in which impact on the poor is assessed both *ex ante* and *ex post* in blended finance interventions.

3.1.6. Indicators for measuring the gender impact of investments

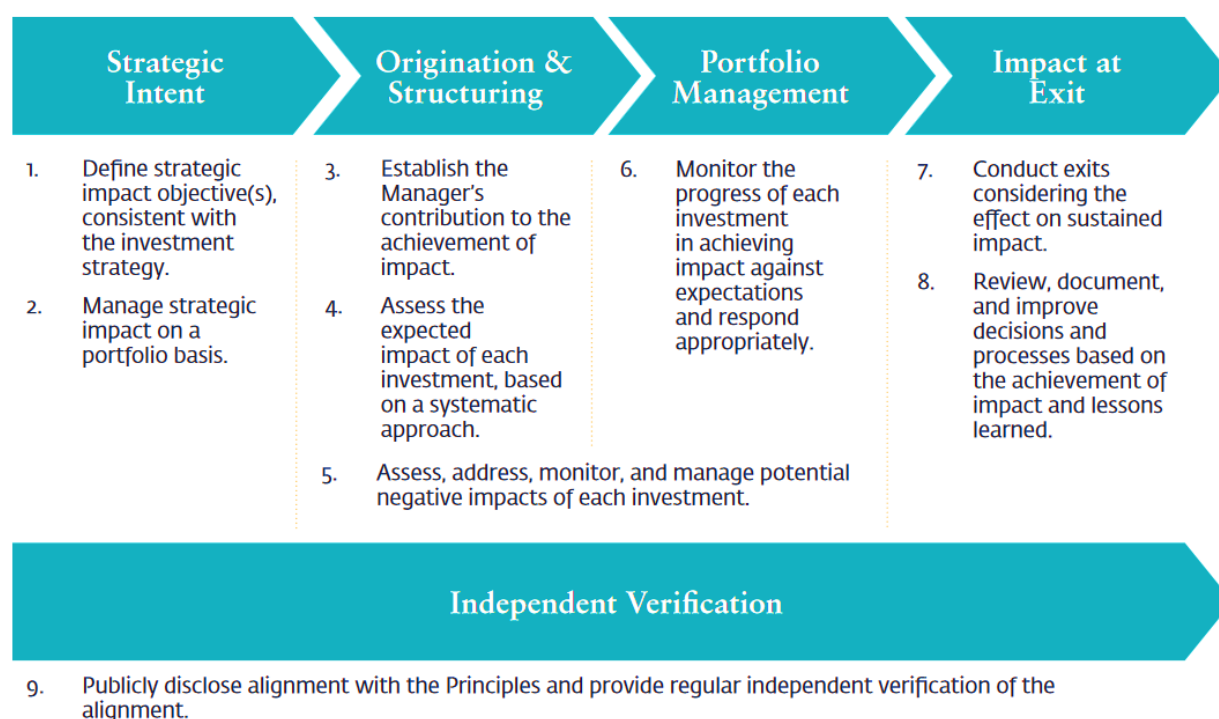
The 2X Challenge, which has 15 major DFIs as members, has committed USD 4.5 billion for financing women entrepreneurs in developing and emerging markets. The 2X Challenge, along with the CDC Group and the GIIN, has developed a guide to measuring performance of its core indicators – entrepreneurship/ownership, leadership/management, employment, and consumption – in alignment with the IRIS+ metrics (CDC Group and GIIN, 2020^[34]). This guidance can be applied to direct equity or debt investments, or indirect investments through financial institutions or funds. With the support of DFAT's Investing in Women's initiative, the Criterion Institute (2019^[35]) has produced a tool for funds and foundations to build their own gender lens investing action plans. The Caribbean Development Bank is finalising a technical guidance brief showing how national DFIs and development banks can design and monitor results-focused gender equality policies and action plans (Beaulieu, Jackson and Sammy, 2020^[36]). A growing number of funds and institutions, such as the Small Enterprise Assistance Funds (SEAF) and Pro Mujer, have created customised scorecards to measure their progress on gender lens investing. The collection and analysis of sex-disaggregated data throughout the investment cycle are

essential for successful application of all these tools, as are critical perspectives and local voice and choice (Jackson and de Morais Sarmiento, 2021^[37]).

3.1.7. Operating principles for impact management

In 2019, the International Finance Corporation (IFC) published the Operating Principles for Impact Management (IFC, 2019^[38]), which provide a reference point for investors to ensure that impact considerations are purposefully integrated throughout the investment life cycle. The principles include defining strategic impact objectives, assessing the expected impact, assessing potential negative impacts, monitoring the progress and conducting exits (see Figure 3.1). Signatories are obliged to provide an annual disclosure statement documenting their compliance with the principles. The IFC (2020^[39]) has also published a compendium of insights from the impact management and measurement activities of signatories to the principles.

Figure 3.1. Operating principles for impact management



Source: IFC, (2019^[38]), *Operating Principles for Impact Management*, www.impactprinciples.org/sites/default/files/2019-06/Impact%20Investing_Principles_FINAL_4-25-19_footnote%20change_web.pdf.

3.1.8. Other indicators and standards for measuring impact

The World Bank has developed a guide for assessing the organisational performance – including objectives and theory of change, mandate, governance and risk management, operations, including products and their interactions, and monitoring – of locally incorporated credit guarantee scheme (CGS) entities (often trusts or funds) that issue various types of guarantees to financial intermediaries and individual companies (Hansen, Rand and Winckler Andersen, 2020^[40]; World Bank, 2016^[41]). The guidance can be used by regulators, governments, third-party evaluators, or as a self-assessment tool by CGS entities themselves. The United States Agency for International Development (USAID), as part of its tool for the ongoing monitoring of guarantee schemes, has created a risk management system and

organisation representing good practice that can be adapted by other major guarantors (Carnegie Consult, 2016^[42]; USAID, 2013^[43]).

Since 2008, a forum of multilateral and bilateral development institutions meets regularly to help foster collaboration among DFIs to enhance impact measurement through common development indicators. The Harmonized Indicators for Private Sector Operations (HIPSO) are the first tangible result of this collaboration (HIPSO, 2020^[44]). The indicators reflect the commitment of 28 DFIs toward long-term collaboration in impact measurement. The Memorandum of Understanding includes 38 reporting indicators for DFIs' shared clients. Not only does this lead to lower reporting costs for the clients, but it also increases shared learning between DFIs on what works or not.

The mission of the Impact-Weighted Accounts Initiative (IWAI) at Harvard University, a joint project with the Global Steering Group on Impact Investment, is to lead “the creation of financial accounts that reflect a company’s financial, social, and environmental performance” (Impact-Weighted Accounts, 2020^[45]). By mobilising big data and monetising negative and positive impacts, the initiative generates financial accounting statements that integrate the costs and benefits of company performance into three impact areas: environment, employment and products. In late 2020, the World Economic Forum (WEF) published a report entitled “Measuring Stakeholder Capitalism: Towards Common Metrics and Consistent Reporting of Sustainable Value Creation” (WEF, 2020^[46]), the product of a consultative research process. This project produced a package of 21 core and 34 expanded metrics and disclosures which are organised into four pillars: governance, planet, people, and prosperity. Aligning with other standards systems, such as the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB) and the Task Force on Climate-related Financial Disclosures (TCFD) (though not IRIS+ or the SDGs), the core metrics are basic, quantifiable performance indicators that most large companies can report on “with reasonable effort”.

The Climate Bonds Initiative (2019^[47]) has developed a new version of the Climate Bonds Standard and Certification Scheme, a labelling programme for bonds, loans and other debt instruments. It applies rigorous scientific criteria to a proposed product to ensure that it is consistent with the goals of the Paris Climate Agreement to limit warming to under 2°C. The Standard is anchored in a detailed taxonomy of eligible investment areas and sectors. It provides for mandatory reporting on the allocation of proceeds to eligible projects and sectors. “Impact reporting is disclosure of metrics or indicators which reflect the expected or actual impact of eligible projects and assets, and is encouraged for all certified debt instruments, but is not mandatory”, notes the Standard (Climate Bonds Initiative, 2019^[47]).

The literature review shows that most of the standards outlined here have a clear focus on how operational data of blended finance interventions can be collected and used for monitoring purposes in a harmonised way. In addition, this paper argues that a harmonised approach for data collection is not only relevant for the impact measurement and management of blended finance interventions, but also vital to provide better and comparable data for subsequent evaluations.

4

Evaluating blended finance: Approaches and methods

To evaluate blended finance interventions, evaluators have a wide range of approaches and methods at their disposal. This chapter aims to match three of the most pressing evaluation questions that blended finance evaluations typically need to answer, namely, 1) how to evaluate the mechanisms and causal links in blended finance interventions; 2) how to evaluate front-end results; and 3) how to evaluate downstream results, with the most suitable methods and approaches that can be used to answer them. The advantages and disadvantages of these methods as well as their application to the different blended finance instruments and mechanisms are then discussed. The chapter also provides a list of proven results indicators at the output level of each instrument.

However, the matching among questions, results indicators and methods should be understood as a suggestion rather than a strict guideline. The most suitable method will always depend on the question concerned, the resources available and the most crucial information gaps relevant to the intervention. The methods described under one question are therefore not exclusive to that particular question but may also be useful for answering other questions. Finally, the methods described here are not necessarily exhaustive.

4.1. How to evaluate the mechanisms and causal links that underlie blended finance interventions

The actual mechanisms or pathways of change between blended finance interventions and outcomes are still not understood well. For example, field research on a sample of equity and debt investments in small and medium enterprises (SMEs) in Ghana by that country's Venture Capital Trust Fund, a public-private vehicle, found that some venture investments structured without impact intent actually generated significant social outcomes (Barnett et al., 2018^[48]). Evaluators and researchers can examine these “how” questions in detail by employing theory-based approaches. Other methods, such as quasi-experimental methods, may also be useful (see Section 4.3).

4.1.1. Approaches and methods

Theory-based approaches assess the contribution of an intervention to observed results by investigating an explicit theory of change (Government of Canada, 2012^[49]). They represent a way of structuring and undertaking analysis in an evaluation rather than a specific method or technique. Theory-based approaches help in opening the “black box” of a programme's intervention logic by assessing to what extent the intervention contributed to the observed results and to what extent the results were influenced by the context. Theory-based approaches can be used in combination with most evaluation methods and designs, such as experimental or quasi-experimental designs (Gugerty and Karlan, 2018^[50]; Puri and Khan, 2019^[51]). For example, a theory of change might indicate various pathways that lead to an outcome, and an experimental design might then test these pathways by incorporating them as treatment arms.

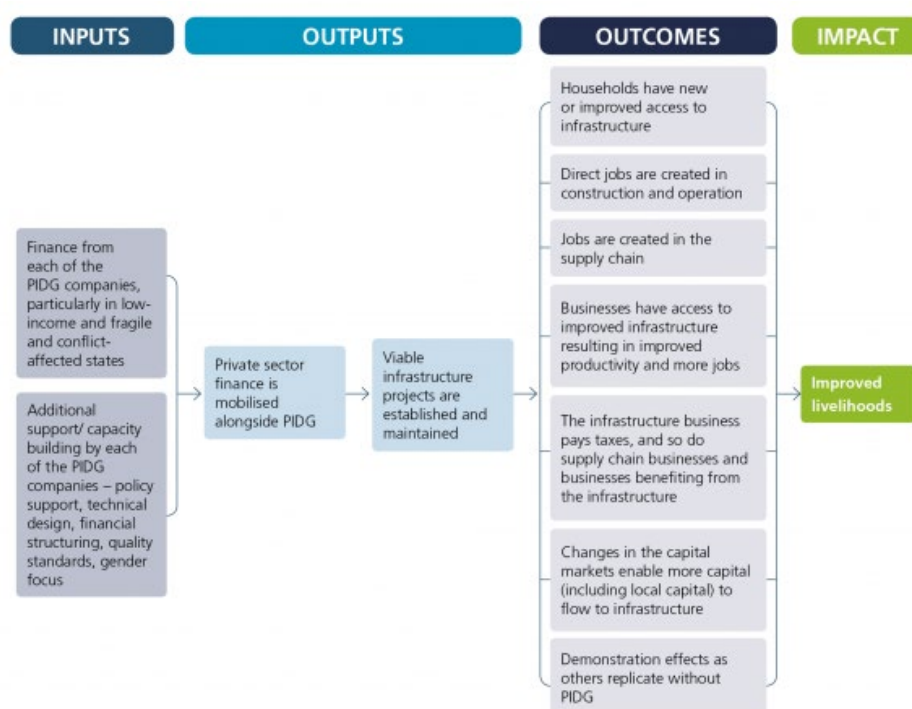
The realist evaluation approach aims to answer the question: “What works, for whom, in what respects, to what extent, in what contexts, and how? [...] realist evaluators aim to identify the underlying generative mechanisms that explain ‘how’ the outcomes were caused and the influence of context.” (Marchal, Van Belle and Westthorp, n.d.^[52]). Key steps in the approach include understanding the (implicit or explicit) theory of change of the intervention, developing and refining a set of context-mechanism-outcome (CMO) hypotheses, and using a variety of research methods, both qualitative and quantitative, to collect and analyse data on both the mechanisms and the outcomes (Westthorp, 2014^[53]). Similar to theory-based approaches, realist evaluation does not impose the use of a specific method or design.

A theory of change describes how the activities of an intervention contribute to a chain of results that leads to long-term impacts. While commonly referred to as theory of change (ToC) in evaluation, some investors refer to it as an investment thesis that expresses the intentionality of the mission and guides the entire investment cycle, from identification through to due diligence, investment agreements and term sheets, monitoring and, ultimately, exit. A ToC forms the basis of theory-based evaluation approaches, which aim to explicitly test the causal links and assumptions in the intervention’s ToC.

Examples of evaluations employing ToC analysis are found in assessments of most blended finance instruments and mechanisms, including equity and debt (Ogunforwora, 2020^[54]; PIDG, 2020^[55]; IFC, 2020^[39]; Jackson, 2013^[56]), guarantees (Carnegie Consult, 2016^[42]; Hansen, Rand and Winckler Andersen, 2020^[40]; USAID, 2013^[43]), development impact bonds (Joynes, 2019^[57]), performance-based grants (Jackson and Alvarez, 2018^[58]) and structured funds (Koenig and Jackson, 2016^[22]; Orth et al., 2020^[59]).

As an example, Figure 4.1 presents the ToC of the Private Infrastructure Development Group (PIDG). While evaluators and researchers can use ToC analysis for all blended finance instruments and mechanisms, such a comprehensive theory of change is still rare in the evaluation of blended finance instruments and mechanisms.

