MINISTRY OF FOREIGN AFFAIRS
OF DENMARK

MAY 2026

EVALUATION STUDY OF BLENDED FINANCE FOR DEVELOPMENT: RATIONALE, ALLOCATION, AND OUTCOMES

MINISTRY OF FOREIGN AFFAIRS
OF DENMARK

MAY 2026

EVALUATION STUDY OF BLENDED FINANCE FOR DEVELOPMENT: RATIONALE, ALLOCATION, AND OUTCOMES

Prepared by

John Rand, Henrik Hansen,
Ruhama Krupinski, Nadja Eifler,
and Alejandra Castro

Production: Department for Evaluation, Learning and Quality (LEARNING), Ministry of Foreign Affairs of Denmark

Graphic production: Kontrapunkt

ISBN: PDF: 978-87-94339-91-9

This report can be downloaded through the homepage of the Ministry of Foreign Affairs or directly from the homepage of the Department for Evaluation, Learning and Quality (LEARNING)
https://um.dk/en/danida/results/eval/eval_reports

Contact: laering@um.dk

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

We are grateful for the comments received from Samantha Attridge (ODI), Paddy Carter (BII), Chris Clubb (Convergence), Neil Gregory (ODI), Chris Humphrey (ODI), Charles Kenny (CGD), Jonas Helth Lønborg (World Bank), and Lasse Møller (OECD). We also acknowledge valuable feedback from Jesper Hilsted Andersen (MFA), Betina Vorsøe Andersen (MFA), Ole Winckler Andersen (DIIS), Morten Elkjær (NCG), Johnny Flentø (MFA), Ninja Ritter Klejnstrup (MFA), Mikkel Klim (MFA), and Theo Ib Larsen (IFDK), which led to substantial improvement of the study.

ABBREVIATIONS AND ACRONYMS USED IN THE DOCUMENT

CGF	Credit Guarantee Fund
CIV(s)	Collective Investment Vehicle(s)
COVID-19	Coronavirus Disease 2019
CRS	Creditor Reporting System
CRSID	Creditor Reporting System Identifier
DAC	Development Assistance Committee
DFI(s)	Development Finance Institution(s)
DIC	Direct Investment in Companies
EU	European Union
FDI	Foreign Direct Investment
GCF	Gross Capital Formation
GDP	Gross Domestic Product
GFC	Gross Fixed Capital Formation
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IFC	International Finance Corporation
IFDK	Impact Fund Denmark (formerly IFU)
IFU	Investment Fund for Developing Countries (now IFDK)
IGO	Intergovernmental Organisation
IMF	International Monetary Fund
LFI(s)	Local Financial Institution(s)
LIC(s)	Low-Income Country(ies)
MDB(s)	Multilateral Development Bank(s)
MIC	Middle-Income Country (often used to refer to middle-income economies)
MIGA	Multilateral Investment Guarantee Agency
MPF	Mobilised Private Finance
ODA	Official Development Assistance
ODF	Official Development Finance
OECD	Organisation for Economic Co-operation and Development
OOF	Other Official Flows
PDB(s)	Public Development Bank(s)
PDF	Private Development Finance
PSI	Private Sector Instrument
SD	Standard Deviation
SDG(s)	Sustainable Development Goal(s)
SME(s)	Small and Medium-sized Enterprise(s)
SPV(s)	Special Purpose Vehicle(s)
UNCTAD	United Nations Conference on Trade and Development
VC(s)	Venture Capitalist(s)

The following annexes to the study can be downloaded as separate PDF files from evaluation.um.dk.

Annexes

Annex A: Credit Risk Modelling
Annex B: Pricing Guarantees
Annex C: Systematic Literature Review: Methodology
Annex D: Systematic Literature Review: Networks
Annex E: Systematic Literature Review: Summary Tables

EXECUTIVE SUMMARY

This evaluation study examines blended finance as a development finance approach that uses concessional public resources (and, in some cases, philanthropic funds) to catalyse private investment in support of development objectives. The study (i) sets out an explicit economic rationale for when such interventions are warranted, (ii) documents how mobilised private finance has been allocated across instruments, institutions, countries, and sectors between 2012 and 2023, and (iii) synthesises recent empirical evidence on outcomes and additionality. The focus is on "when and why" particular instruments, especially guarantees, may be justified, rather than on rating individual programmes or institutions. The study emphasises that descriptive mobilisation statistics, by themselves, are not evidence of financial additionality or development impact, and must therefore be complemented by rigorous ex ante appraisal and ex post evaluation.

Key concepts used in the report

Blended finance is not defined uniformly across the development finance community. The report therefore distinguishes between blended finance as a financing structure (the use of public support to make a transaction feasible) and mobilised private finance (MPF) as a statistical measure of private capital associated with official interventions. The descriptive analysis uses the Development Assistance Committee (DAC) dataset of the Organisation for Economic Co-operation and Development (OECD) on MPF for development, which records private finance mobilised through specific official instruments and attribution rules.

This distinction matters because MPF is an output metric, not a measure of concessional public inputs. The OECD MPF data can describe volumes and patterns of recorded mobilisation. Still, they cannot, on their own, establish leverage ratios (private per dollar of public subsidy) or demonstrate financial additionality. They are best understood as an accounting and pattern-detection tool: where mobilisation is recorded, by whom, through which instruments, and in which countries and sectors.

Additionality and impact are central to the study. In evaluation terms, impact refers to the causal effect of an intervention relative to a counterfactual; a credible impact claim, therefore, implies an additionality claim. For blended finance, additionality is multi-dimensional. Development additionality concerns whether development outcomes

are achieved beyond what would have occurred otherwise (or at a greater scale, speed, or quality), and it is a necessary condition for the use of concessional public resources. Financial additionality concerns whether the intervention crowds in private finance that would otherwise not have been provided or improves terms in ways the market would not offer. Value additionality concerns non-financial contributions (such as technical assistance, governance improvements, ESG standards, or market-building services) that change the quality of investments and their development outcomes. The study stresses that these dimensions should be articulated ex ante and, where feasible, verified ex post.

Conceptual framework: diagnose constraints, then choose instruments

The study adapts a growth diagnostics approach to private investment and blended finance. The guiding proposition is that blended finance should be considered only when private investment is socially desirable but privately unattractive at prevailing risk-adjusted prices. Low levels of international private finance are treated as symptoms of underlying constraints, not as binding constraints in themselves.

The framework distinguishes four proximate constraints that can depress private investment: (i) low levels of domestic finance, (ii) low levels of international finance (as an outcome of deeper frictions), (iii) low returns to private sector activity, and (iv) low appropriability of private returns due to externalities or weak institutions. This structure supports disciplined ex ante reasoning about why public support is needed and where it is likely to be most impactful.