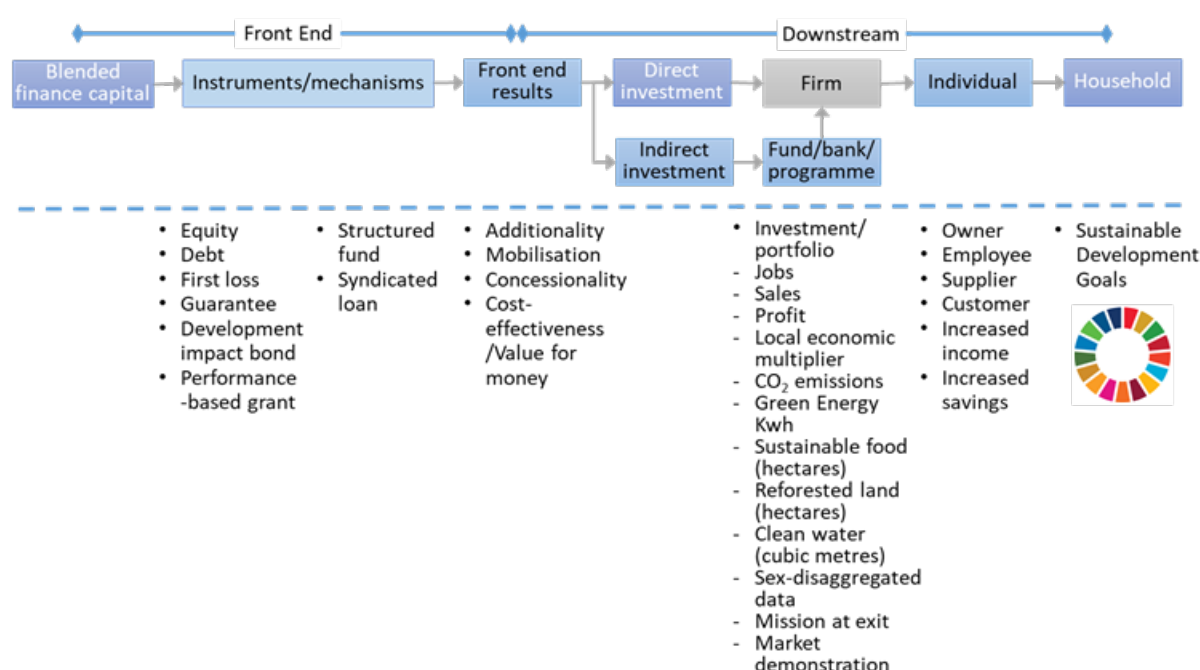
Figure 4.1. Example of a theory of change model



Source: Private Infrastructure Development Group, (2020^[55]), *Delivering Impact*, www.pidg.org/our-impact/delivering-impact/.

Figure 4.2 presents a generic model of a ToC that can be used when assessing blended finance instruments and mechanisms. It explicates the elements of both the main front-end and downstream results to be assessed. While the earlier downstream units of analysis that matter are the intermediary fund or bank and the individual investee company, it is the individual entrepreneurs or workers who are the vector of change at the far end of the results chain. They drive revenue and knowledge into the household to generate outcomes that can be, and more frequently are, aligned with the SDGs. This model ToC can be adapted to specific instruments and mechanisms, sectors, and types and stages of businesses. In addition, sex-disaggregated data collection and gender-based analysis (see Figure 5.1) can be built into the model, which can also be applied in conjunction with common standardised guidance such as the International Finance Corporation's (IFC)'s Operating Principles for Impact Management and industry-wide metrics such as the IRIS+ System (see Section 3.1).

Figure 4.2. Results chain for blended finance instruments and mechanisms



Theory-based approaches include contribution analysis and process tracing as the most prominent examples. These approaches can be useful for better understanding how blended finance instruments and mechanisms lead to results and why, in some cases, they fail to have an impact.

Contribution analyses are used to systematically test assumed causal links. They analyse the causal pathways in a ToC (in other words, the assumed links between activities, inputs, outputs and outcomes) to determine whether causal effects are plausible, why this is the case (or not) and the contributing factors (Mayne, 2011^[60]). To examine the causal pathways, previously defined assumptions and risks, as well as expected effects, are operationalised through indicators that are tested using the evidence gathered. For example, a blended finance intervention may assume that additional finance provided to a financial intermediary will lead to more loans extended to end beneficiaries. Evaluators using contribution analysis can then examine the evidence on key assumptions underlying this link, e.g. that the financial intermediary had previously been credit constrained, in addition to looking at the change in the number of loans granted. In turn, these analyses are used to assess the plausibility of the individual causal pathways (Mayne, 2012^[61]). In a next step, evaluators can then create a new model of how the activities lead to the results, similar to a ToC but based on the collected evidence and plausibility assessments.

Process tracing is a method that identifies an intervening causal process or, in other words, the chain or mechanism between an independent variable and the outcome of a dependent variable (George and Bennett, 2005^[62]). It uses detailed, within-case empirical analysis of real-world cases to assess hypothetical causal mechanisms. Process tracing differs from contribution analysis in that process tracing is a method, whereas contribution analysis is an approach. This means that contribution analysis provides a logic that can be used as overarching guidance, while process tracing specifies detailed steps to follow. For example, process tracing involves several specific tests that use evidence to either rule out causal hypotheses or to confirm that a mechanism is indeed at work (Befani and Mayne, 2014^[63]). Process tracing is useful for determining which of a series of alternative explanations is correct, while contribution analysis is more about the relative importance of various contributions.

Theory-based approaches are potentially applicable to all blended finance instruments and mechanisms. However, the causal links that the approaches aim to test will vary greatly between different instruments and mechanisms and their value propositions. For example, part of the value proposition of development impact bonds is that they are expected to stimulate innovation, which would therefore be included as one of the elements in the ToC and would thus need to be verified as part of contribution analysis or process tracing. Contribution analysis is also particularly useful for complex interventions, where assessment of sole attribution is difficult (INTRAC, 2017^[64]). This applies in particular to instruments and mechanisms with intermediary structures such as structured funds or development impact bonds, where the causal chains are complicated and the impact of the blended finance component is difficult to assess. In those cases, contribution analysis can not only assess the plausibility of impacts created by the intervention, but it can also pinpoint possible weaknesses in the value chain that may lower the probability of impacts. For its part, process tracing has been suggested as a tool for measuring additionality (see Section 4.2.4).

In addition to theory-based approaches, the mechanisms and causal pathways underlying blended finance can also be investigated using other methods. In particular, (quasi) experimental designs may be used to examine different causal pathways by setting up different treatment arms, comparing for example the performance of companies that receive a credit line and technical assistance with those that only receive the credit line. These designs are discussed in further detail in Section 4.3.

4.1.2. Discussion

Theory-based evaluation methods have great potential for analysing blended finance interventions because they look at how and why potential changes occur, and in what way the blended finance intervention contributes to such changes. By understanding “what works better for whom in what circumstances, and why” (Pawson and Tilley, 1997^[65]), evaluators are in a strong position to make specific, evidence-based recommendations to improve the functioning and impact of blended finance interventions. Contribution analysis can also help to uncover the dynamics underlying unintended negative results, for example if it is used to investigate a negative theory of change. A negative theory of change is constructed in the same way as a positive one, except that possible negative impacts rather than the intended positive impacts are at the end of the logic model (Rogers, 2014^[66]). By examining the negative theory of change, contribution analysis can then be used to assess the plausibility of negative effects, just as it normally assesses the plausibility of intended effects.

As opposed to experimental approaches, theory-based methods do not require randomisation, which is often not possible in blended finance operations (see Section 4.3). They can also be carried out *ex post* and do not require a baseline or control group. These factors can lower the financial and organisation burden of an evaluation and make it a more realistic option for smaller interventions and organisations. However, the resources required for theory-based approaches should not be underestimated. Evidence should be collected for every link in the theory of change, which can result in huge amounts of data if the causal mechanisms are complex.

Theory-based methods are unlikely to be useful in cases where the stakeholders of an evaluation are mostly interested in understanding whether changes occurred and possibly quantifying these. In those cases, quantitative methods such as experimental approaches may be more appropriate. Theory-based approaches are also not as good as experimental approaches at reducing selection bias and at identifying the changes that can be attributed to the intervention rather than to confounding variables.

Contribution analysis is likely to be more widely applicable than process tracing as it requires less detailed knowledge of the given case and less specialised methodological knowledge and expertise. To date, very few evaluators, scholars, or investors have been professionally trained in process tracing. However, using aspects of process tracing might be a realistic and less resource-intensive approach and will still improve the rigour of the assessment. For example, in an evaluation of structured funds, Orth et al. (2020^[59]) use elements of process tracing to systematically assess the strength of the evidence by looking at the quantity of sources and the interests they are assumed to pursue. Others have suggested combining the logic of contribution analysis with the specific steps prescribed by process tracing (Befani and Mayne, 2014^[63]). Still, another option is to combine process tracing with comparative methods such as comparative qualitative analysis (QCA). Given that the focus of process tracing is within a specific case, combining it with QCA is recommended when the goal is to make a cross-case inference (Beach and Pedersen, 2013^[67]).

4.2. How to evaluate front-end results?

It is useful to distinguish between front-end and downstream results in the investment chain. At the front end, evaluators must strive to estimate the future financial sustainability of the blended finance instrument used as well as its development orientation and additionality. Downstream results, on the other hand, refer to results further along the value chain, such as outcomes and impacts on end beneficiaries and, depending on the instrument, on financial intermediaries. The following sub-sections focus on front-end results and Section 4.3 deals with downstream results.

4.2.1. Financial sustainability and development orientation

Results indicators

Table 4.1 presents examples of results indicators that can be used to measure financial sustainability at the output level. In general, evaluators should, wherever possible, use already established, common indicators such as the IRIS+ System or HIPSO. If other indicators are used, they should always include a transparent explanation of the methodology applied to develop these indicators and comparability across indicators.

Table 4.1. Results indicators for financial sustainability

Instrument or mechanism	Profit/yield	Interest income	Costs (operating cost, etc.)	Repayment/default rates	Non-performing loans (NPL) in % of total loan portfolio	Equity internal rate of return	Valuation of shares over time	Debt to equity ratio	Dividends	Redemption conditions	Revolving use of funds	Financial return offered to A and B shareholders	Assessment of pre-agreed outcomes	Financial performance of investee (e.g. profit, credit history, NPL, etc.)
Equity	x		x			x	x	x	x	x				x
Debt (credit lines, syndicated loans, etc.)		x	x	x	x			x		x				x
Guarantees/insurance			x	(x)	(x)									x
Bonds	x	x	x	x				x						x
Performance-based grants			x										x	
Structured funds	x	x	x	x	x	x	x	x	x	x	x	x		x

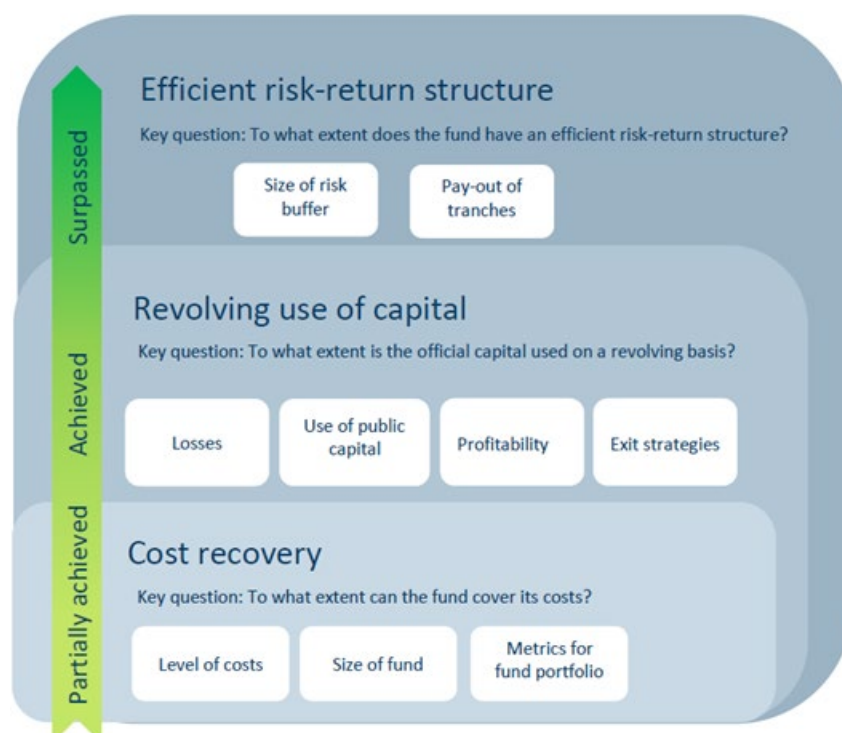
Evaluating the financial sustainability and development orientation of different instruments and mechanisms

Rating financial sustainability

A key aspect of front-end results is the financial sustainability of the blended finance instruments and mechanisms, which is often equated with the long-term ability of the intervention to cover costs, but also includes other aspects. While some of these aspects, such as cost recovery and the efficiency of the risk-return structure, can be considered minimum requirements for a functioning blended finance instrument, others may be considered more advanced aspects of financial sustainability. It is therefore useful to create a rating scale, which indicates different levels of financial sustainability depending on the fulfilment of specific criteria. Such a rating scale also serves the purpose of comparing different instruments and mechanisms with each other on an objective basis. The rating scale used by Orth et al. (2020^[59]), which was developed for structured funds (see Figure 4.3), includes further examples of metrics used to assess financial sustainability which can be applied to different blended finance instruments and mechanisms. The data for most of these metrics should be available through standard monitoring documentation and document review of contractual agreements. For some of the metrics that are qualitative rather than quantitative, such as for exit strategies (see Box 4.1), evaluators may need to conduct interviews or surveys with managers and donors.

After analysing and rating the financial sustainability of a blended finance instrument, comparisons can be drawn to other blended finance approaches or more traditional development finance instruments and mechanisms such as credit lines. The latter offer a good benchmark for structured funds given that both instruments follow similar development objectives and make use of debt financing. Credit lines can also offer a suitable reference point for comparing loan volumes, cost structures and the control options of donors (Orth et al., 2020^[59]). Further comparisons can be drawn between performance-based grants and traditional grant financing schemes. Evaluators can compare the level of results achieved as well as the costs for determining and monitoring the results.

Figure 4.3. Example of a rating scale for financial sustainability



Source: Orth et al. (2020^[69]), Structured Funds. A Balancing Act between Financial Sustainability and Development Impact, <https://nbn-resolving.org/urn:nbn:de:101:1-2021012011363095203316>.

It is important to consider the specific characteristics of the instrument for the assessment of financial sustainability. For example, the indicators for financial sustainability described here mostly apply to instruments and mechanisms that are set up with the aim of operating on a financially sustainable and revolving basis, such as structured funds and credit lines.

Box 4.1. Evaluating exits

In mainstream investing, “exit” means liquidating the investor’s holdings in a fund or company with financial returns that meet or exceed the investor’s originally planned targets. In development finance or impact investing, however, exits must also be assessed for their fidelity to the social or environmental objectives or “mission” of the original investment. To what extent will the new owner that has purchased the interest being sold continue to pursue the social or developmental agenda of exiting investors (often public investors)?

Results indicators to consider include the internal rate of return for investors, the environmental and social mission of the investment (as defined in mission statements, theory of change, investment theses or legal agreements) as well as the social and development agenda of the new owner.

Theory-based methods will be central to evaluating exits in development finance or impact investing (see Section 4.1), including analyses of the investment theses or theories of change for the funds under study, as well as those for investee companies involved in exits. Key informant interviews with representatives of general partners, limited partners and portfolio companies in the exit sample will also be important. Probing each fund’s due diligence process and criteria can provide insight on the extent to which the investee firms’ business models and products and services are embedded into their impact missions. Further, evaluation teams will require familiarity with legal agreements between general and limited partners and between funds and portfolio companies, as well as the regulatory environments within which these agreements are executed. Evaluations involving comparative case studies and applying cost-benefit analysis to exited investments could also provide valuable insights and enable evaluators to assess value for money to taxpayers or investing institutions.

Designing impact evaluations to consider the downstream results of exits also offers interesting possibilities, especially when these involve companies delivering products or services on a large scale, such as in renewable energy or land conservation. For example, experimental or quasi-experimental designs involving random samples of households in comparable districts that accessed off-grid solar lighting systems and those that did not, both before and after the exit could be carried out.

Initial research has examined datasets of exits spanning 15-year periods (Cambridge Associates, 2017^[68]; Cambridge Associates and GIIN, 2017^[69]; Gray, 2015^[70]). It will take impact investing and blended finance actors another ten to fifteen years to build a larger critical mass of exits across all sectors which can be examined in depth.

Assessing development orientation

The goal of blended finance in development co-operation is to mobilise private funds to support sustainable development in developing countries (OECD, 2018^[1]). The development orientation of a blended finance instrument is therefore another key component of its front-end results. It is closely related to the criterion of relevance, which asks whether the intervention is doing the right things. More specifically, it considers “the extent to which the intervention objectives and design respond to the beneficiaries’, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change” (OECD, 2019^[27]). A further question that evaluators might ask is whether this alignment also applies to the needs of particularly disadvantaged or vulnerable individuals, groups and organisations.²

Assessing the development orientation of a blended finance instrument can include looking at:

- objectives and goals
- alignment with the SDGs and other official development strategies, including those of the donor and recipient countries, and to what extent the intervention responds to local needs

- flexibility of the instrument in adjusting to changing circumstances and goals
- management and governance, including:
 - quality of reporting standards
 - decision-making powers of public donors
 - division of tasks between investors
 - possibilities of conflicts of interest and procedures for dealing with them.

As with financial sustainability, assessing development orientation depends on the characteristics of the instrument and mechanism under review. It is important to consider whether the structure of an instrument allows for changes in the development orientation of the intervention during the implementation phase or solely when the intervention is being set-up. Different structures also mean that some stakeholders may only be involved in the set-up stages and not during the implementation. For example, in structured funds, the decision-making powers of public donors are limited once the fund has been set up. Public donors tend to have more sway when the instruments or mechanisms, such as loans and guarantees, are offered on an individual basis to companies or projects. Generally, instruments and mechanisms such as structured funds that pool resources can only indirectly ensure development orientation through, for example, investment guidelines. Others, such as performance-based grants, provide for much more direct control over effects on the beneficiaries.

Are we using the right instrument?

In addition to understanding the merits and drawbacks of a particular intervention, evaluators also need to consider what other options (e.g. blended finance instruments and mechanisms) were available to achieve the intervention's objectives and whether any of them might have led to better results or similar results at a lower cost. This analysis reflects the criterion of efficiency or how well the resources are being used. The criterion assesses "the extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way" (OECD, 2019^[27]). It refers to the ratio between inputs and achieved results. Questions that evaluators might ask include: To what extent are the inputs of the measure used economically in relation to the outputs produced? By what other means and at what cost could the effects have been achieved otherwise?

To analyse the appropriateness of a particular blended finance instrument, evaluators have a spectrum of options at their disposal. On one end of the spectrum, they might look at the specific characteristics of blended finance instruments and mechanisms to understand whether another instrument might have been appropriate. They could also interview key stakeholders to understand the reasoning behind their decision. The other end of the spectrum allows evaluators to engage in more systematic and formalised methods such as cost-benefit analysis. Cost-benefit analysis (CBA) is a longstanding public policy tool rooted in economics and accounting. It involves systematically computing the net present value of a set of alternative projects or policies by monetising the negative and positive impacts of the interventions to key stakeholders (Boardman et al., 2001^[71]). CBA can be used to assess completed and potential courses of action. For potential courses of action, such as the use of different blended finance instruments and mechanisms, the calculations provided by CBA are employed to compare the total expected cost of each option with its total expected benefits.

Social return on investment (SROI) is another "systematic way of incorporating social, environmental, economic and other values into decision-making processes. By helping reveal the economic value of social and environmental outcomes it creates a holistic perspective on whether a development project or social business or enterprise is beneficial and profitable" (Salverda, n.d.^[72]). With roots in cost-benefit analysis and accounting, and links to both sustainability accounting (Nicholls, 2017^[73]; Nicholls and Pearce, 2010^[74]) and the IRIS+ standards and metrics (Social Value UK, 2016^[75]), SROI has been developed and refined by the Social Value International network and the UK government, building on earlier work by the Roberts

Economic Development Fund in the United States (Yates and Marra, 2017^[76]). Calculating the social value created by an intervention, practitioners of SROI require sets of granular, time series data for meaningful analysis, and specialised training in the SROI technique for evaluators.

Discussion

In summary, financial sustainability and development orientation are important concepts for assessing the value of a blended finance instrument. However, they also need to be considered in relation to each other. This is because there is usually a tension between the two: instruments and mechanisms that are highly financially sustainable typically need to sacrifice aspects of development orientation, and vice versa. For example, an equity investment is much more likely to generate higher financial returns and minimise the possibility of losses if it invests in a market leader in a middle-income country rather than a Tier 3 microfinance institution in a least-developed country, where the development orientation and development additionality is arguably higher.

In addition to assessing the front-end results of an intervention, evaluators also need to assess the extent to which the instrument that was chosen for the intervention was the most appropriate one for achieving the objectives of the donors. To accomplish this, efficiency needs to be considered in addition to financial sustainability and development orientation. Cost-benefit analysis and social return on investment are useful tools for addressing this issue because they make it possible to compare different options. They are also often used *ex ante* which can help policy makers choose the most suitable instrument to achieve their goals. However, a review of the literature did not identify applications of CBA specifically to blended finance investments. Nor, with the important exception of Joynes (2019^[57]) concerning development impact bonds, were formal value for money (VfM) exercises found to have been conducted. Looking ahead, VfM studies may gain prominence among public organisations in a post-COVID era of massive government debt and scarce and contested operating resources in the public sphere. Finally, it is also worth noting that the practice of evaluating blended finance instruments and mechanisms has to date largely failed to tap into the existing pool of social accounting tools, including SROI. Nicholls' (2018^[77]) theory-building and empirical work suggests "successful social impact accounting processes both give voice to service users and produce more accurate performance data".

4.2.2. Mobilisation of capital

Mobilisation is a core purpose and feature of blended finance. It refers to the amount of commercial capital mobilised by concessional capital (2019^[78]; WEF and OECD, 2015^[79]). Some organisations also count the capital leveraged from publicly funded DFIs and private actors in their calculation of mobilised capital.

Table 4.2 presents an overview of exemplary results indicators that can be used to measure mobilisation at the output level.

Table 4.2. Results indicators for mobilisation of capital

Instrument or mechanism	Mobilisation of private capital				Subsidy costs to mobilise private investors	Pricing of the financial return offered to private investors
	In absolute terms	As a ratio to official capital invested	For local and foreign capital	For class A and B shares		
Equity	x	x	x		x	x
Debt (Credit lines, syndicated loans, etc.)	x	x	x		x	x
Guarantees/insurance	x	x	x		x	x
Bonds	x	x	x		x	x
Performance-based grants	x	x	x		x	
Structured funds	x	x	x	x	x	x

Evaluating the mobilisation of capital through different instruments and mechanisms

Different actors in international development use different approaches to measuring private capital mobilisation, highlighting different priorities. Approaches differ, for example, in whether they attempt to measure the contribution of each donor to the mobilised capital rather than crediting only the largest official donor, and whether they consider the risk that donors have assumed by being invested in different tranches. This section discusses approaches to measuring mobilisation of capital through equity, debt, guarantees, structured funds and syndicated loans, focusing mostly on OECD guidelines, as these are a primary reference point for members of the Development Assistance Committee (DAC).

Equity instruments

Measuring the mobilisation of capital through equity investments assumes that equity investors take on a higher risk than mezzanine and debt investors (OECD, 2020^[23]). It follows that official equity investments should have a stronger effect on mobilising private finance than official mezzanine or debt investments. The OECD measurement guidelines take these factors into account by attributing 50% of the amounts mobilised from the private sector to official investors according to the risk taken. If there are several official donors that take different levels of risk, the full 50% is attributed to those investing in equity. The remaining 50% is then attributed to all official investors according to their official share in the company, regardless of the risk taken.

Debt instruments

Measuring the mobilisation of debt instruments depends on whether the debt consists of debt investments in a company or of credit lines. Measuring the leveraging effect of debt investments follows the same logic as the measurement of mobilisation by equity instruments. Debt investors might be included in the first 50% of the mobilised capital if there are no investors in a more senior tranche. In addition, they will be attributed with the pro-rata share of their investment in the company. Credit lines are more complicated to calculate, however, because borrowers decide how much of the credit line they draw down at any given time. They are also used differently from loans, as they usually aim to support the private sector through local financial institutions (LFI). The total private capital mobilised is calculated as the sum of top-up funds from the LFI (e.g. additional private funds raised by the LFI) and equity investments by the private end-borrowers (OECD, 2020^[23]). The amount of private capital mobilised by each credit line provider is then attributed pro-rata to the financial share of each investor.

Guarantees

Measuring the mobilisation of guarantees assumes that the private investors would not have made their investment without the official guarantee. The amount mobilised by a guarantee therefore equals the total amount of the instrument covered by the guarantee, regardless of the exposure value of the guarantee (OECD, 2020^[23]). If, for instance, a private investor provides a loan of USD 10 million to a development project that is covered by a 70% guarantee, the amount of USD 10 million will be considered as the amount that has been mobilised. If the guarantee is provided by multiple actors, the private capital mobilised is attributed pro-rata to all guarantors according to the amount guaranteed by each. Other approaches use the value of the resources backed by the guarantee as mobilised capital (Halvorson-Quevedo and Mirabelle, 2014^[80]). More detailed evaluations of guarantees may examine empirical data and performance implications to understand exactly to what extent guarantee commitments were drawn upon by the borrower across multiple guarantors.

Structured funds

There are broadly four different approaches to measuring the mobilisation of structured funds and similar applications of first loss capital. In the first approach, the private capital that has been invested in the structured fund is measured at face value regardless of the amount of other investments. In the second approach, the total official investment in the fund is measured in relation to all the private investment in the fund. In the third approach, which is used by the OECD DAC, the mobilisation of private capital is calculated for each donor. This metric considers the amount of capital invested by the donor as well as the risk tranche of the donor's investment. This means that the riskier the tranche that a donor invests in, the higher the amount of private capital mobilised will be attributed to that donor. In the fourth approach, the mobilisation of private capital is calculated based on the risk buffer (in other words, how much private capital could theoretically be mobilised) and how much is actually mobilised.

Syndicated loans

The measurement method for syndicated loans takes into account that the loan is provided by a group of lenders and that it is usually arranged by one institution, which is therefore credited with a larger share of the mobilised capital. According to the OECD's approach, 50% of the amount mobilised is attributed to the official arranger, with the remaining 50% attributed to all lenders, pro-rata to their individual financing shares in the syndicated loan.

Discussion

The methods described above for measuring mobilisation are based on several assumptions that cannot always be verified. For example, a key assumption is financial additionality. In other words, it is assumed that the private investor would not have invested without the official contribution. However, verifying financial additionality is difficult because of the incentives that DFIs have to report high additionality. It is likely that at least some of the private investments were made independently from the official contributions and that the calculations of mobilised amounts are therefore an overestimation.

A further difficulty is the comparison of mobilisation achieved by different instruments and mechanisms. The instruments and mechanisms differ significantly in their structure, the way they mobilise private capital and the way that this mobilisation is measured. It is therefore difficult to compare the mobilisation of different instruments and mechanisms such as bonds and funds with each other, especially without referring to the differences in the measurements. This is a particular problem in evaluating guarantees, which tend to report the highest amounts of mobilisation. While the OECD uses the total value of the project, as described above, others argue that using the value of the resources backed by the guarantee is the best approach (Halvorson-Quevedo and Mirabelle, 2014^[80]), as it reduces the risk of overstating the

effect of the guarantee and of double counting. Furthermore, these authors caution against using leveraging ratios in assessing guarantee effects. They argue that such a ratio calculation must determine a value for “donor effort”, which requires estimating the probability of default and thereby discounting that value. They find that designing and implementing a common methodology for doing this would be complicated and time consuming.

Generally, a high mobilisation ratio does not automatically mean high donor additionality. In fact, an alternative interpretation of high amounts of mobilised capital could be that the investment was so attractive to private investors that it did not really need the donor’s contribution. Evaluators should therefore not infer financial additionality from mobilisation, but instead examine both concepts individually and in combination.

Finally, in interpreting mobilisation values, it is important to consider context – particularly the level of market development – as it influences private sector capital mobilisation in significant ways.

4.2.3. Factors that drive mobilisation

In addition to measuring how much a blended finance intervention has mobilised in private capital, it is just as important for evaluators to understand the factors that have encouraged or discouraged private actors from investing, so that evaluators can make recommendations that will improve mobilisation in the future. Some of these factors are also discussed in Principle 2 of the OECD DAC’s “Blended Finance Principles Guidance” (OECD DAC, 2020^[28]). The methods described here are comparative, which means that they draw insights from the comparison of different cases.

Results indicators

The following table presents an overview of exemplary results indicators that can be used to measure the factors that drive mobilisation at the output level.

Table 4.3. Results indicators for factors that drive mobilisation

Instrument or mechanism	Financial return to private investors	Provided risk buffer/ level of risk	Track record of success	Existence of a financial rating	Level of concessionality	Social and environmental impact
Equity	x	x			x	x
Debt (Credit lines, syndicated loans, etc.)	x	x			x	x
Guarantees/insurance	x	x			x	x
Bonds	x	x	x	x	x	x
Performance-based grants	x				x	x
Structured funds	x	x	x	x	x	x

Evaluating the factors that drive mobilisation

Comparative case studies and qualitative comparative analysis (QCA) are suitable methods for investigating factors that drive mobilisation because they enable the researcher to make substantiated claims that generalise across cases. A simpler approach that would require less time and resources might be a series of semi-structured interviews with private investors in the fund, inquiring about the reasons that led to their investments.

Case studies have long served as a research tool for development evaluators. Through case studies, evaluators gain an in-depth understanding of an intervention as well as its context (Morra Imas and Rist, 2009^[81]). In comparative case studies, researchers analyse and synthesise the similarities, differences and patterns across several cases that share a common focus or goal. This makes it easier to generalise about causal questions, such as why a particular intervention works or does not work (Goodrick, 2014^[82]). Influenced by Yin (2017^[83]), Stake (2006^[84]) and other methodologists, applications of this approach in development evaluation use qualitative or quantitative data, or both. They typically involve site visits, data gathering through documentation and files, interviews, direct observation, participant observation and physical artefacts, as well as drawing on internal monitoring data collected by the interventions under study.