The same logic clarifies instrument choice. When the binding constraint is primarily on the supply side (high cost of capital due to risk, information frictions, or weak intermediation), de-risking instruments can be appropriate. Guarantees and concessional debt can reduce required spreads, extend maturities, and reallocate risk in a targeted manner. When the binding constraint is primarily on the demand side (low expected private returns, including because positive externalities are not priced), interventions must address returns and capabilities. Risk capital (including subordinated or first-loss structures), results-based payments, and technical assistance can improve risk-adjusted returns for private investors or raise the underlying productivity of projects. Notably, equity in itself does not change project cash flows; instead, equity-like and subordinated structures can change who bears downside risk and provide patient capital, thereby improving private investors' risk-adjusted return profile when projects are otherwise not financeable.

Stylised facts from OECD DAC MPF data, 2012-2023

OECD DAC statistics indicate that more than USD 500 billion (constant 2023 prices) in private finance was mobilised between 2012 and 2023. Annual mobilisation increased from below USD 20 billion in 2012 to almost USD 70 billion in 2023, with a strong post-pandemic surge in 2022 to 2023. Even at this peak, MPF remained below one quarter of total official development flows (ODF), underscoring that mobilisation is a meaningful but still limited component of overall development finance.

Measurement choices materially affect headline figures. Different definitions, instrument coverage, and attribution rules produce different mobilisation estimates. The report documents that, for 2021, the OECD MPF estimate is substantially higher than estimates from alternative sources applying different definitions. This reinforces the need to interpret mobilisation volumes as descriptive indicators rather than as direct evidence of effectiveness or additionality.

Instrument composition and mobilising institutions

The composition of MPF across instruments has shifted substantially. Guarantees dominated the early part of the period (exceeding half of annual mobilisation) but account for roughly one quarter in recent years. Direct investments in companies and special purpose vehicles, and shares in collective investment vehicles (often equity-like positions providing risk capital), expanded strongly and averaged roughly one quarter of mobilisation over the period, while syndicated loans, co-financing, and credit lines account for smaller but significant shares.

Multilateral development banks (MDBs) and multilateral development finance institutions (DFIs) account for approximately 72% of total mobilisation in the OECD data. The International Finance Corporation (IFC) is the single largest institution by volume, mobilising close to USD 120 billion since 2012, relying mainly on syndicated loans and equity-like investments, while other World Bank Group entities rely more heavily on guarantees. Bilateral DFIs mobilise less in aggregate and, in recent years, rely more on guarantees, suggesting different operating models and risk preferences.

Geographical and sectoral allocation

Mobilised private finance is highly concentrated in middle-income countries: over 90% of country-allocable MPF goes to middle-income countries (MICs), while low-income countries receive around 5%. This pattern is consistent with the observation that mobilisation is easier in contexts with deeper markets and stronger institutions. It also implies an important interpretive caution: because MPF captures mobilisation outputs rather than public inputs, the distribution of MPF is not a direct map of where concessional resources are used, and it will be mechanically skewed towards contexts with higher mobilisation ratios.

Sectoral allocation is similarly skewed. Roughly two-thirds of MPF is mobilised for economic infrastructure and services, around one-quarter for production sectors, and about one-tenth for social infrastructure and services. Within economic infrastructure and services, the most pronounced growth is in the subsector "banking and financial services", reflecting the central role of financial intermediaries and on-lending structures in many transactions. Energy mobilisation remains substantial but has declined since 2015, while transport and storage have increased from a lower base in recent years. The study notes that these patterns likely reflect both demand-side needs and supply-side investor preferences, and that aggregate data alone cannot reveal alignment with development priorities or additionality.

Evidence from the systematic literature review

To move beyond description, the evaluation study conducts a systematic literature review (SLR) of 81 studies published since 2019, following PRISMA-aligned procedures and using recognised appraisal tools (AMSTAR-2 and DART). The SLR is complemented by bibliometric network analysis to map how evidence clusters across institutional and academic sources.

Across the four outcome domains reviewed, the evidence base points to a consistent set of strengths and limitations. First, there is evidence that MDBs and DFIs can mobilise private capital, including through signalling and anchor-investor roles in syndications and some equity co-investments in innovation-intensive sectors. However, attribution is often contestable, and leverage ratios vary widely across sources and definitions. Consequently, mobilisation statistics alone do not demonstrate financial additionality, especially in settings where private investors are already active, and the risk of crowding out is higher.

Second, blended finance can improve financing conditions (pricing, maturity, collateral requirements) in some contexts, but such improvements are highly context-dependent and do not reliably materialise in higher-risk markets. Some studies raise concerns that subsidies can distort markets, reinforce concentration, or displace commercial finance if pricing and incentives are misaligned, implying that minimum concessionality and careful design are central to achieving additionality.

Third, evidence on market development, innovation, and systemic change is uneven. While some interventions support innovation or entry in nascent sectors, the effects are often localised rather than transformational, and institutional mandates and incentives can lead DFIs towards more bankable transactions in safer markets.

Fourth, the most critical test, development impact, yields weak to mixed evidence. Some studies find positive effects on intermediate outcomes

such as investment, jobs, innovation, and environmental performance. Still, evidence on higher-level outcomes such as productivity, incomes, and poverty reduction remains limited. Non-financial contributions (value additionality) may be central to development outcomes, but they are methodologically difficult to disentangle from the effects of concessional finance. The report therefore emphasises the need for stronger transparency, monitoring, and evaluation as prerequisites for credible learning and accountability.

Implications for policy and practice

The study's core message is to shift from output accounting towards credible claims of additionality and impact, using the constraints framework as the organising logic:

1. Use MPF statistics as a diagnostic starting point, not as a performance metric. MPF data are valuable for describing where mobilisation occurs, but they do not establish additionality, minimum concessionality, or development results. They should be paired with programme- and transaction-level evaluation.

2. Institutionalise ex ante constraint diagnosis and minimum concessionality. Each intervention should document the binding constraint it addresses, why that constraint is plausibly binding (including whether it reflects objectively high risk or perceived risk driven by information and liquidity frictions), and why the chosen instrument is the least distortive way to relax it.

3. Require a full additionality narrative: development, financial, and value. Financial additionality should be assessed against credible market benchmarks and counterfactual reasoning; value additionality should be specified and measured where it is central (for example, environmental, social, and governance (ESG) safeguards, governance upgrades, or technical assistance that changes firm behaviour).

4. Align incentives and reporting with development outcomes rather than volumes. Move beyond mobilisation targets and track results along the causal chain from outputs to long-term outcomes, with independent ex post evaluations where feasible.

5. Strengthen transparency and evaluation infrastructure. Many limitations in the evidence base reflect limited disclosure of deal rationales, risk assessments, concessionality levels, and performance. Stronger deal-level documentation (within confidentiality constraints) and systematic reporting (including on guarantee utilisation, defaults, and payouts) would improve accountability and learning.

6. Be realistic about frontier markets. Low mobilisation in low-income or fragile contexts does not imply low development value, but it does imply that mobilisation-based success metrics are inadequate. In these contexts, additionality may require a combination of instruments (including grants and project preparation) and mission-aligned investors with a tolerance for patient risk, alongside complementary reforms to reduce underlying risk and increase private returns over time.

Conclusion

Blended finance can be a useful part of the development finance toolbox, but it is neither a substitute for public finance nor a guarantee of development impact. The descriptive evidence shows meaningful growth in mobilised private finance, but also strong concentration in middle-income countries and in channels linked to economic infrastructure and financial intermediation. The evidence review indicates that successes exist, yet additionality and impact are too often asserted rather than demonstrated. The practical way forward is therefore disciplined use of the constraints framework, clearer ex ante additionality rationales (including minimum concessionality), and substantially stronger transparency and evaluation so that blended finance resources are directed to contexts and transaction structures where they are most likely to deliver development additionality.

1. INTRODUCTION

The Finance for Development Outcome Document dated 16 June 2025, reiterates that private business activity, investment, and innovation are major drivers of sustainable development, economic growth, and job creation (Article 31).[2] At the same time, it recognises that investment in sustainable development has not met expectations, in part due to underdeveloped financial and capital markets, high financing costs, and a misalignment between short-term financial incentives and the long-term impact on sustainable development. The document calls on development partners and Development Finance Institutions (DFIs) to further expand the use of risk-sharing instruments, such as guarantees and insurance solutions, to mobilise private capital (Article 33h). Thus, blended finance is an integral part of international development finance and cooperation. Even so, as indicated in the document (Articles 33h and r), much can still be learned and agreed upon regarding the use and evaluation of blended finance instruments.

Several of the instruments have long been utilised in international development cooperation. Blended finance instruments were employed by the United States' Economic Cooperation Administration during the implementation of the Marshall Plan (Behrman, 2007), and the International Finance Corporation (IFC) made its first equity investment in 1957 (World Bank, 2016). Furthermore, European countries have channelled bilateral aid through DFIs to encourage investment in developing countries, particularly in infrastructure, since the late 1960s (Kragh et al., 2000). However, this lending did not meet the concessionality criteria required for reporting as Official Development Assistance (ODA). Most blended finance instruments are therefore recorded in the OECD DAC data under the category of Other Official Flows (OOF).

During the 1990s, the role of DFIs in development finance grew as development finance itself evolved. ODA flows declined during this decade, and donors began to focus more on the role of the private sector, adapting their conceptualisation of foreign aid as a mechanism to stimulate private sector growth. This shift led to changes in DAC reporting, such that equity investments became reportable as ODA in 1995 (Hjertholm & White, 2000).

[2] The document can be downloaded from https://financing.desa.un.org/sites/default/files/ffd4-documents/2025/Compromiso%20de%20Sevilla%20for%20action%2016%20June.pdf

The 2002 Monterrey Consensus, the first Financing for Development agreement, emphasised the importance of leveraging foreign aid towards the private sector. Shortly after, in 2006, the EU introduced blended finance into its Multiannual Financial Framework, followed by the establishment of the Africa Infrastructure Trust Fund in 2007. From that point onwards, numerous statements, agreements, and new funds have been issued.

In 2012, the European Commission launched a platform for blending funds in external cooperation. Additionally, the Addis Ababa Action Agenda of the third International Conference on Financing for Development in 2015 "recognize that both public and private investment have key roles to play in infrastructure financing, including through development banks, development finance institutions and tools and mechanisms such as public-private partnerships, blended finance, which combines concessional public finance with non-concessional private finance and expertise from the public and private sector, special-purpose vehicles, non-recourse project financing, risk mitigation instruments and pooled funding structures." (Addis Ababa Action Agenda, Article 48).

Together with the increased focus on blended finance, much has been written about the lack of common terminology and limited comprehension of the complex chains of blended finance interventions (see, inter alia, Convergence, 2019, 2024; DAC Working Party on Development Finance Statistics, 2024; Mutambatsere & Schellekens, 2020; Spratt, Lawlor, and Coppens, 2021; Tew, Caio, & Lonsdale, 2016; The Blended Finance Taskforce, 2018; Winckler Andersen et al., 2019; Winckler Andersen et al., 2021).

Alongside calls to standardise terminology, concerns have been raised about the structure and effectiveness of blended finance. Neil Gregory of the Overseas Development Institute (ODI), in a Devex opinion piece published on 17 May 2023, emphasised that mobilising more private capital for development requires a fundamental shift in DFI business models.

Some DFIs also acknowledge the limitations of current blended finance practices. In its February 2025 publication, "Driving Market-Level Changes in Impact Investing," British International Investment (BII) stresses the importance of coordinated action among public and private investors, companies, governments, and industry bodies. The article advocates building shared knowledge platforms to support systemic, long-term market transformations and emphasises that DFIs must move beyond short-term development goals to contribute to lasting change in market systems.

Several academics underscore the shortcomings of blended finance. For example, Mariana Mazzucato of University College London argues that

the current model is fragmented, insufficiently aligned with national priorities, and unduly influenced by private sector interests. Mazzucato (2025) critiques the dominant "gap-filling" paradigm of SDG financing, asserting that it has failed to deliver the required scale, equity, and impact. Instead of focusing solely on mobilising additional resources, Mazzucato proposes reorienting the international financial system around the SDGs. Moreover, Charles Kenny of the Center for Global Development argues in a February 2024 blog post that the current system is inefficient and poorly targeted. He criticises the ad hoc process in which private companies first secure financing from DFIs and only later seek concessional subsidies, often without strategic guidance or competition. This approach, he argues, leads to misallocation of resources, with low-income countries (LICs) receiving a disproportionately small share of concessional finance.

Common to recent contributions to the discussion is a call to reconsider how blended finance is structured, governed, and deployed. A key consideration in blended finance is ensuring that it is deployed in a manner that meets essential criteria, such as additionality, business integrity, and adherence to environmental and social safeguards. Moreover, concerns have been raised about the concentration of mobilised private finance in middle-income countries, where existing financial instruments may be more effective.

Understanding the mechanisms that shape the impact of concessional blended finance and learning from past experience are crucial for informing future strategies. While there are opportunities to attract private capital to lower-income countries, such investments may require greater effort and engagement. Moreover, blended finance is not solely about the immediate mobilisation of private investment; it can also empower DFIs to undertake high-impact projects in riskier markets that are otherwise unattractive to commercial private investors. Even when such investments do not directly mobilise private capital, they may help gradually move markets closer to commercial viability.

To enhance the impact of concessional blended finance, greater clarity is needed on when and how different instruments should be used, and on how they contribute to development outcomes. Furthermore, the rationale for the mechanisms of blended finance instruments must be clarified. This study contributes to the discussion of these questions.