Qualitative comparative analysis (QCA) is a research method that has attracted recent attention in the field of development evaluation (Porter and O'Halloran, 2012^[85]). Particularly suited for small-sample studies, QCA employs Boolean algebra to convert relatively small numbers of cases into quantitative data to identify relevant causal patterns. In that way, causal claims can be tested without using a counterfactual (Davies, 2020^[86]). In QCA, interrelationships between states are analysed as quantity relations, which are then interpreted as conditions (Wagemann and Siewert, 2018^[87]). The approach can make extensive use of existing information and can be a useful tool for developing theory (Davies, 2020^[86]). This analytical method is mostly used when seeking possible causes of a given outcome, and when assumptions about the interrelationships can be interpreted as conditions.

Comparative case studies or QCA are also potential approaches for evaluating factors that drive mobilisation of any blended finance instrument or mechanism. These could be input or output oriented and should be based on theoretical knowledge and empirical insights (Schneider and Wagemann, 2010^[88]). For example, evaluators might examine the quantum of official investments, the number of official investors, the maturity of the intervention and the regions and types of companies/institutions that the instrument or mechanism invests in (Orth et al., 2020^[59]). The variables included in QCA would vary depending on the characteristics of the instrument or mechanism being evaluated. For example, a key feature of development impact bonds and performance-based grants, but not other blended finance instruments and mechanisms, involves collaboration with a service provider. Aspects such as the reputation and experience of the service provider are likely to influence investors' decisions and could therefore be added as variables in the QCA.

While comparative approaches are not in themselves limited to a particular instrument or mechanism, they do require several interventions that use the same blended finance instrument or mechanism and can be compared with each other. For instance, it makes little sense to draw conclusions about regions that encourage private investments from comparing a guarantee that invests in Africa with a fund that invests in Asia. Instead, evaluators can use comparative approaches to evaluate an instrument or mechanism as a whole (e.g. guarantees as an instrument in German financial co-operation) or several applications of an instrument or mechanism (e.g. several different guarantees used to mobilise finance for investments in renewable energies). If evaluators aim to evaluate just one intervention, they will require detailed data on the mobilisation of other comparable interventions, which would most likely be unavailable. Comparative approaches are therefore not appropriate for instruments or mechanisms that vary greatly in their specific design and structure, such as performance-based grants.

Discussion

Although QCA and comparative case studies are more expensive than other qualitative methods such as interviews, they are likely to provide more reliable results. Interviews on factors that drive mobilisation face three main issues. First, investors may be inclined to focus mostly on reasons that are socially desirable, such as the desire to make SDG-relevant investments, which might lead to an under-estimation of the financial aspects. Second, there is little incentive for investors to discuss their possibly confidential reasons with evaluators. Third, to understand factors that might hinder investment, evaluators would also need to interview investors that chose not to invest in the intervention. Those investors would be difficult to identify and might also not be inclined to disclose their reasons. QCA on the other hand does not depend on information from interviews but can use any type of information that differentiates the interventions from each other, such as the sector, region, public investors, track record and level of pay-outs. This method therefore reduces the risk of bias, although the (subjective) judgement of the evaluator is still needed to assign values to different conditions, such as deciding what constitutes a strong or weak track record.

Both methods, the QCA and comparative case studies, can be applied separately or in combination. According to Schneider and Wagemann (2010^[88]), QCA is particularly useful if combined with conventional comparative case studies because such studies provide familiarity with the cases which is required for generating the data and interpreting QCA results in a meaningful way. It is also possible to nest comparative case studies within larger experimental or quasi-experimental evaluations, to generate “evidence about how the context has influenced patterns of outcomes” or test the scope and transferability of certain causal mechanisms (Goodrick, 2014^[82]).

4.2.4. Additionality

The concept of additionality is discussed in detail in the OECD Working Paper developed by Work Stream 2 of the EvalNet Working Group on Evaluating Blended Finance (Winckler Andersen, Hansen and Rand, 2021^[89]). The paper outlines various definitions of financial and development additionality, analyses how they relate to impact and causality, and discusses different approaches to assessing these concepts of additionality.

It is generally agreed that an intervention has “additionality” if it will lead, or has led, to effects that would not have occurred without the intervention (Winckler Andersen, Hansen and Rand, 2021^[89]). Financial additionality and development additionality are the most common forms of additionality that are investigated and discussed within blended finance operations. The OECD (2016^[90]) defines an official transaction to be financially additional if it “is extended to an entity that cannot obtain finance from local or international private capital markets with similar terms or quantities without official support, or if it mobilises investment from the private sector that would not have been invested otherwise”. Conversely, the OECD defines development additionality as “... the development impacts that arise as a result of investment that otherwise would not have occurred” (OECD, 2016^[90])³

Results indicators

The following table presents an overview of exemplary results indicators that can be used to examine the financial and development additionality of a blended finance intervention at the output level.

Table 4.4. Results indicators for financial and development additionality

Instrument or mechanism	Financial additionality					Development additionality	
	Additional capital raised since financing	Capital amount offered vs. capital available in the market	Local currency financing	Longer loan tenors/grace periods	Introduction of the instrument/mechanism in a new market or sector	ESG performance improvements	Instrument/mechanism provides first-time access to funding
Equity	x	x	x		x	x	x
Debt (Credit lines, syndicated loans, etc.)	x	x	x	x	x	x	x
Guarantees/insurance	x	x	x		x	x	x
Bonds	x	x	x		x	x	x
Performance-based grants	x	x			x	x	x
Structured funds	x	x	x	x	x	x	x

Evaluating the financial and development additionality of different instruments and mechanisms

Financial additionality

In their working paper, Winckler Andersen et al. (2021^[89]) present an overview of the methodological approaches used in evaluations and studies to examine financial and development additionality. To evaluate financial additionality, the authors recommend that both *ex ante* and *ex post* assessments be used. *Ex-ante* assessments may be based on market information and on analyses of possible externalities of the project. Further examples include company-level factors such as insufficient funds to self-finance the project, the lack of knowledge or competencies to design and implement a poverty-reducing business model, and the lack of duplication with other possible forms of donor support (Heinrich, 2014^[91]). *Ex post* assessments on the other hand are usually conducted using counterfactual approaches (Winckler Andersen, Hansen and Rand, 2021^[89]). While methodologies relying on counterfactual approaches are relatively well established, the challenge remains to construct the relevant counterfactual in blended finance interventions (EBRD, 2018^[92]).

Escalante et al. (2018^[93]) propose two approaches to examining the question of additionality. One approach is qualitative and uses a multi-criteria assessment framework applied through case studies. The other is quantitative and explores additionality through a composite index that assesses the investment environment in countries where investments took place. The authors' approach is tailored to private equity instruments but might also be applied to other forms of financing.

However, as Carter, Van de Sijpe and Calel (2018^[94]) point out, verifying without doubt that additionality is present is impossible, in part because of the self-interest of DFIs in claiming high additionality even if this is unsubstantiated by evidence. Even econometric models using cross-country data to estimate the degree of additionality are "clearly open to the possibility of bias". For more accurate assessments, they suggest, "it could be fruitful to find natural experiments that allow researchers to identify endogenous variation in DFI budgets". This points to quasi-experimental methods, which are well suited to assessing counterfactual causal claims. At the micro level of the firm, they find that to accurately assess financial (or investment) additionality, "we need to estimate what would have happened had the DFI not invested", although private investors usually protect the private information they use to inform their decisions and building such a

database is challenging. The authors therefore argue that DFIs should embrace uncertainty and look at the likelihood of additionality rather than trying to quantify it. To estimate whether additionality is likely, Carter, Van de Sijpe and Calel (2018^[94]) suggest theory-based approaches such as process tracing (see Section 4.1).

Multilateral development banks on the other hand have mostly relied on frameworks that systematise the criteria and evidence used to determine additionality. The *Multilateral Development Banks' Harmonized Framework for Additionality in Private Sector Operations* (IFC et al., 2018^[95]) aims at increasing the understanding of additionality as a concept with clear definitions and guidance on how it is applied. In terms of financial additionality, the framework suggests a variety of proxy measures for private sector operations. These include evidence on market benchmarks and proxies for market behaviour as well as the client's inability to obtain commercial financing and/or willingness to pay for multilateral development bank support.

A recent evaluation by the Independent Evaluation Group (IEG) of the IFC's blended finance operations checked the following factors in their assessment of financial additionality: the economic case for blended finance (analysing whether alternative sources of finance would have been available or if a subsidy was required to ensure the financing); crowding in and minimum concessionality to realise the transaction; commercial viability and sustainability; market effects such as competition, market development and extending good business practices; as well as the promotion of environmental and social standards (World Bank, 2020^[96]).

Different blended finance instruments and mechanisms require the use of different methods and criteria for examining additionality. The multilateral development banks' framework caters to this by suggesting proxies for specific instruments and mechanisms. One proxy is its innovative potential in a new market or sector. Introducing an instrument or mechanism into a new market or sector where it has not been used before might serve as a first indicator of being financially additional. In the case of credit lines to banks and other financial intermediaries, evaluators should analyse a list of funding sources that the financial intermediary has used in the past. Furthermore, the maturity structure of the intermediary's deposits and loans might provide evidence of their capacity to access stable long-term resources. In terms of guarantees and other risk-sharing instruments and mechanisms, financial additionality can be assessed by examining reductions in funding lines that the investee received in the past as well as looking at the rating of capital providers that have extended capital relief to the beneficiary. The use of equity finance is still rare in development and emerging markets. However, when it is used, it often serves as a vehicle for financial additionality. In evaluating the instrument or mechanism's additionality, evaluators should analyse the investee's ability to take risk and to leverage further debt finance as well as the investor's influence on the corporate governance of the investee.

In some cases evaluators compare blended finance interventions with similar interventions that are financed purely by private capital to understand the value added of the public component. This comparison is more likely to be useful for some instruments and mechanisms than others. For example, the regions and sectors that a purely private microfinance fund invests in, as well as the type of financing it offers (e.g. hard or local currency), may be compared with the investments and financing of a structured fund that includes official investment (Orth et al., 2020^[59]). Similarly, evaluators might look at the differences between investments that are covered by a guarantee or insurance and those that are not. However, at least some information on private interventions must be publicly available for this approach to be effective, which will probably be limited to information for regions and sectors. In addition, some instruments and mechanisms such as development impact bonds and performance-based grants do not have clear private counterparts because private investors would not usually invest in social projects that do not generate a financial return.

Development additionality

In general, impact evaluation using experimental or quasi-experimental methods (see Section 4.3) is the most rigorous approach for assessing development additionality because it provides the closest approximation to the counterfactual, which is what would have happened without the intervention. For example, McKenzie, Assaf and Cusolito (2017^[97]) looked at the impact of government subsidies on improving employability in Yemen by randomly assigning the subsidies to eligible graduates. Comparing outcome indicators, such as the income of those who received the subsidies compared to those who did not, revealed a much clearer picture of the development additionality of the intervention than other methods would have done.

Nonetheless, impact evaluations are not always feasible, ethical or realistic, particularly for projects or organisations with lower levels of resources. In addition, as discussed in Section 4.3, other methods such as those testing a theory of change may sometimes provide insights that are more useful and actionable than those provided by experimental methods because they investigate mechanisms and processes rather than just outcomes. If impact evaluations are not possible or useful, evaluators may therefore use social accounting matrices, indirect meso-level *ex ante* approaches, perception-based surveys with various stakeholders and contribution analysis to assess development additionality (Winckler Andersen, Hansen and Rand, 2021^[89]). However, evaluators should be careful about the implications they can draw from the use of less rigorous methods and discuss the strength of the evidence gathered.

In assessing development additionality, the evaluation of the IFC's blended finance operations cited above also considered accompanying measures such as subsidised advisory services and the extent to which they were critical for project risk mitigation in addition to the financial subsidy. For such an assessment, they evaluated the client's commitment and capacity for the operation, the needs for complementary and preparatory technical assistance as well as regulatory reforms, investment preparation and progress (World Bank, 2020^[96]).

Another factor that points to development additionality is the demonstration effect, i.e. whether the intervention encourages other players to engage in similar activities. For example, following an intervention other DFIs might introduce similar products such as green bonds, or other (private) investors might decide to invest in the same sector or region. Evaluators can therefore use the demonstration effect as a proxy for development additionality if they can establish the attribution of the other investors' actions to the intervention.

Discussion

The evaluation of financial and development additionality should not limit itself to looking at either of the two in isolation, but instead consider the relationship between the concepts. In some cases, the private sector might have invested even if there had not been an official contribution, thus suggesting a lack of financial additionality, but the donor or DFI invested official capital nonetheless to ensure development additionality (Carter, Van de Sijpe and Calel, 2018^[94]). By investing, donors ensure that they have a say in the strategic orientation of the intervention and can push for high-impact investments, e.g. in low-income countries, that private investors might have avoided. This highlights the importance of another aspect of measuring additionality in blended finance: evaluators need to determine not only the difference that the intervention made in comparison to doing nothing at all, but also in comparison to the same intervention without the private or public financing component.

Generally, financial additionality is likely to be higher for instruments and mechanisms that invest in sectors and regions that traditionally receive limited private funds, such as conflict and fragile contexts, because it is unlikely that private investors would have channelled their funds there without the public component. Special consideration must be paid to additionality in settings of conflict and fragility as "some governments or DFIs have set ambitious quotas or revised their strategic priorities for their DFIs in order to increase

their engagement in higher risk higher impact sectors and/or countries," (Koenig and Jackson, 2016^[22]). Investments in fragile contexts can be highly additional even if private participation is low. This offers interesting examples for evaluators to consider in answering questions on additionality.

4.2.5. Concessionality

Blended finance instruments and mechanisms represent different forms of concessional finance, which may have the same level of concessionality measured in grant equivalents. However, each form of concessionality aims to address different underlying problems, whether these are related to access, cost, or risks (IFC, 2020^[98]). For example, if liquidity is available in the commercial market but high perceived risk is a barrier, then risk sharing may be a more appropriate form of concessionality than concessional loans or equity.

Development agencies, DFIs, foundations and impact funds argue that concessional finance can mobilise commercial capital, especially from the private sector, to seed, scale and sustain enterprises and funds that can achieve social and environmental results as well as generate a financial return (MacArthur Foundation, 2019^[99]).

Concessional finance is provided by the public and philanthropic sectors. "It has low or no return expectations or is able to take on outsized risks and is used in a blended finance transaction to improve the risk/return profile of a deal to attract commercial capital that would otherwise not participate" (Irugas, 2019^[78]).

Results indicators

Table 4.5 presents an overview of results indicators that can be used to measure the concessionality of a blended finance instrument or mechanism at the output level.