The study comprises four parts. First, it offers a conceptual and theoretical analysis of how blended finance, particularly guarantees, can boost private investment in emerging and developing countries and develop financial markets. Second, drawing on data from the OECD DAC Creditor Reporting System, it describes past trends and characteristics of private finance mobilised through blended finance instruments. This includes an overview of the development and use of these instruments, organised by

donor, recipient country, and sector. Third, a systematic literature review investigates the mechanisms and outcomes of various blended finance instruments, drawing on both academic and grey literature. The review discusses additionality, mobilisation, and development outcomes within a blended finance context. Finally, in the concluding remarks, the study reflects on the advantages of ex ante versus ex post evaluations and offers recommendations for measuring the impact of blended finance operations.

As the purpose of the study is to enhance our understanding of the rationale and justification for applying various blended finance instruments with a particular focus on guarantees, there is no attempt to describe any specific blended finance programmes or their achievements in detail. This implies that detailed design issues, effectiveness, efficiency, potential outcomes, or sustainability are not explicitly discussed.

2. UNDERSTANDING BLENDED FINANCE

Despite the frequent use of the term "blended finance," there is no consensus on its definition. OECD (2018b, Box 3.1) lists 10 formulations used in documents and studies published since 2011. However, the three definitions below are the leading contenders.

In 2017, the OECD DAC, in collaboration with key private-sector and government players, formulated a set of principles to ensure that blended finance meets accepted quality standards and achieves its intended impact. The principles were approved at the DAC High Level Meeting on 31 October 2017 (OECD, 2018a). As of 2018, the OECD DAC has defined blended finance as "the strategic use of development finance for the mobilisation of additional finance towards the SDGs in developing countries." However, the approval of the OECD DAC definition has not ended discussions among the various actors involved. Specifically, the 23 DFIs in the DFI Working Group have agreed on a different definition: "Combining concessional finance from donors or third parties alongside DFIs' normal own account finance and/or commercial finance from other investors, to develop private sector markets, address the Sustainable Development Goals (SDGs), and mobilise private resources" (DFI Working Group, 2018). Finally, the Blended Finance Taskforce has a third definition: "Blended finance is the strategic use of public or philanthropic development capital for the mobilisation of additional external private commercial finance for SDG-related investments" (The Blended Finance Task Force, 2018). This definition is similar to that used by Convergence, a global network for blended finance (see Convergence, 2024).

The three definitions differ in their emphasis on (1) concessional versus commercial leverage of additional finance, and (2) mobilisation of public and private capital. Across these two dimensions, the definitions span three overlapping, yet distinct sets of financial transactions. The OECD DAC definition appears to be the broadest as it requires neither concessional capital nor public or private involvement. It makes no requirement for concessional funds, as only a reference to "development finance" is stated. This contrasts with the other two definitions, which require concessional funding. Notably, the DFI Working Group's definition requires both concessional and commercial finance, but not private sector involvement. Although it aims to mobilise private resources, transactions involving only concessional and commercial capital from public donors (such as MDBs and DFIs) are considered blended finance. Finally, the Blended Finance Taskforce does not require the involvement

of a public institution. Blended finance can include concessional finance from a private philanthropic source. However, it must involve commercial financial participation from at least one private actor.

Given the multiple definitions, we consistently rely on a core set of key concepts. These underpin the framework, the interpretation of mobilisation data, and the evidence on outcomes. In our study, we distinguish between blended finance as a financing structure (using public support to enable a transaction) and mobilised private finance as a statistical measure of private capital linked to official actions. This distinction is important because the OECD DAC's account of mobilised private finance is an outcome metric rather than a measure of concessional public inputs.

Impact and additionality are central to our analysis. In the present study, impact refers to the causal effect of an intervention relative to a counterfactual. Thus, a credible impact claim inherently involves an additionality claim. For blended finance, additionality has multiple dimensions. Development additionality assesses whether development outcomes are achieved beyond what would otherwise have occurred naturally, or at a different scale, speed, or quality, and is essential for deploying concessional public funds. Financial additionality examines whether the intervention attracts private finance that would not otherwise be provided or improves terms in ways the market alone would not achieve. Value additionality involves non-financial contributions (such as technical assistance, governance improvements, ESG standards, or market-building services) that enhance the quality of investments and their development impacts.

2.1 A conceptual framework

In the following discussion of rationales for blended finance, we denote a public or private entity that provides concessional funds (or development finance under the OECD DAC definition) as the donor, and the entity that provides funds on commercial terms as acting on market terms. The total funds generated from these two sources constitute blended finance. Thus, blended finance combines return-seeking capital with donor capital (public or philanthropic), with the latter aiming to subsidise or de-risk the former. The objective is to catalyse return-seeking capital into investments that create societal value but would otherwise not be financed on purely commercial terms.

From a welfare-economic perspective, there are two broad rationales for subsidising investment: equity and efficiency. Equity arguments focus on distributional objectives (e.g. access, inclusion, spatial targeting), whereas efficiency arguments focus on correcting market failures and other distortions that prevent socially desirable investments from being

undertaken. In practice, most blended finance operations are justified primarily on efficiency grounds, sometimes combined with explicit equity objectives. This distinction matters for diagnosing constraints and for assessing whether a given instrument is appropriate.

A natural starting point is therefore to ask why private investment is below the level implied by the relevant development objectives, and whether this reflects (i) a wedge between social and private returns on investment (a demand-side problem), (ii) a wedge between the private return and the cost of external finance (a supply-side problem), or (iii) both. Put differently, the donor should be explicit about whether the main constraint is that too few projects are privately attractive even when finance is available, or that projects are privately attractive but cannot obtain finance on reasonable terms. This is precisely the diagnostic logic embedded in the constraints tree in Box 1.

The demand-side logic suggests that society may value an investment more than private investors do. This discrepancy arises because some part of the return on investment may not be fully appropriable, due to spillovers, externalities, first-mover advantages, coordination effects, learning, or demonstration. Additionally, risks and frictions may diminish private incentives relative to the social value generated (Hall & Lerner, 2010; Collier et al., 2021). In these situations, social returns exceed private returns, indicating underinvestment from a societal perspective. In appraisal terminology, this situation occurs when the economic rate of return (ERR) exceeds the financial rate of return (FRR).

On the supply side, the logic differs. Even if the FRR is theoretically sufficient, market failures in financial intermediation, particularly information asymmetries and weak collateral, can lead to credit rationing or high financing costs. This issue is especially pronounced among smaller firms and in markets with limited activity (Greene, 2003; Andersson, 2019). Here, the main problem is not that the projects lack value, but that financing is unavailable at the required scale or at a price that aligns with the projects' underlying profitability.

These two logics align with the two main branches in Box 1. Demand-side constraints correspond to the right branch of the tree (low returns to private sector activity and/or low appropriability). Supply-side constraints correspond to the left branch (high cost of finance, driven by domestic saving and intermediation problems and/or limited international finance). Importantly, the two branches call for different "best-fit" interventions. If the binding constraint is low appropriability (e.g. spillovers or coordination failures), interventions that raise private returns conditional on performance, or that absorb early-stage risks to overcome first-mover problems, may be warranted. If the binding constraint is information and intermediation failures, interventions that reduce lenders' expected losses, lower transaction costs, or improve

screening and monitoring (including guarantees, credit lines, and technical assistance to intermediaries) are more directly targeted. The analytical gain from making this distinction explicit is that it reduces the risk that blended finance instruments are deployed as "finance solutions" to constraints that are fundamentally low-productivity or weak-appropriability problems.