Table 4.5. Results indicators for concessionality

Instrument or mechanism	Size of the grant element	Return to private investor	Pricing of the instrument/mechanism	Type of beneficiary of grant element
Equity	x	x	x	x
Debt (Credit lines, syndicated loans, etc.)	x	x	x	x
Guarantees/insurance	x	x	x	x
Bonds	x	x	x	x
Performance-based grants	x			x
Structured funds	x	x	x	x

Evaluating the concessionality of different instruments and mechanisms

Concessionality reflects the price difference of instruments which are offered at market terms and instruments which are offered at more favourable conditions. The price of a concessional instrument is typically set at a level that is significantly below market rate. In practice, assessing the market price is often challenging. This is particularly true for less developed economies, where local capital markets are typically underdeveloped or non-existent and borrowers only have limited access to international capital markets or commercial financial services. Moreover, when competition is limited and markets are illiquid, prices may not provide a reliable benchmark, which makes it more difficult to assess the extent to which a given blended finance instrument or mechanism is concessional.

Grants are perhaps the most transparent form of concessional finance since the subsidy component is equal to the grant's face value. In terms of debt instruments and mechanisms evaluators could use typical benchmarks for market prices such as bank interest rates, tenors or grace periods available in the market. Especially long tenors or grace periods can be seen as concessional, particularly when combined with below-market pricing. For example, concessional debt may involve interest rates that are below commercially available market rates for the given risk profile, or below-market interest rates combined with longer grace periods or tenors than available on the market (IFC, 2019^[100]).

For loans financed by official development assistance (ODA), the convention has been to calculate the degree of concessionality in terms of the “grant element” of a loan. “Whenever the interest rate charged for a loan is lower than the discount rate, the resulting present value of the debt is smaller than its face value, with the difference reflecting the grant element of the loan” (IMF, 2013^[101]; OECD, 2011^[102]). In 2019, the grant element method became the OECD’s main tool for measuring all types of ODA, though data will continue to be presented in traditional cash-flow formats as well. There are three crucial factors in calculating the grant element of a soft loan: the interest rate charged on the loan, the discount rate (usually equivalent to the market rate), and the repayment schedule. A higher discount rate in relation to the interest rate stands for a larger grant element with the size of the concession dependent on its duration (Scott, 2017^[103]).

In the case of equity investments, the typical benchmark would be the return required by a commercial equity investor for an investment with a similar risk profile. Equity instruments and mechanisms are concessional if the funder of the equity agrees to accept a lower return for the risk undertaken or buys the equity at a less favourable price than commercial investors. Equity is concessional only to the extent that the provider requests a lower risk-adjusted rate of return, thus facilitating a project or fund to invest in interventions that are riskier than commercial alternatives (IFC, 2020^[98]).

Table 4.6 presents the average concessional levels provided by the IFC for various blended finance instruments and mechanisms, sectors and themes, calculated against total project cost (as of October 2020). The level is estimated based on comparing a reference price consisting of risk, cost and net profit with the concessional price. In terms of instruments and mechanisms, concessional levels for equity are lower than those for debt, whereas deals in local currency entail the highest level of concessionality. Looking at sectors, concessional levels are highest for manufacturing, agriculture and services, and financial institutions, whereas they are almost negligible for disruptive technology investments. Finally, by theme, concessionality is higher for climate projects but lower for SMEs and gender finance. The highest concessional level, is provided for blended finance projects undertaken in low income and fragile and conflict-affected states.

While the above approaches outline ways to measure the given level of concessionality, evaluators should also look at the level of concessionality that is required for a blended finance intervention to attract commercial capital. In some cases, DFIs might overestimate the risk perceived by private investors and set the concessionality level unnecessarily high, thereby wasting public resources and reducing the financial additionality. If concessionality is too low, however, the intervention might fail to attract sufficient private capital. To avoid this problem and to gain a better understanding of required concessionality, DFIs could experiment with different levels of concessionality, particularly in sectors and regions where they have limited experience with private sector investments.

Table 4.6. IFC's concessional levels for instruments and mechanisms, industries and themes

	Average concessional level as a percentage of total project cost
Overall	3.8%
<i>By instrument/product</i>	
Senior debt	2.7%
Sub debt	2.6%
Guarantee	3.6%
Equity	3.8%
Performance incentive	1.5%
Local currency	10.1%
<i>By sector/industry</i>	
Manufacturing, agriculture and services	3.7%
Financial institution group	4.2%
Infrastructure and natural resources	2.9%
Disruptive technology and funds	2.5%
<i>By blended finance facility theme</i>	
Agriculture	3.7%
Climate	2.7%
SME finance	2.5%
Gender finance	1.3%
Low income, fragile and conflict-affected states	5.8%

Source: IFC (2020^[98]), *What is Concessional and How is it Calculated?*

www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/bf/bf-details/concessional-calculation

Regarding the grant element method introduced above, Scott (2017^[103]) points out that grant element calculations, typically generated when the loan agreement is signed, are estimates of concessional level. They make no effort to predict the influence of other factors that may affect the degree or quantum of concessional level over time, such as penalties for late or partial payments, options to convert the loan from a fixed to floating interest rate, possible reinsurance of loan repayments, the right of the borrower to make lump sum payments to reduce the principal owed. At the front end of blended finance deals, cost-benefit and value-for-money analyses could be useful in assessing the contribution of concessional terms. By calculating the grant element of concessional loans, adding in other relevant explicit and implicit costs, and taking care to apportion the relative contribution of each blended finance component, a comparison could be made with the benefits generated at the front end (mobilisation of commercial capital) and downstream (sales growth of the investee enterprise, jobs created and saved, CO₂ emissions reduced or prevented, etc.). While there are other variables that contribute to downstream results, such as leadership and human resources practices within a company, and competition and macro-economic conditions externally, it should be possible for evaluators to make a general judgement on how and to what extent concessional level contributes to development results.

4.3. How to evaluate downstream results?

Downstream results refer to the outcomes and impacts on financial intermediaries and end borrowers or beneficiaries, depending on the instrument or mechanism. To rigorously assess not only the changes that have occurred, but the extent to which they can be attributed to the intervention, experimental or quasi-experimental methods could be appropriate. If these are not feasible, however, other approaches, such as those analysing the theory of change (see Section 4.1) can provide information on the plausibility of

impacts and their attribution to the intervention. Analysing downstream results is an important aspect of the analysis of development additionality.

4.3.1. Results indicators

Table 4.7 presents an overview of exemplary results indicators that can be used to measure downstream results at the output level. It provides a non-exhaustive list of some exemplary downstream results in blended finance evaluations. Depending on the scope and topic of the evaluation some results indicators might not be relevant or other indicators may need to be added.

Table 4.7. Results indicators for exemplary downstream results

Downstream results	
Result	Indicators
Climate and environment	Share of renewable energy as percentage of overall energy production/consumption over time Net CO ₂ emissions avoided Market value of CO ₂ emissions reduced
Financial inclusion	Number of end beneficiaries without previous access to finance Types of financial services provided Client segments (type of household or enterprise) Loan duration Uses of the loan
Job creation	Number of jobs created/retained Number of decent jobs/good quality jobs
Gender	Sex-disaggregated data at all levels: • portfolio data • individual investments • investee business • financial intermediaries Number of female borrowers Number of female-owned firms Number of firms with gender inclusive governance Number of gender-related policies and practices
Growth	Performance/growth of investee/borrower enterprise Income gains by borrowing households and their employees
Market development	Number of end beneficiaries accessing new products or services Launch of new business models or technologies Volume of private investments Level of local asset ownership

4.3.2. Evaluating the downstream results of different instruments and mechanisms

Counterfactual designs aim at assessing to what extent outcomes can be attributed to the intervention rather than to other factors (Ferraro, 2009^[104]). Ideally, one would compare the outcomes in the absence of the intervention with the outcomes in the presence of the intervention. Since this is not possible, counterfactual designs try to mimic the absence of the intervention by choosing a control group that is as similar as possible to the treatment group. Outcomes are then compared between the control and treatment group, with any differences attributed to the intervention. For example, the financial performance of investees could be compared with financial intermediaries that were not financed by the intervention. Ideally, investees should be randomly assigned to each group. However, in many cases this is not possible, and quasi-experimental methods are used.

Experimental methods

The aim of using randomised controlled trials (RCTs) is to compare the outcome of a population or group exposed to an intervention to an estimated counterfactual outcome, which represents the alternative outcome without the intervention. In an RCT, the units of observation (e.g. potential investees) are randomly assigned to the intervention and the control group. This ensures that any differences between the two groups are random and not systematically biased. Consequently, differences in outcomes between the two groups can be attributed to the intervention.⁴ RCTs are used to evaluate development programmes in a wide range of sectors, e.g. health, education, governance, climate change, micro credit and access to finance (White, 2013^[105]).

While experimental methods may in theory be applied to evaluating downstream results of any blended finance instrument or mechanism, some lend themselves more to those methods than others. This particularly applies to development impact bonds (DIBs) and performance-based grants (PBGs). The very nature of outcomes-based interventions requires that the implementing partner maintain ongoing, detailed and systematic records of results achievements as the programmes proceed. However, to ensure the data is sufficient for conducting a (quasi)-experimental analysis later, the implementing partner also needs to collect the same information for a control group.

In addition, in DIBs and PBGs, the performance agreements between the implementing agency and each recipient specify clear and measurable metrics by which to assess success or failure. Sturla, Shah and McManus (2018^[106]) emphasise that if an evaluation fails to provide a credible comparison of what would have happened without the programme, “the potential benefits of DIBs collapse. The implementer’s incentives for good performance will be missing or distorted; the outcome payer cannot be confident they are paying for results; and the investors will not know if they will be fairly compensated for a successful program.” Furthermore, these authors argue that although the RCT approach and other quasi-experimental designs may be costly, the fixed costs of these studies mean that larger-scale DIBs can be relatively less costly to evaluate than smaller-scale pilots. Other measures, such as greater use of mobile and web-enabled tools, can also achieve cost efficiencies (Sturla, Shah and McManus, 2018^[106]).

Experimental methods may be more difficult to implement for other instruments and mechanisms such as structured funds where intermediaries and end borrowers cannot be selected randomly. However, experimental methods may be useful for evaluating a specific component of an intervention, such as technical assistance, that accompany a structured fund or guarantee. Here, randomisation among all investees may be possible. This would have the technical advantage that evaluators could gain access to contact details and information of both treatment and control groups.

Box 4.2. Case study: Using experimental methods to evaluate the Educate Girls programme, India

In the sphere of development impact bonds (DIBs), and in the broader literature on impact measurement and evaluation, some efforts have been made to apply randomised controlled trials (RCTs) and other, quasi-experimental designs to impact evaluations. The most prominent and widely reported of these is the impact evaluation of the Educate Girls Development Impact Bond in India's Rajasthan State. Educate Girls provides a network of volunteer tutors and other supports to improve the educational achievement of girls in rural primary schools. The consulting firm IDinsight carried out a three-year evaluation from 2015-18 of this impact bond using a village-clustered, randomised controlled trial methodology. The evaluation tracked the learning gains and enrolment of 12 000 students in grades three to five, who were randomly assigned to either the control group, which did not receive the programme, or the treatment group, which did participate in the Educate Girls programme. Data were collected in 2015, 2016, 2017 and at the end of the programme in 2018. The evaluation found a large positive learning effect for girls in the treatment group, with learning improvements over the three-year period of 28%. Notably, for the treatment group, learning gains in Mathematics and English proved to be three times greater than those for Hindi. Enrolment rates were also found to be significantly higher for the treatment group participants compared with the control group. Overall, the evaluation found that the DIB achieved 160% of its outcome targets for learning gains and 116% of its enrolment outcome targets, triggering payments by and a financial return for the outcome payer, the UBS Optimus Foundation.

Source: IDinsight (2018^[107]), *Educate Girls Development Impact Bond: Final Evaluation Report*, https://static1.squarespace.com/static/5b7cc54e4eb7d25f7af2be/t/5bce543ee4966befb66c13e5/1540248811132/EG+DIB+Project+Report_Final_High+Res_Web.pdf.

Quasi-experimental methods

Quasi-experimental methods are usually used when experimental methods are not possible for ethical or practical reasons. They are similar in the sense that both compare outcomes between an intervention and a comparison group. However, in a quasi-experimental method, participants are not randomly assigned to these groups. For example, evaluators might compare the effects of financial literacy training on the income of entrepreneurs who signed up for the training with those that did not.

Given that the assignment to a treatment or control group is not random in a quasi-experimental design, differences between the groups may be due to systematic biases. To reduce the risk of a systematic bias, several methods have been developed. These include the difference-in-differences technique. Difference-in-differences measures the outcome variables before and after the intervention for the treatment and the control group to enable comparison of the trends between the two groups. If the change is greater for the treatment group than the control group, this change can be attributed to the intervention (Shadish, Cook and Campbell, 2002^[108]). The method is based on the “parallel trend assumption” which assumes the treatment and control groups would have followed the same trend without the intervention (Fredriksson and de Oliveira, 2019^[109]).

However, this assumption does not always hold. For example, if selected investees are already financially more successful before the intervention than the control group, they may also grow more rapidly over time regardless of the intervention. Techniques such as propensity score matching can be used in combination with difference-in-differences to account for such covariates (characteristics) between the two groups, which may affect their trends in the outcome variable over time. Evaluators use propensity score matching to match participants in the treatment and control groups based on their probability of receiving the

treatment (i.e. the blended finance intervention). Propensity score matching is a statistical technique well known to quantitative analysts in investment and finance.

Another option for making sure participants in the treatment and control groups are as similar as possible is regression discontinuity design. This technique is used when there is a criterion that must be met for people or organisations to participate in the intervention (White and Sabarwal, 2014^[110]). For example, government schemes that provide funding to companies may use a point system to determine whether a company is eligible for a loan. Companies just above the eligibility threshold would make up the treatment group, whereas those just below the threshold would make up the comparison group. As only those around the cut-off point can be compared, however, a large sample is needed for this method.

While different instruments and mechanisms may aim at similar downstream effects, such as employability gains and business growth, they try to achieve these effects by targeting different groups. The biggest systematic difference here can be drawn between instruments and mechanisms that work with intermediary structures, such as structured funds that give out loans to financial institutions, and those that target end beneficiaries directly, such as development impact bonds or performance-based grants. The structure of the instrument or mechanism therefore determines whether the intervention and control group in (quasi-) experimental approaches will consist of financial intermediaries or end beneficiaries. While intermediary structures would in theory make it possible to include both intermediaries and beneficiaries as units of analysis, this will most likely be too complex and resource-intensive for most evaluations.

4.3.3. Discussion

There are important advantages to using RCT designs in impact evaluations, the most significant of which is the capability of this method to reduce selection bias and to isolate the value-added of the programme intervention to outcomes, thus strengthening causal inferences (White, 2013^[105]). While RCTs can be expensive, their cost-effectiveness demonstrably improves for larger interventions (IDinsight, 2018^[107]; Sturla, Shah and McManus, 2018^[106]). RCTs may therefore be a useful tool for demonstrating the effectiveness of large-scale interventions or proof-of-concept before scaling up interventions.

The most promising opportunities for RCT designs involve micro-level units of analysis such as individuals or households in the green economy. There may be tens or even hundreds of thousands of households that gain access to, for example, off-grid solar power from a major solar farm project supported by blended finance, or to an improved potable water supply from a private-public partnership. These may be compared to similar communities but that have not been provided access to the new energy source.

However, RCTs are often not feasible for blended finance operations. First, randomised trials need to be planned from the beginning by the evaluators and the programme implementers. Once the recipients of the intervention have been chosen, it is no longer possible to randomly select treatment groups. RCTs therefore require careful planning and foresight. In addition, in many cases managers of blended finance interventions must consider commercial viability when selecting financial intermediaries and can therefore not be expected to randomly choose from a pool of all available institutions. Second, projects must be mature enough to have potentially produced impacts; many blended finance investments are less than three to five years old. Third, the complex causal chains involved in blended finance interventions, especially downstream, involve several organisational actors – funds or banks, investee companies, suppliers, technical assistance providers, etc. – and it is a challenge to develop a design that clearly tests the core thesis of the intervention. Lastly, the use of control groups in RCT impact studies raises ethical issues (Easterly, 2009^[111]; Bédécarrats, Guerin and Roubard, 2020^[112]), as the control group is deliberately denied access to an intervention that is assumed to be beneficial. There are some workarounds for this problem, however, such as using different treatment arms to determine which of the measures are most beneficial.

In many cases where RCTs cannot be implemented, quasi-experimental designs may be an option. In blended finance, datasets that include the required data are most likely to be found in multi-fund portfolio analyses or evaluations of investments in scaled programme/product/service delivery from businesses to households and individuals, such as solar energy or clean drinking water. Databases such as MIX Market offer a free way to collect data from both investees and other (in this case, microfinance) institutions.

In contexts where there is only a limited number of financial institutions, it can be difficult to generate a sufficiently large, statistically meaningful sample of comparable treatment and comparison groups. In that case, neither experimental nor quasi-experimental evaluations will be possible. In addition, (quasi-)experimental approaches are not the most suitable or cost-effective options if the goal of the evaluation is to better understand the processes and procedures of the intervention rather than actual outcomes. In those cases, theory-based approaches can be more useful (see Section 4.1).

5 Conclusions and recommendations

The objective of this paper is to contribute to a shared understanding of the various approaches and methods for evaluating blended finance instruments and mechanisms, providing a practical guide to answering three of the key questions asked by evaluators: 1) how to evaluate the mechanisms and causal links in blended finance interventions; 2) how to evaluate front-end results; and 3) how to evaluate downstream results. This chapter reviews these methods and provides several findings and recommendations aimed at strengthening the evaluation of blended finance instruments and mechanisms.

The literature review conducted for this working paper highlighted a rich diversity of methods and tools used to evaluate blended finance instruments and mechanisms. However, this body of work also demonstrates that the current practice of blended finance evaluation is unsystematised, fragmented and compartmentalised across instruments and mechanisms.

The methodological pluralism that is demonstrated in the mostly practice-based literature reviewed here, comprising nearly 140 reports and articles, should be embraced. Three points emerged from the review:

- There is broad agreement among evaluators that analysing a programme theory or investment thesis is the crucial first step in any evaluation that informs the selection of the most appropriate combination of research methods.
- There is wide agreement among most practitioners and some scholars that stakeholder engagement throughout the evaluation process is essential to optimising insights and utilisation.
- Most practitioners and many scholars recognise the value of selecting, integrating, and sequencing, in ways that respond to the evaluation's terms of reference, methods drawn from both the theory-based cluster of research tools and the counterfactual cluster.

One prominent challenge in collecting data on the performance of blended finance instruments and mechanisms, especially for front-end results, involves the confidentiality of information. Strict privacy regulations in the banking and investment sectors often disallow the sharing or publication of certain types of data. Commercial actors, including intermediaries such as banks and funds, as well as investee companies, can refuse to provide data on the basis that doing so would confer a commercial advantage on their competitors. In addition, only a small minority of studies attempt to explicitly address the OECD evaluation criteria in any comprehensive or systematic way, and, of these, most select only a sub-set of the criteria as their focus. In fact, the most comprehensive evaluations in this regard, all using mixed methods to examine multiple project cases, are clustered in assessments of guarantee schemes. Other studies, notably those grouped around development bonds, focus on impact evaluation (though not on the other OECD evaluation criteria), employing RCT designs for that purpose.

Table 5.1 provides an overview of all the results indicators discussed in this paper as well as the quantitative and qualitative methods that are suggested for addressing evaluation questions. However, this overview is not meant to be comprehensive or exclusive. For example, evaluators may well find that some of the methods considered are also useful for addressing other aspects of their evaluation and that a combination of methods is often necessary to answer the full range of evaluation questions.

Table 5.1. Methods and indicators for evaluating blended finance instruments and mechanisms

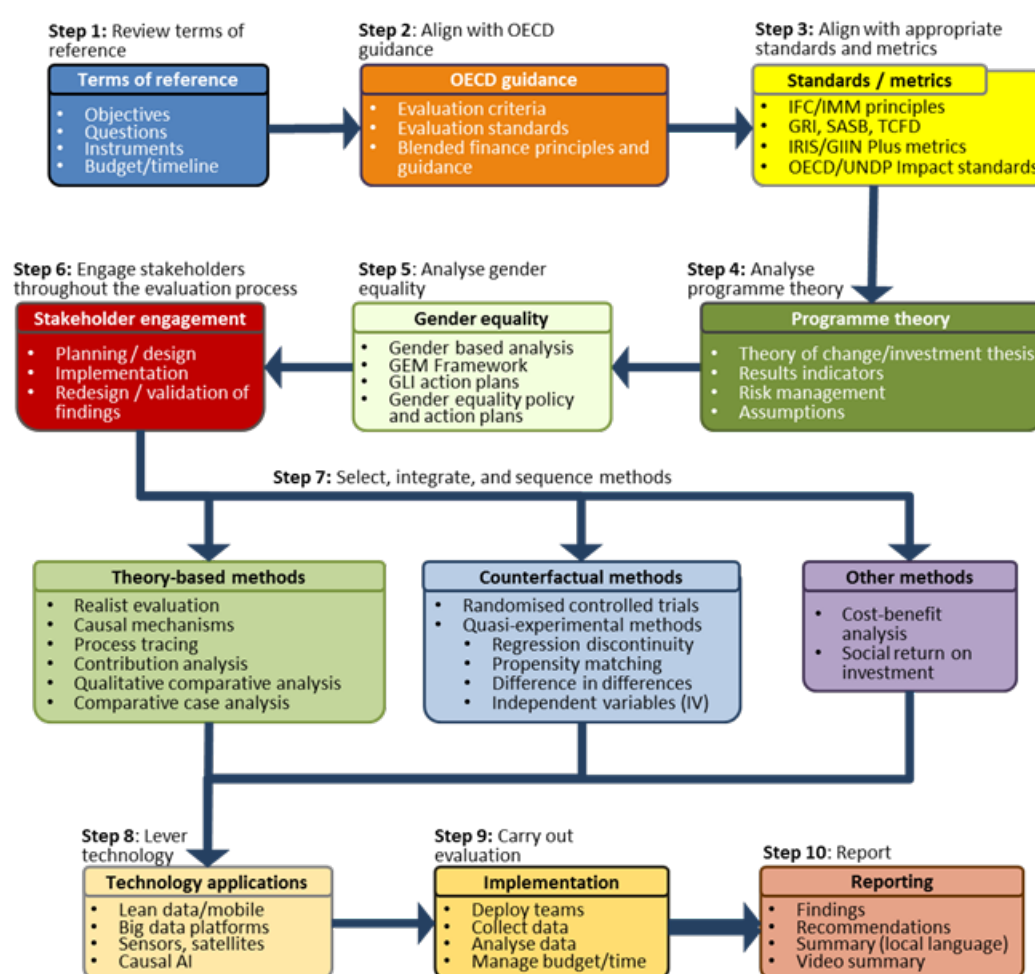
Evaluation issue	Indicators	Quantitative methods	Qualitative methods
Underlying mechanisms and causal links			Theory-based methods (contribution analysis, realist evaluation, process tracing, QCA)
Front-end results			
Financial sustainability & development orientation	• Profit/yield; interest income • Costs (e.g. operating costs) • Repayment/default rates; non-performing loans • Internal rate of return/net present value • Debt to equity ratio • Dividends; redemption conditions • Credit history • Revolving use of funds	Cost-benefit analysis Social return on investment Value for money analysis	Document analysis of: • Development objectives and goals • Alignment with the SDGs and other official development strategies • Flexibility of the instrument/mechanism Management and governance
Mobilisation	• Leverage ratios: ○ in absolute terms ○ as a ratio to official capital invested ○ for local and foreign capital ○ for class A and B shares • Cost of the subsidy • Pricing of the financial return offered to investors		
Factors that drive mobilisation			Comparative case studies Qualitative comparative analysis
Additionality	Financial additionality: • Additional capital raised since financing • Capital amount offered vs. available in the market • Local currency financing • Loan tenors/grace periods Development additionality: • ESG performance improvements • Financing terms (e.g. interest rate, maturity)	Counterfactual approaches (quasi-experimental or experimental)	Theory-based methods Document analysis of market information
Concessionality	• Size of the grant element of the loan		
Exits	• Internal rate of return for investors • Environmental and social mission of the investment • Social and development agenda of the new owner	Cost-benefit analysis Counterfactual approaches	Theory-based methods
Downstream results		Counterfactual approaches	Theory-based methods

5.1. Recommendations

In response to these challenges and requirements, Figure 5.1 presents an integrated approach to evaluating blended finance instruments or mechanisms. The approach proposed here involves ten successive steps in the design and implementation of such evaluations. This process begins with the alignment of the evaluation design with OECD norms, standards and guidance on evaluation and blended

finance, along with other relevant standards and metrics. It then moves to a detailed interrogation of the intervention's theory of change and investment thesis, followed by a thoroughgoing gender-equality analysis. This approach can be used for institutions or funds, portfolios, individual deals and investees. In fact, there is a strong case to be made for applying gender analysis at the front end of any evaluation to inform appropriate strategy on stakeholder engagement, choice of methods, data collection and analysis, and use of technology. The next step is to embed stakeholder engagement, especially among downstream actors, and a learning orientation throughout the evaluation. Relevant methods are then selected, integrated, and sequenced, ideally drawn from both the theory-based cluster of methods and the counterfactual cluster. Technology applications are integrated into the design if applicable to gain efficiencies and reach. The evaluation is then implemented and its reports are generated.

Figure 5.1. Designing evaluations of blended finance instruments



Once the reporting on the blended finance evaluation is concluded, it is important to feed the lessons and recommendations that emerged from the evaluation back into decision-making processes within bilateral and multilateral donors as well as DFIs to support learning on blended finance.

The following points on methodology, evaluation management and research are further recommended for the evaluation of blended finance interventions.

5.1.1. Methodology

While rigorous methods such as (quasi)-experimental and theory-based approaches provide more accurate and thorough results, using these methods undeniably requires more time and resources. Organisations therefore need a strategic approach for deciding which projects should be prioritised for complex and rigorous evaluations, choosing strategically relevant interventions. These interventions may include those that enter a new market, test a new instrument or mechanism or approach, or those that achieve meaningful scale, managing particularly large volumes. Yet not all evaluations should focus exclusively on the evaluation criterion of impact – investigating the transformative effects of the intervention and possible unintended consequences. Most evaluations, for good reason, examine other criteria such as relevance, coherence, effectiveness, efficiency and sustainability.

For strategically relevant interventions there is the need for impact evaluations using an integration of methods including theory-based approaches and experimental or quasi-experimental designs in the space of blended finance. For this, constructing and interrogating larger datasets and compendiums of case study projects are important tasks across all instruments and mechanisms.

Evaluations should examine more systematically and with more granularity the costs and benefits, both front-end and downstream, of blended finance investments for each instrument and mechanism. Here cost-benefit studies using social accounting tools and value-for-money analyses could be useful.

Considering the challenges faced by blended finance investors, there is a strong case to be made for measuring the downstream effects of a blended finance intervention, as is the case for all development interventions, particularly in fragile and conflict-affected settings. Such evaluations should analyse if DFIs and impact investors can truly be highly additional in such settings, where professionally managed investment capital that is unaligned with contending forces on the ground may be scarce.

Finally, gender lens investing should be more strongly embedded into the design and implementation of evaluations and should encompass collecting and analysing sex-disaggregated performance data.

5.1.2. Evaluation management

Due to the financial technicalities that need to be considered and the contextual knowledge required, it is essential that evaluation teams include experts in finance and investment who have knowledge of the specific instruments and mechanisms deployed. Experts on the type of development change that is desired should also be included.

Regarding data privacy, private entities benefiting from public finance in blended deals could be obliged to share certain data necessary for effective evaluation of those deals by building such obligations into investment agreements and related contracts. However, it is incumbent upon evaluators to consistently honour the confidential nature of the data supplied to them by banks, funds, businesses, entrepreneurs, employees and suppliers, and to thoroughly anonymise findings in their reports and presentations.

5.1.3. Further research and collective initiatives

Further research should be undertaken to strengthen global knowledge on the design, techniques, and execution of evaluations of blended finance instruments and mechanisms.

Beyond research alone, there is an opportunity, and a need, for institutions seeking more effective and efficient means of evaluating blended finance interventions to design and implement a series of collective initiatives by donor agencies, DFIs, foundations, impact investors, local investors, business networks, governments, and other stakeholders to advance the theory and practice of blended finance evaluation to avoid funding ineffective and inefficient interventions.

One option for blended finance actors and evaluators is to build productive links with academia in the service of the joint production and mobilisation of deeper, more nuanced and explanatory knowledge through evaluations. This could include the production and publication of guidance notes, such as on the nature and capabilities of a wide range of blended finance instruments and mechanisms; model terms of reference for blended finance evaluations; an inventory of results indicators for outputs, outcomes, and impacts; robust model theories of change based on research that also help identify adverse effects; and advice on how to recruit and integrate finance and banking specialists into evaluation teams. Gathering completed evaluations in a library such as the DAC Evaluation Resource Centre (DEReC) is also useful.

Overall, this paper suggests that the way forward should be based on three priorities: pluralism, pragmatism and capacity building. The pluralistic character of the methods and tools highlighted here is a strength in the practice of evaluating blended finance instruments and mechanisms and should be valued and cultivated. What is required, though, is increased connectivity and exchange across instruments and mechanisms, issues, and fields (including drawing on development evaluation experience beyond blended finance). Pragmatism is also crucial, while setting the bar on accountability and transparency as high as possible.

In a post-COVID-19 world, resources for blended finance instruments and mechanisms, as important as they may be for mobilising commercial capital for the SDGs, will be limited, as will resources available to evaluate these approaches. Capacity building will be central to continue strengthening evaluation. Future research and collective initiatives can be used to strengthen the methods, tools and the professional knowledge necessary to more effectively and efficiently evaluate blended finance instruments and mechanisms. Building such capacity is especially important in the emerging economies themselves and for fragile contexts.