This framing also clarifies the role of financial additionality. In this report, we use the term financial additionality to denote cases where donor/DFI involvement alters the availability, terms, or structure of finance relative to what the client could obtain from private capital markets on comparable terms and quantities (e.g. longer tenor, local currency funding, risk sharing/guarantees, or other structuring that relaxes a binding financing constraint). Financial additionality is therefore assessed against a market-based counterfactual and is closely related to, but not the same as, reported mobilisation: mobilisation records associated private finance, whereas financial additionality requires the judgement that such finance (or such terms) would not have been available absent the intervention. Financial additionality is also distinct from development additionality, which concerns whether donor involvement changes project design and outcomes in ways that raise development impact beyond what would otherwise have materialised. For any individual investment project, the donor should engage only when the expected private return without donor engagement falls below the minimum threshold for private investors; otherwise, donor engagement risks crowding out private finance. This implies that the donor's appraisal must establish not only that the investment has social value (ERR sufficiently high), but also that the private case is not already commercially viable (FRR below the hurdle rate), and that the donor contribution is designed to address a specific diagnosed constraint rather than simply subsidising inframarginal investments (Kenny & Moss, 2020; Carter et al., 2021). The principle is closely aligned with guidance on ensuring additionality and minimising concessionality in blended finance operations (OECD, 2021; MDB, 2018).

Two practical questions follow naturally. First, why (and under what conditions) subsidise investments rather than address the underlying market failures directly? In a first-best world, countries should remove the distortion at its source, for example, by strengthening regulation and supervision, improving property rights enforcement, investing in infrastructure, or correcting policy-induced risks. However, such reforms may lie outside the mandate or time horizon of a specific donor operation, face political economy constraints, or require coordination across multiple actors. Moreover, some distortions are project- or sector-specific (e.g. demonstration and learning externalities, pioneer risks, limited track record of borrowers) and can be more efficiently addressed through targeted, time-bound financial instruments that explicitly aim to shift the market towards commercial sustainability over time (OECD,

2021; MDB, 2018). This is a second-best logic: a subsidy or de-risking mechanism is justified insofar as it relaxes a binding constraint identified in the diagnostic and is designed to avoid permanent dependence on concessional resources.

Second, why (and under what conditions) is "blending" preferable to purely public or donor concessional loans? The rationale for blending is not only to increase the volume of finance but also to harness the screening, monitoring, and incentive properties of commercial co-financiers, while strategically using scarce concessional funds to address the specific risk, affordability, or appropriability problem that prevents private participation. Blending can therefore improve the allocation of concessionality. The donor can target the minimum subsidy needed to crowd in private capital (e.g. by absorbing a tail risk, providing first-loss coverage, or extending maturities), rather than financing the entire investment on concessional terms. Where private co-financiers participate meaningfully, blending can also strengthen market discipline and reduce the risk that subsidised finance replaces viable private finance (Kenny & Moss, 2020; OECD, 2021). Conversely, where private capital is unavailable for reasons rooted in low productivity, severe government failure, or other non-financial constraints, pure public finance (including grants or sovereign lending) may be more appropriate than attempting to mobilise private investment through blending.

A comprehensive analysis of the proximate causes of low private-sector investment can be grounded in the framework developed by Hausmann et al. (2008). The framework is presented as a "constraints tree" that outlines the proximate causes of obstacles to private investment. This tree, depicted in Box 1, illustrates the potential barriers to private investment within a specific country or sector. The starting point is that private investment is low because the risk-adjusted rate of return on investment projects (FRR) is low. The constraints tree helps formulate the theory of change by determining whether the low risk-adjusted rate of return is due to high financing costs or to low expected returns to investors. The framework thus directs analysts to examine the supply of finance versus the demand for finance as the first branching point. In short, the framework asks whether there is a lack of attractive projects (a low-return/demand-side problem) or whether projects are profitable but cannot obtain affordable financing (a high-cost-of-finance/supply-side problem).

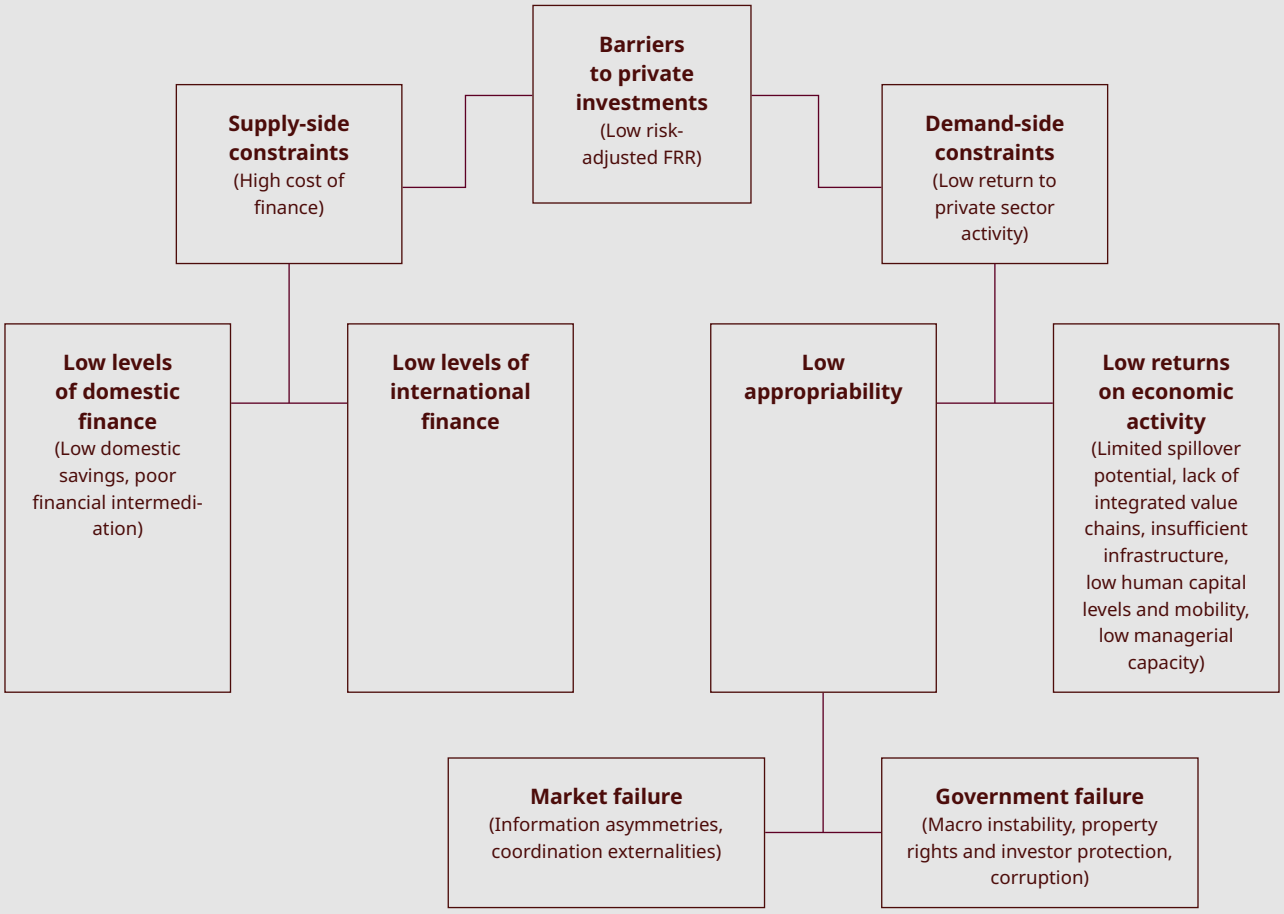
To illustrate how the constraints tree in Box 1 translates into a theory of change and instrument choice, we begin with the supply side (the left branch of the tree), where potentially viable projects may remain unfunded due to high financing costs. The high cost of finance problem is typically analysed in the literature on financial instruments (see, e.g., Greene, 2003; Brown & Lee, 2017; Hansen et al., 2020). High financing costs arise when the supply of capital is low relative to demand. A low

supply of finance may, in turn, result from inadequate national savings, inefficient financial intermediation by domestic institutions, or low levels of international finance. We consider these three nodes in turn, starting with domestic finance.

Low levels of domestic finance

Low domestic savings are often due to poor domestic financial intermediation. The main challenges to financial intermediation are incomplete information and timing: credit is granted initially and repaid later, with some uncertainty. Incomplete information arises because the lender does not know exactly how the borrower is using the borrowed funds. Simultaneously, the borrower's use of the loan affects the likelihood of future repayment, making information about the borrower and their actions essential to the lender. Therefore, incomplete information leads to asymmetric information, as borrowers, by controlling their actions, possess more knowledge about the probability of repayment than the lender.

BOX 1: PROXIMATE CAUSES OF A LOW RISK-ADJUSTED RATE OF RETURN (FRR)



Source: Authors' illustration based on Hausmann et al. (2008).

A possible solution to the asymmetric information problem is for lenders to require collateral. However, collateral requirements may lead to credit rationing for certain borrowers if their credit demand exceeds the value of the collateral they can provide. In such a setting, blended finance, in the form of subsidised loans, credit lines, or credit guarantees, can either directly increase the loanable funds available or reduce lenders' expected losses, thereby indirectly increasing the funds available to firms at prevailing interest rates. Another possible outcome of such interventions is lower interest rates on loans, which would also improve borrowers' terms.

Another solution to the asymmetric information problem is for lenders to obtain additional information about borrowers or to monitor them to improve their assessment of repayment probability. Gathering such information will be costly, but once it is obtained, disseminating it is almost costless; therefore, lenders cannot prevent free-riding by other financial institutions if they are present. As a result, lenders may have little incentive to produce costly information and instead employ practices that exclude certain borrowers based on relatively simple characteristics that do not necessarily reflect their probability of success or risk profile. If no lenders are investing in better information about loan applicants, the credit market may be thin. In such situations, blended finance, such as credit guarantees, can improve the functioning of the credit market by increasing market activity and enabling subsidised lenders to assess borrowers' creditworthiness. Improved knowledge about borrowers may subsequently decrease, or even eliminate, credit rationing as borrowers establish a repayment reputation. Clearly, this will occur only if lenders improve their knowledge of borrowers. If this is not the case, the donor in the blended finance arrangement is simply bearing the cost of information asymmetry.

Low levels of international finance

International finance faces the same information challenges as domestic finance. Moreover, there are three specific challenges to consider. First, foreign lenders often have limited local information. They therefore need to collaborate with a domestic financial institution to reduce asymmetric information. A domestic financial institution without committed capital will be more costly to motivate than one with capital at risk, because capital at risk enables the institution to commit more to monitoring borrowers, thereby reducing the cost of providing monitoring incentives to the international lender. Therefore, international lending may be limited not only by a lack of domestic financial institutions but also by a lack of domestic intermediary capital. Here, blended finance, such as credit lines to a domestic financial institution or credit guarantees to a foreign lender, can attract foreign lenders by shifting the investment's risk-return profile. As noted above, an essential outcome of the intervention must be that domestic financial institutions increase their committed intermediary capital over time.

The second reason for low international finance is legal constraints (restrictions on international capital movements), while the third is low expected returns on private-sector activity for international investors (as discussed below). Both reasons are directly linked to the right branch of the constraints tree. Thus, low international finance may be seen as a symptom rather than a cause of high financing costs. This illustrates that not all nodes in the tree are independent causes. However, they are informative, which is why Hausmann et al. (2008) treat the nodes as possible causes or symptoms of syndromes (distortions in economic fundamentals). In relation to blended finance, this illustrates why the donor must carefully analyse the constraints before mobilising international private finance to a specific country and industry.

Low return to private sector activity

On the demand side (the right branch of the constraints tree in Box 1), a low risk-adjusted rate of return on private investment may reflect low returns to economic activity. This can occur in two ways: (i) the economic fundamentals of the investment project are weak (reflecting low productivity), or (ii) the private appropriability of the financial return is low. The latter can be caused by either market failures (e.g. market structure, externalities, information asymmetries) or government failures (e.g., policy uncertainty, poor regulatory frameworks).

Two common reasons for relatively low productivity, leading to low returns on economic activity in the least developed countries, are a lack of an integrated supply chain and poor (physical) infrastructure. With poor infrastructure, the most effective blended finance instrument would involve a public entity in the country or region. An example is a credit guarantee to support the public entity.

A lack of "bankable" projects is also often cited as a key reason for the low levels of international finance in emerging and developing countries (Bielenberg et al., 2016; OECD/World Economic Forum, 2015; OECD, 2018b). Here, the problem concerns scale and productivity, and one proposed solution is to establish facilities to enhance project preparation, including feasibility studies and funding schemes. In this case, blended finance donors should subsidise or fund project preparation costs (possibly through in-kind contributions, such as technical assistance). The blended finance instrument would be equity finance or syndicated loans via a special purpose vehicle (SPV).

Low appropriability of private returns

A potential cause of low private returns on external finance is "thin markets" (Nightingale et al., 2009). This is a form of information-based market failure that arises when risk-tolerant investors and (new) high-risk firms cannot find each other at a reasonable cost. In such cases, a donor can intervene to address the information problem by directly supporting entrepreneurs, start-ups, and other high-risk firms while also attracting

private equity capital. In this way, blended finance may help resolve coordination failures in the absence of a well-functioning equity market.