References

- Barnett, C. et al. (2018), “Understanding and optimising the social impact of venture capital: Three lessons from Ghana”, *African Evaluation Journal*, Vol. 6/2, <https://aejonline.org/index.php/aej/article/view/335>. [48]
- Beach, D. and R. Pedersen (2013), *Process-Tracing Methods: Foundations and Guidelines*, University of Michigan Press. [67]
- Beaulieu, D., E. Jackson and K. Sammy (2020), “The Design and Implementation of a Gender Equality Policy and Action Plan for Development Finance Institutions”, *Technical Guidance Brief*, Caribbean Development Bank. [36]
- Bédécarrats, F., I. Guerin and F. Roubard (2020), *Randomized Control Trials in the Field of Development: A Critical Perspective*, Oxford University Press. [112]
- Befani, B. and J. Mayne (2014), “Process Tracing and Contribution Analysis: A Combined Approach to Generative Causal Inference for Impact Evaluation”, *IDS Bulletin*, Vol. 45/6, pp. 17-36, <https://doi.org/10.1111/1759-5436.12110>. [63]
- Blended Finance Taskforce (2018), *Better Finance Better World: Consultation Paper Of The Blended Finance Taskforce*, Blended Finance Taskforce, London, http://s3.amazonaws.com/aws-bsdc/BFT_BetterFinance_final_01192018.pdf. [19]
- Boardman, A. et al. (2001), *Cost-Benefit Analysis, Concepts and Practice, 2nd Edition*, Prentice Hall, NY. [71]
- Bouri, A. and A. Mudaliar (2013), *Catalytic First-Loss Capital*, Global Impact Investing Network, <https://thegiin.org/assets/documents/pub/CatalyticFirstLossCapital.pdf>. [10]
- Cambridge Associates (2017), *PE/VC Impact Investing Index and Benchmark Statistics*, Cambridge Associates, Cambridge, <https://www.cambridgeassociates.com/wp-content/uploads/2017/02/PEVC-Impact-Investing-Statistics-2017-Q1.pdf>. [68]
- Cambridge Associates and GIIN (2017), *Financial Performance of Real Assets Impact Investments*, Cambridge Associates and the Global Impact Investing Network (GIIN), https://thegiin.org/assets/The%20Financial%20Performance%20of%20Real%20Assets%20Impact%20Investments_webfile.pdf. [69]
- Carnegie Consult (2016), *Evaluation of Sida’s use of guarantees for market development and poverty reduction - Evaluation report*, Swedish International Development Cooperation Agency, <http://www.sida.se/contentassets/a99e846c5eaf48268efb1f99a0de0edf/21668.pdf>. [42]

- Carter, P., N. Van de Sijpe and R. Calel (2018), “The Elusive Quest for Additionality”, *CGD Working Paper 495*, pp. 32,33, <https://www.cgdev.org/sites/default/files/elusive-quest-additionality.pdf>. [94]
- CDC Group and GIIN (2020), *How to Measure the Gender Impact of Investments: Using the 2X Challenge Indicators in Alignment with IRIS+*, CDC Group and Global Impact Investing Network, <https://s3.amazonaws.com/giin-web-assets/iris/assets/files/How-to-measure-the-gender-impact-of-investments.pdf>. [34]
- Climate Bonds Initiative (2019), *Climate Bonds Standards V3.0*, Climate Bonds Initiative, London, <https://www.climatebonds.net/climate-bonds-standard-v3>. [47]
- Climate Technology Program (2017), “Can Outcome-Based Financing Catalyze Early Stage Investments in Green Small and Growing Businesses?”, *Brief, No 8*, World Bank, <http://documents.worldbank.org/curated/en/946281530131480373/pdf/Can-Outcome-Based-Financing-Catalyze-Early-Stage-Equity-Investments-in-Green-Small-and-Growing-Businesses-in-SA.pdf>. [20]
- Criterion Institute (2019), *Gender Lens Investing Tool: Designing an Action Plan. Investing in Women, Jakarta and Haddam*, <https://criterioninstitute.org/resources/gender-lens-investing-tool-designing-an-action-plan>. [35]
- Dalberg (2019), *How Development Impact Bonds Work, and When to Use Them*, Dalberg Advisors, Washington, DC, <https://dalberg.com/our-ideas/how-development-impact-bonds-work-and-when-use-them/>. [16]
- Davies, R. (2020), *Qualitative Comparative Analysis*, BetterEvaluation, Melbourne, https://www.betterevaluation.org/en/evaluation-options/qualitative_comparative_analysis. [86]
- Easterly, W. (2009), *Development Experiments: Ethical? Feasible? Useful?*, Aid Watch Blog, <http://www.nyudri.org/aidwatcharchive/2009/07/development-experiments-ethical-feasible-useful>. [111]
- EBRD (2018), *Additionality in the EBRD – Review of Concept and Application*, European Bank for Reconstruction and Development, <https://www.ebrd.com/documents/evaluation/additionality-in-the-ebrd-review-of-concept-and-application.pdf>. [92]
- Escalante, D. et al. (2018), *Approaches to assess the additionality of climate investments*, Findings from the evaluation of the Climate Public Private Partnership Programme (CP3), London, https://www.climatepolicyinitiative.org/wp-content/uploads/2018/03/Approaches-to-assess-the-additionality-of-climate-investments-_-Findings-from-the-evaluation-of-the-Climate-Public-Private-Partnership-Programme-CP3-2.pdf. [93]
- Ferraro, P. (2009), “Counterfactual thinking and impact evaluation in environmental policy”, *New Directions for Evaluation* 122, pp. 75-84, <https://doi.org/10.1002/ev.297>. [104]
- Fredriksson, A. and G. de Oliveira (2019), “Impact evaluation using Difference-in-Differences”, *RAUSP Management Journal*, Vol. 54/4, pp. 519-532, <http://dx.doi.org/10.1108/RAUSP-05-2019-0112>. [109]
- George, A. and A. Bennett (2005), *Case Studies and Theory Development in the Social Sciences*, MIT Press, Cambridge. [62]

- GIIN (2021), *IRIS+ System: Standards*, The Global Impact Investing Network, New York, [29]
<https://iris.thegiin.org/metrics/> (accessed on 21 June 2021).
- GIIN (2020), *Understanding Impact Performance: Agriculture Investments*, The Global Impact Investing Network, New York, [32]
https://thegiin.org/assets/Understanding%20Impact%20Performance_Agriculture%20Investments_webfile.pdf.
- GIIN (2020), *Understanding Impact Performance: Financial Inclusion Investments*, The Global Impact Investing Network, New York, [33]
https://thegiin.org/assets/Understanding%20Impact%20Performance_Financial%20Inclusion_webfile.pdf.
- GIIN (2019), *Evaluating Impact Performance: Clean Energy Access Investments*, The Global Impact Investing Network, New York, [30]
https://thegiin.org/assets/Evaluating%20Impact%20Performance_Clean%20Energy%20Access_webfile.pdf.
- GIIN (2019), *Evaluating Impact Performance: Housing Investments*, The Global Impact Investing Network, New York, [31]
https://thegiin.org/assets/Evaluating%20Impact%20Performance%20Housing_webfile.pdf.
- Goodrick, D. (2014), “Comparative Case Studies”, *Methodological Briefs: Impact Evaluation No. 9*, UNICEF Office of Research, Florence, https://www.unicef-irc.org/publications/pdf/brief_9_comparativecasestudies_eng.pdf. [82]
- Government of Canada (2012), *Theory-Based Approaches to Evaluation: Concepts and Practices*, Treasury Board of Canada Secretariat, Ottawa, http://epe.lac-bac.gc.ca/100/201/301/weekly_checklist/2013/internet/w13-03-U-E.html/collections/collection_2013/sct-tbs/BT22-131-2012-eng.pdf. [49]
- Gray, J. (2015), *Great Expectations: Mission Preservation and Financial Performance in Impact Investing*, Wharton Social Impact Initiative, Wharton School of Business, University of Pennsylvania, <https://socialimpact.wharton.upenn.edu/wp-content/uploads/2016/09/Great-Expectations-Mission-Preservation-and-Financial-Performance-in-Impact-Investing.pdf>. [70]
- Gugerty, M. and D. Karlan (2018), “Ten Reasons Not to Measure Impact—and What to Do Instead”, *Stanford Social Innovation Review*, Stanford, [50]
http://emiguel.econ.berkeley.edu/assets/miguel_media/792/Ten_Reasons_Not_to_Measure_Impact_and_What_to_Do_Instead.pdf.
- Gustafsson-Wright, E. (2020), *What Happens in an Outcome-Based Financing Model When a Major Crisis Hits?*, Center for Universal Education, Brookings Institution, New York, [17]
<https://www.brookings.edu/research/what-happens-in-an-outcome-based-financing-model-when-a-major-crisis-hits/>.
- Halvorson-Quevedo, R. and M. Mirabelle (2014), *External Financing for Development: Guarantees for Development*, OECD Publishing, Paris, <https://www.oecd.org/dac/financing-sustainable-development/GURANTEES%20report%20FOUR%20PAGER%20Final%2010%20Mar%2014.pdf>. [80]

- Hansen, H., R. Rand and O. Winckler Andersen (2020), *Guarantees and Incentives in Development Aid*, Danida Evaluation Department, Danish Ministry of Foreign Affairs, Copenhagen, https://um.dk/en/danida-en/results/eval/eval_reports/publicationdisplaypage/?publicationID=C08D47A3-6349-4513-A66E-3F76329146E4. [40]
- Heinrich, M. (2014), *Demonstrating Additionality in Private Sector Development Initiatives*, The Donor Committee for Enterprise Development, Maastricht, https://www.enterprise-development.org/wp-content/uploads/DCED_Demonstrating-Additionality_final.pdf. [91]
- HIPSO (2020), *Delivering Development Impact Together*, Harmonized Indicators for Private Sector Operations,, <https://indicators.ifipartnership.org/>. [44]
- IDB (2017), *Comparative Study of Equity Investing in Development Finance Institutions*, Inter-American Development Bank, <https://publications.iadb.org/publications/english/document/Comparative-Study-of-Equity-Investing-in-Development-Finance-Institutions.pdf>. [4]
- IDinsight (2018), *Educate Girls Development Impact Bond: Final Evaluation Report*, IDinsight, Washington, DC, https://static1.squarespace.com/static/5b7cc54eec4eb7d25f7af2be/t/5bce543ee4966befb66c13e5/1540248811132/EG+DIB+Project+Report_Final_High+Res_Web.pdf. [107]
- IFC (2020), *Growing Impact: New Insights into the Practice of Impact Investing*, International Finance Corporation, Washington, DC, <https://www.ifc.org/wps/wcm/connect/8b8a0e92-6a8d-4df5-9db4-c888888b464e/2020-Growing-Impact.pdf?MOD=AJPERES&CVID=naZEST9>. [39]
- IFC (2020), *What is Concessionality and How is it Calculated?*, International Finance Corporation, Washington, DC, https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/bf/bf-details/concessionality-calculation. [98]
- IFC (2019), *DFI Working Group on Blended Concessional Finance for Private Sector Projects*, Joint Report, International Finance Corporation, Washington, DC, <https://www.ifc.org/wps/wcm/connect/73a2918d-5c46-42ef-af31-5199adea17c0/DFI+Blended+Concessional+Finance+Working+Group+Joint+Report+%28October+2019%29+v1.3+Report+.pdf?MOD=AJPERES&CVID=mUEEcSN>. [100]
- IFC (2019), *Operating Principles for Impact Management*, International Finance Corporation, Washington, DC, https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/development+impact/principles/opim. [38]
- IFC et al. (2018), *Multilateral Development Banks' Harmonized Framework for Additionality in Private Operations*, Multilateral Development Banks, https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/development+impact/resources/201809-mdbs-additionality-framework (accessed on 22 June 2021). [95]
- IMF (2018), "Borrowing Costs and the Role of Multilateral Development Banks: Evidence from Cross-Border Syndicated Bank Lending", *IMF Working Paper*, No. 263, International Monetary Fund (IMF), Washington, DC, <https://www.imf.org/en/Publications/WPI/Issues/2018/12/07/Borrowing-Costs-and-The-Role-of-Multilateral-Development-Banks-Evidence-from-Cross-Border-46392>. [24]

- IMF (2013), *Update on the Financing of the Fund's Concessional Assistance and Debt Relief to Low-Income Countries*, International Monetary Fund, Washington, DC, <https://www.imf.org/external/np/pp/eng/2013/092013.pdf>. [101]
- Impact-Weighted Accounts (2020), *Impact-Weighted Accounts Project website*, <https://www.hbs.edu/impact-weighted-accounts/Pages/default.aspx> (accessed on 28 May 2021). [45]
- INTRAC (2017), *Contribution Analysis*, International NGO Training and Research Centre (INTRAC), Oxford, <https://www.intrac.org/wpcms/wp-content/uploads/2017/01/Contribution-analysis.pdf>. [64]
- Irugas, L. (2019), *Blended Finance Jargon Buster*, Convergence, Toronto, <https://www.convergence.finance/news-and-events/news/4iJAtdNIAelZLSTnDuCEz9/view>. [78]
- Jackson, E. (2013), "Interrogating the theory of change: evaluating impact investing where it matters most", *Journal of Sustainable Finance and Investment*, Vol. 3/2, pp. 95-110, <https://doi.org/10.1080/20430795.2013.776257>. [56]
- Jackson, E. and K. Alvarez (2018), *Catalytic Capital for Women's Economic Empowerment: Report of the External Review of Component 2 of the Investing in Women Initiative*, Investing in Women, Manila; the Department of Foreign Affairs and Trade, Canberra, https://investinginwomen.asia/wp-content/uploads/2019/03/190206-C2-Review-Report_Catalytic-Capital-for-WEE_final_online-version.pdf. [58]
- Jackson, E. and E. de Moraes Sarmiento (2021), "Gender Lens Investing: Co-Creating Critical Knowledge to Build a Credible, Durable Field", in *Global Handbook of Impact Investing*, Hoboken, Wiley. [37]
- Johnston, J. (2019), *Blending with Guarantees: Hope or Hype?*, Convergence, Toronto, <https://www.convergence.finance/news-and-events/news/5sx7ivKz7eNwZBILNRfN87/view> (accessed on 26 May 2021). [11]
- Joyes, C. (2019), *An Overview of Evidence Regarding the Impact of Impact Bonds as Innovative Financing Mechanisms for Education in Development Contexts*, Department for International Development, Institute of Development Studies, Brighton, <https://assets.publishing.service.gov.uk/media/5c87e016ed915d50aa142f89/544.pdf>. [57]
- Kenny, C. et al. (2018), *Comparing Five Bilateral Development Finance Institutions and the IFC*, Center for Global Development (CGD), Washington, DC, <https://www.cgdev.org/sites/default/files/comparing-five-bilateral-development-finance-institutions-and-ifc.pdf>. [5]
- KfW (2020), *Innovative Development Finance Toolbox*, KfW Development Bank, Frankfurt am Main, https://www.kfw-entwicklungsbank.de/PDF/Download-Center/PDF-Dokumente-Brosch%C3%BCren/2020_Innovative_Development_Finance_Toolbox.pdf. [12]
- Koenig, A. and E. Jackson (2016), "Private Capital for Sustainable Development: Concepts, Issues and Options for Engagement in Impact Investing and Innovative Finance", *Evaluation Study 2016/2*, Danida, <https://www.convergence.finance/resource/5zik8CqnWEMCAgO0eQiY0k/view> (accessed on 2 December 2020). [22]