Finally, some risks are related to the industry and country levels more than to the individual project. Specifically, regulatory and political risks are associated with uncertainties at the country level. Political risks include changes in regulations affecting specific sectors, for instance, the implementation of tariffs, while institutional risks are mainly related to the enforceability of contracts. Additionally, the macroeconomic environment, particularly currency risks, is critical for foreign investors.

Public donors and MDBs may influence these risks. A prominent example is MIGA, which, in addition to credit guarantees, offers political risk guarantees to private investors (see https://www.miga.org).

2.2 Using the framework for ex ante assessment of blended finance interventions

Using the framework for identifying the most binding constraint enables recommendations for situations in which concrete blended finance investments are most likely to deliver financial additionality. Once the binding constraint is identified, the principle should be to deploy the minimum concessional support required to push a project's risk-adjusted internal rate of return to a commercially acceptable level, without over-shooting. Moreover, to be effective, the instrument choice should align with the binding constraint. This approach translates into two broad decisions: (i) de-risking the investment or (ii) enhancing returns for investors. Distinguishing between these cases is not merely an academic exercise. It has practical implications for development finance. If donors aim to increase private investment, subsidising the supply side will not work if there are only a few viable investment projects demanding finance. Conversely, if viable projects exist but investors are held back by risk or capital constraints, then addressing productivity issues alone would miss the mark.

Summarising the examples given above, we can provide a few simple decision rules that may be used as initial considerations in an ex ante assessment:

- Low levels of domestic finance:
    - Low domestic savings: Use syndicated loans to attract private capital.
    - Poor financial intermediation: Use credit guarantees aimed at the domestic financial sector to decrease the (perceived) risk, thereby increasing the supply of credit and improving the functioning of the financial sector.

- Low levels of international finance:

  This is a symptom, not a cause, of high costs. Look for the reason for low levels of international finance. Three proximate causes are (i) poor financial intermediation, (ii) low appropriability of economic returns, and (iii) low returns on economic activity.

- Low returns to economic activity:

  - Poor infrastructure: Attract blended finance for infrastructure projects.
  - Lack of integrated supply chains or low managerial capacity: Use SPVs or equity and subsidise project preparation costs.

- Low appropriability of private returns:

  - Thin markets: Use equity finance to support entrepreneurs and start-ups while attracting private capital.
  - Political, regulatory, and macroeconomic risks: Use political risk guarantees.
  - International trade risks: Use trade finance guarantees.

2.3 Principles of the specific blended finance instruments

The above description of potential constraints on private investment and the links to blended finance instruments illustrate that several instruments may be used in most situations, while an optimal choice may also exist. A practical starting point is therefore to map the intervention to the binding constraint in Box 1. Instruments that primarily change the availability or terms of credit, such as concessional loans, credit lines, and credit guarantees, are best suited to supply-side constraints, where projects are privately profitable, but financing is scarce or costly. By contrast, when the binding constraint lies on the demand side, such as low returns to economic activity or low private appropriability, effective interventions typically need to raise expected cash flows, improve bankability through structuring and project preparation (e.g. via SPVs), or reallocate non-commercial risks (e.g. political or trade risks) that depress private returns. Below, we describe three specific instruments in more detail: (i) loans, (ii) equity finance, and (iii) guarantees.

Loans

Loans and other debt-based instruments often carry concessional terms, such as reduced interest rates, longer maturities, or grace periods. In the framework outlined in Box 1, these features primarily target supply-side constraints by lowering the cost of finance for projects

whose expected private returns are already adequate, but for which lenders ration credit, shorten maturities, or require high collateral. When low private appropriability is the binding constraint, however, subsidised debt is often a blunt instrument: it lowers the cost of capital but does not, by itself, resolve the underlying reason private returns are depressed (e.g. missing markets, weak enforceability, or non-commercial risk), and it may simply increase leverage without improving project incentives. These features are designed to lower financing costs or mitigate risk. One standard instrument is subordinated or first-loss debt. In this arrangement, the donor takes a junior position in the capital structure, agreeing to absorb initial losses or to receive repayment only after senior creditors have been fully repaid. This structure encourages private lenders to finance high-risk projects they might otherwise avoid.

Debt-based blended finance instruments can also be structured as syndicated or parallel lending arrangements. In these cases, the donor serves as the anchor investor or lead arranger, taking on a riskier share of the investment. These arrangements provide co-lenders with benefits such as preferred creditor status or protection against political risk. Overall, the key mechanism is to adjust the risk-return profile through concessional pricing, subordination, or extended tenure, thereby enabling capital mobilisation.

Equity finance

Equity finance is an instrument through which firms exchange share capital with an investor in exchange for liquidity. This also includes venture capital and risk capital for start-up firms. Catalytic and first-loss equity involve the provision of patient, risk-tolerant capital by donor investors.

Donor equity injections serve several purposes. First, they strengthen the capital structures of investee firms, thereby serving as credit enhancement. Secondly, they allow donors to exert positive governance influence, including through board representation and technical assistance. Thirdly, the presence of a respected donor-investor can serve as a certification mechanism, attracting commercial co-investors who might otherwise remain on the sidelines (Fernandez-Arias et al., 2020).

Structured funds or investment vehicles frequently deploy equity through a layered structure, in which public or philanthropic actors assume the junior equity tranche. Meanwhile, commercial investors occupy the more senior tranches. The junior tranche absorbs initial losses and usually accepts capped or concessionary returns, thereby improving the risk-adjusted return of the senior tranches. This structured approach aligns incentives across investor classes, enabling private participation in high-risk, high-impact sectors (Habbel et al., 2021).

The need for blended finance arises because high fixed costs are necessary to conduct due diligence and meet information demands in equity markets. While firm owners are assumed to possess complete knowledge of the firm's operational capacity and balance sheet, an official valuation is essential to close the information gap between insiders and outsiders. As a result, equity finance providers often focus on larger deals in straightforward markets to minimise the sunk costs of this process. These high fixed costs can result in an under-provision of equity finance for smaller companies (Brown & Lee, 2017). In such cases, blended venture capital targeting smaller firms can serve as a helpful intervention. Another reason for blended equity finance is the argument concerning thin markets.

Guarantee schemes

A guarantee scheme is a mechanism for risk transfer and diversification. It lowers the lender's risk by guaranteeing (in part) repayment of a loan in the event of a default or a loss in value. Thus, guarantees offer risk mitigation without requiring an immediate disbursement of funds. By accepting risks that private lenders otherwise bear, guarantees can catalyse investment in projects deemed commercially unviable. The different types of guarantees are outlined in Box 2.

BOX 2: TYPES AND PRICING OF GUARANTEES

Types of guarantees: Guarantees are typically classified as *funded* or *unfunded*. Funded guarantees require the guarantor to set aside a substantial reserve equal to the guaranteed amount. Unfunded guarantees, widely used by donor agencies, provide only for the statistically expected loss and often rely on the sovereign balance sheet to cover extreme outcomes.