- Levine, R. and W. Savedoff (2015), "Aid at the frontier: building knowledge collectively", *Journal of Development Effectiveness*, Vol. 7/3, pp. 275-289, <https://doi.org/10.1080/19439342.2015.1068354>. [118]
- MacArthur Foundation (2019), *Catalytic Capital Consortium*, MacArthur Foundation, Chicago, <https://www.macfound.org/programs/catalytic-capital-consortium/> (accessed on 26 May 2021). [99]
- Manilla, R. (2020), *Panel presentation on using endowments for guarantees*, presented at the MIE 2020 National Conference, Mission Investors Exchange (MIE). [14]
- Manilla, R. (2018), *Mission, Money & Markets: Making 'Cents' of Guarantees, the View from a CIO*, The Kresge Foundation, Troy, <https://kresge.org/news-views/mission-money-markets-making-cents-of-guarantees-the-view-from-a-cio/> (accessed on 26 May 2021). [13]
- Marchal, B., S. Van Belle and G. Westhorp (n.d.), *Realist Evaluation*, Better Evaluation, https://www.betterevaluation.org/en/approach/realist_evaluation (accessed on 21 June 2021). [52]
- Mayne, J. (2012), "Contribution analysis: Coming of age?", *Evaluation*, Vol. 18/3, pp. 270–280, <https://doi.org/10.1177/1356389012451663>. [61]
- Mayne, J. (2011), "Contribution analysis: Addressing cause and effect", in *Evaluating the Complex: Attribution, Contribution, and Beyond*, Transaction Publishers, New Brunswick. [60]
- McKenzie, D., N. Assaf and A. Cusolito (2017), "The additionality impact of a matching grant programme for small firms: Experimental evidence from Yemen", *Journal of Development Effectiveness*, Vol. 9/1, pp. 1-14, <https://openknowledge.worldbank.org/handle/10986>. [97]
- Mirchandani, B. (2019), *The Surprising Leader In The Impact Investing Boom: Debt*, Forbes Magazine, <https://www.forbes.com/sites/bhaktimirchandani/2019/08/08/the-surprising-leader-in-the-impact-investing-boom-debt/?sh=37fc70564d6b>. [6]
- Moles, P. and N. Terry (2003), *The Handbook of International Financial Terms*, Oxford University Press, Oxford. [9]
- Morra Imas, L. and R. Rist (2009), *The Road to Results - Designing and Conducting Effective Development Evaluations*, World Bank, <http://documents1.worldbank.org/curated/en/400101468169742262/pdf/The-road-to-results-designing-and-conducting-effective-development-evaluations.pdf>. [81]
- Mudiliar, A. et al. (2018), *The Financial Performance of Impact Investing Through Private Debt*, Symbiotics and the Global Impact Investing Network, https://thegiin.org/assets/Financial%20Performance%20of%20Impact%20Investing%20through%20Private%20Debt_web_March%202018.pdf. [7]
- Nemzoff, C., L. Clarke and K. Chalkidou (2019), *DIBs: Value for Money or Just an Interesting Financing Mechanism?*, Center for Global Development, Washington, DC,, <https://www.cgdev.org/blog/dibs-value-money-or-just-interesting-financing-mechanism>. [18]
- Nicholls, A. (2018), "A General Theory of Social Impact Accounting: Materiality, Uncertainty and Empowerment", *Journal of Social Entrepreneurship*, Vol. 9/2, pp. 132-153, <https://doi.org/10.1080/19420676.2018.1452785>. [77]

- Nicholls, J. (2017), "Social return on investment: Development and convergence", *Evaluation and Program Planning*, Vol. 64, pp. 127-135, <https://doi.org/10.1016/j.evalprogplan.2016.11.011>. [73]
- Nicholls, J. and J. Pearce (2010), *The Relationship between Social Return on Investment and Social Accounting and Audit*, Social Value UK and Social Audit Network, London. [74]
- OECD (2021), *Applying Evaluation Criteria Thoughtfully*, OECD Publishing, Paris, <https://doi.org/10.1787/543e84ed-en>. [26]
- OECD (2021), *DAC and CRS code lists*, OECD Publishing, Paris, <https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/dacandcrscodelists.htm>. [8]
- OECD (2021), *Official Development Assistance: What is ODA?*, OECD Publishing, Paris, <https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/What-is-ODA.pdf>. [3]
- OECD (2020), *DAC Methodologies for Measuring the Amounts Mobilised from the Private Sector by Official Development Finance Interventions*, Draft, OECD Publishing, Paris, <https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/DAC-Methodologies-on-Mobilisation.pdf>. [23]
- OECD (2019), *Better Criteria for Better Evaluation: Revised Evaluation Criteria Definitions and Principles for Use*, OECD DAC Network on Development Evaluation (EvalNet), Paris, <http://www.oecd.org/dac/evaluation/revised-evaluation-criteria-dec-2019.pdf>. [27]
- OECD (2018), *Making Blended Finance Work for the Sustainable Development Goals*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264288768-en>. [1]
- OECD (2016), "Understanding Key Terms and Modalities for Private Sector Engagement in Development Co-operation", *Private Sector Peer Learning, Peer Inventory 1: Private Sector Engagement Terminology and Typology*, OECD Publishing, Paris, <http://www.oecd.org/dac/peer-reviews/Inventory-1-Private-Sector-Engagement-Terminology-and-Typology.pdf>. [90]
- OECD (2011), "Glossary of key terms and concepts", in *Development Co-operation Report 2011: 50th Anniversary Edition*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/dcr-2011-46-en>. [102]
- OECD DAC (2020), *Blended Finance Guidance Principles*, OECD Publishing, Paris, [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DCD/DAC\(2020\)42/FINAL&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DCD/DAC(2020)42/FINAL&docLanguage=En). [28]
- Ogunforwora, O. (2020), *Social Impact Measurement and Impact Investing for Social Enterprises*, Alliance Manchester Business School, Manchester University, Manchester. [54]
- Orth, M. et al. (2020), *Structured Funds. A Balancing Act between Financial Sustainability and Development Impact*, German Institute for Development Evaluation, Bonn, <https://nbn-resolving.org/urn:nbn:de:101:1-2021012011363095203316>. [59]
- Pawson, R. and N. Tilley (eds.) (1997), *Realistic Evaluation*, SAGE Publishing, London. [65]

- PIDG (2020), *Delivering Impact*, Private Infrastructure Development Group, London, [55]
<https://www.pidg.org/our-impact/delivering-impact/>.
- Porter, S. and P. O'Halloran (2012), "The use and limitation of realistic evaluation as a tool for [85]
 evidence-based practice: a critical realist perspective", *Journal of Research in Nursing*,
 Vol. 19/1, pp. 18-28, <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1440-1800.2011.00551.x>.
- Puri, J. and A. Khan (2019), *Climate Impact Bonds and the GCF*, Green Climate Fund, Seoul, [51]
<https://ieu.greenclimate.fund/news/new-blog-post-climate-impact-bonds-and-the-gcf>
 (accessed on 26 May 2021).
- Reinecke, S. et al. (2020), *Germany's Contribution to the Forest and Climate Protection [21]
 Programme REDD+*, German Institute for Development Evaluation (DEval), Bonn,
https://www.deval.org/fileadmin/Redaktion/PDF/05-Publikationen/Berichte/2020_REDDPlus/DEval_Report_2020_German_contribution_to_RED_D_web.pdf.
- Rogers, P. (2014), *Negative Programme Theory*, BetterEvaluation, [66]
https://www.betterevaluation.org/evaluation-options/negative_program_theory (accessed on
 26 May 2021).
- Salverda, M. (n.d.), *Social Return on Investment*, BetterEvaluation, [72]
<https://www.betterevaluation.org/en/approach/SROI> (accessed on 26 May 2021).
- Schiff, H. and H. Dithrich (2017), *Scaling the Use of Guarantees in U.S. Community Investing*, [15]
 Global Impact Investing Network, New York,
https://thegiin.org/assets/GIIN_Issue_Brief_Guarantees_final%20for%20web.pdf.
- Schneider, C. and C. Wagemann (2010), "Standards of Good Practice in Qualitative [88]
 Comparative Analysis (QCA) and Fuzzy-Sets", *Comparative Sociology*, Vol. 9/3, pp. 397-418,
<https://doi.org/10.1163/156913210X12493538729793>.
- Scott, S. (2017), "The Grant Element Method of Measuring the Concessionality of Loans and [103]
 Debt Relief", *OECD Development Centre Working Paper*, No. 339, OECD Publishing, Paris,
<https://doi.org/10.1787/19e4b706-en>.
- SDG Impact (2018), *SDG Impact Standards for Private Equity Funds*, [25]
<https://sdgimpact.undp.org/private-equity.html>.
- Shadish, W., T. Cook and D. Campbell (eds.) (2002), *Experimental and Quasi-Experimental [108]
 Designs for Generalized Causal Inference*, Houghton Mifflin, Boston.
- Social Value UK (2016), *What is the relationship between IRIS and SROI?*, Social Value UK, [75]
<https://socialvalueuk.org/wp-content/uploads/2016/03/IRIS%20and%20SROI%20Overview1.pdf>.
- Spratt, S., E. Lawlor and V. Coppens (2021), "Core concepts in Blended Finance: Assessment of [114]
 uses and implications for evaluation", *OECD Development Co-operation Working Papers*,
 OECD Publishing, Paris.
- Stake, R. (2006), *Multiple Case Study Analysis*, Guildford Press. [84]

- Sturla, K., N. Shah and J. McManus (2018), *The Great DIB-ate: Measurement for Development Impact Bonds*, Stanford Social Innovation Review, Stanford, https://ssir.org/articles/entry/the_great_dib_ate_measurement_for_development_impact_bonds. [106]
- Tri Hita Karana Roadmap for Blended Finance (2020), *A checklist for assessing the impact of blended finance on the poor*, The Tri Hita Karana Roadmap for Blended Finance Impact Working Group, https://www.thkforum.org/wp-content/uploads/2020/06/THK_Impact_checklist.pdf. [115]
- UN (2015), *Addis Ababa Action Agenda of the Third International Conference on Financing for Development*, United Nations, https://sustainabledevelopment.un.org/content/documents/2051AAAA_Outcome.pdf (accessed on 30 December 2020). [113]
- UNCDF (2018), *Blended finance in the Least Developed Countries*, United Nations Capital Development Fund, <https://www.uncdf.org/en/article/4220/blended-finance-in-ldcs-report#:~:text=The%20report%20%E2%80%98Blended%20Finance%20in%20the%20Least%20Developed,-%20aims%20to%20help%20fill%20in%20these%20gaps>. [116]
- UNCTAD (2014), *World Investment Report 2014: Investing in the SDGs: An Action Plan*, OECD Publishing, United Nations Conference on Trade and Development (UNCTAD), Paris, http://unctad.org/en/PublicationsLibrary/wir2014_en.pdf. [117]
- USAID (2013), *Development Credit Authority: Final Report of Evaluations, 2008-2013*, United States Agency for International Development (USAID), Washington, DC, https://www.usaid.gov/sites/default/files/documents/2151/DCA_Evaluations_Final_Report.pdf. [43]
- Wagemann, C. and M. Siewert (2018), “Qualitative Comparative Analysis”, in *Handbuch Methoden Der Politikwissenschaft*, Springer VS, Wiesbaden. [87]
- WEF (2020), *Measuring Stakeholder Capitalism: Towards Common Metrics and Consistent Reporting of Sustainable Value Creation*, World Economic Forum, <https://www.weforum.org/reports/measuring-stakeholder-capitalism-towards-common-metrics-and-consistent-reporting-of-sustainable-value-creation>. [46]
- WEF and OECD (2015), *A How-To Guide for Blended Finance. A Practical Guide for Development Finance and Philanthropic Funders to Integrate Blended Finance Best Practices into Their Organizations*, World Economic Forum, Geneva, http://www3.weforum.org/docs/WEF_How_To_Guide_Blended_Finance_report_2015.pdf. [79]
- Westhorp, G. (2014), *Realistic Impact Evaluation: An Introduction*, Methods Lab, Overseas Development Institute (ODI), London, <https://odi.org/en/publications/realist-impact-evaluation-an-introduction/> (accessed on 26 May 2021). [53]
- White, H. (2013), “An Introduction to the Use of Randomised Control Trials to Evaluate Development Interventions”, *Journal of Development Effectiveness*, Vol. 5/1, pp. 30-49, <https://doi.org/10.1080/19439342.2013.764652>. [105]
- White, H. and S. Sabarwal (2014), “Quasi-Experimental Design and Methods”, *Methodological Briefs*, No. 8, UNICEF Office of Research, Florence, https://www.unicef-irc.org/KM/IE/img/downloads/Quasi-Experimental_Design_and_Methods_ENG.pdf. [110]

- Winckler Andersen, O. et al. (2019), “Blended Finance Evaluation: Governance and Methodological Challenges”, *OECD Development Co-operation Working Papers*, No. 51, OECD Publishing, Paris, <https://dx.doi.org/10.1787/4c1fc76e-en>. [2]
- Winckler Andersen, O., H. Hansen and J. Rand (2021), “Evaluating financial and development additionality in blended finance operations”, *OECD Development Co-operation Working Papers*, No. 91, OECD Publishing, Paris, <https://dx.doi.org/10.1787/a13bf17d-en>. [89]
- World Bank (2020), *The International Finance Corporation’s Blended Finance Operations: Findings from a Cluster of Project Performance Assessment Reports*, Independent Evaluation Group, Washington, DC: World Bank, <https://openknowledge.worldbank.org/bitstream/handle/10986/33202/The-International-Finance-Corporation-s-Blended-Finance-Operations-Findings-from-a-Cluster-of-Project-Performance-Assessment-Reports.pdf?sequence=5&isAllowed=y>. [96]
- World Bank (2016), *World Bank Group Guarantee Products*, World Bank, Washington, DC, https://ppp.worldbank.org/public-private-partnership/sites/ppp.worldbank.org/files/documents/PPPCSA_WBGuarantees_Final%20%20English%20Printed%20Oct%202016.pdf. [41]
- Yates, B. and M. Marra (2017), “Critical Meta-Evaluation of Social Return on Investment (SROI): Evaluator and Economist Perspectives”, *Evaluation and Program Planning (Special Issue)*, <https://www.sciencedirect.com/journal/evaluation-and-program-planning/vol/64/suppl/C>. [76]
- Yin, R. (2017), *Case Study Research: Design and Methods*, Sage, California. [83]

Notes

¹ Some of the challenges are addressed by this paper, others by the two related OECD working papers on blended finance “Core Concepts in Blended Finance: Assessment of Uses and Implications for Evaluation” (Spratt, Lawlor and Coppens, 2021^[114]) and “Evaluating Financial and Development Additionality in Blended Finance Operations” (Winckler Andersen, Hansen and Rand, 2021^[89]).

² For a list of indicators for the impact of blended finance interventions on the poor, see The Tri Hita Karana Roadmap for Blended Finance Impact Working Group (2020^[115]).

³ For definitions of financial and development additionality by other organisations, see Winkler Andersen, Hansen and Rand (2021^[89]).

⁴ For more information on using RCTs, see for example Ruth Levine and William Savedoff (2015^[118]).