Loan guarantees cover the risk of default on a specific loan and are typically partial, thereby ensuring that lenders retain incentives to screen and monitor borrowers. *Portfolio guarantees* extend this concept to a set of loans that meet pre-defined criteria, thereby encouraging banks to shift lending towards development priorities while diversifying risk across many borrowers. In practice, these two instruments account for the majority of guarantee use in blended finance.

Portable guarantees function similarly to loan guarantees but are issued to the borrower rather than to a specific lender, enabling borrowers to seek competitive loan offers. This can increase bargaining power and stimulate lending in markets where banks are liquid but risk-averse. *Bond guarantees* provide partial or full credit enhancement for bond issuances, improving credit ratings and facilitating access to institutional investors. They are especially useful for infrastructure and municipal finance in emerging markets but are typically deployed selectively due to the need for adequate market depth.

Equity guarantees protect investors against losses on equity stakes, enabling development-oriented investors to back higher-risk ventures, such as early-stage firms or frontier-market funds. *Balance sheet guarantees* directly address the financial stability of institutions by covering portions of existing liabilities, thereby helping banks or firms maintain lending capacity during stress periods. While most blended finance guarantees focus on commercial credit risk, some complementary products address *political risk*. These are typically offered by specialised institutions such as the World Bank's MIGA.

Pricing guarantees: Guarantee pricing generally combines a *risk-based fee* calibrated to the expected loss under the guarantee with a *fixed administrative fee*. Expected loss is often derived from traditional credit risk modelling (see Annex A and Annex B for an elaboration on credit risk modelling and pricing of guarantees), which serves as the core benchmark for the risk premium charged to partners. Accordingly, fees are set to match the anticipated loss over the guarantee's life and include a small administrative charge to cover programme costs. Donors may subsidise part of the risk fee in high-risk or high-development-impact markets to ensure that concessionality supports additional investment rather than displacing commercial finance. These *subsidies* (the portion of the risk fee paid by the donor on behalf of the partner) can be recorded as Official Development Assistance (ODA). Administrative costs may also be drawn from aid budgets, but they are often accounted for separately. Collected fees and subsidies are, by some donors, placed into dedicated guarantee reserves used to compensate lenders in the event of defaults. The idea is that, because only expected losses are provisioned and guarantees are rarely called in full, this model enables donors to mobilise significant private finance with comparatively modest budgetary effort.

Sources: (i) OECD (2021), The Role of Guarantees in Blended Finance – definitions of guarantee instruments and usage statistics. (ii) Sida (2022). Sida's guarantee portfolio and pricing structure. (iii) Danida (2023). Development Guarantee Facility. (iv) Hansen et al. (2020). Guarantees and incentives in development aid.

Partial credit guarantees cover a specified share of credit risk on loans or bonds, often the first losses or a capped share of principal, thereby enhancing the transaction's credit profile. This credit enhancement can translate into lower borrowing costs or higher lending volumes. Such guarantees are widespread in development finance and must be carefully structured to maintain lender incentives. Best practice dictates that the lender retains some exposure to ensure due diligence (Hansen et al., 2020).

Political risk guarantees, by contrast, address non-commercial risks such as political instability, currency inconvertibility, or contract breach. By mitigating sovereign or regulatory risks, these guarantees enable investors to enter fragile or frontier markets. Donors have increasingly bundled high-risk investments into guarantee pools to demonstrate portfolio-level performance and attract additional private capital (Bandura & Ramanujam, 2019).

First-loss guarantees cover initial losses up to an agreed threshold, typically equivalent to the junior tranche in a loan structure. In this role, the guarantor is "last paid" in default scenarios, absorbing early losses to protect senior investors. This form of credit enhancement is instrumental in mobilising private finance for high-risk projects.

There are three standard arguments for credit guarantee schemes. First, asymmetric information may be partially overcome if a guarantor has more information about potential borrowers than lenders do. Guarantees can then be implemented to improve access to credit and reduce credit costs for the targeted group of borrowers. Second, risk across lenders that specialise in specific sectors or geographic areas may be pooled by a guarantor with broader sectoral or geographic coverage.

This is a standard risk-pooling argument in which the guarantor is simply a larger financial entity than the lenders in the sector or area. Finally, if a guarantor is not subject to the same regulatory requirements as lenders, guarantee schemes may emerge to exploit such differences. A simple example is that foreign banks may have lower reserve requirements than domestic banks. In such a regulatory setting, it may be optimal for foreign banks to serve as guarantors for domestic banks if the latter have informational advantages over borrowers.

None of the three arguments requires blended finance. Beck et al. (2010) show that a guarantor should have either an informational, a risk-pooling, or an institutional advantage over lenders. The main argument for blended finance is that the donor institution involved is generally better at coordinating and pooling common and specific risks among specialised lenders.

Anginer et al. (2014) show how the famous Arrow and Lind (1970) finding—that the state best manages risk across space and time in nations with risk-averse lenders and insurers—can highlight the advantages of blended finance guarantees when risks are purely idiosyncratic. This logic suggests that guarantees are more justifiable in countries with less developed financial systems and greater difficulty in risk sharing.

Arping et al. (2010) show that guarantee funds can be more efficient and less expensive than direct lending programmes for improving access to credit. Moreover, guarantees are often easier to defend politically, as they act as market-friendly tools and require relatively low initial investment, with losses spreading gradually as defaults occur.

The conceptual difference between credit guarantees and direct forms of intervention is worth emphasising. A subsidised loan provides funds at below-market rates, directly increasing credit supply. However, the lender still bears the default risk on that loan. An equity investment injects capital into a firm or intermediary, sharing profits and losses, and thus does not directly target the credit risk associated with bank lending. In contrast, a guarantee explicitly targets the risk dimension by partially indemnifying lenders against loss. However, guarantees also introduce complexity into deals and require effective risk management and clear contracts, as a third party (the guarantor) becomes involved in the credit relationship. Moreover, as illustrated in Box 3, the registration of guarantees in the OECD DAC Creditor Reporting System (CRS) has not been standardised.

BOX 3: GUARANTEES AND ODA REGISTRATION – THE DANISH CASE

According to the OECD DAC guidelines, the issuance of guarantees in itself does not qualify as ODA. However, related components, such as administrative expenses, technical assistance, or first-loss capital, may be reported as ODA to the extent that they contain a quantifiable grant-equivalent element and meet the DAC's concessionality requirements. In principle, two accounting approaches are permitted for registering guarantees as ODA: (i) reporting the concessional portion of the risk premium at the time the guarantee is issued, or (ii) recording realised financial losses as they occur. To illustrate how these rules are operationalised, examples from Danish development cooperation are instructive.

Regarding Denmark's capital contributions to the International Bank for Reconstruction and Development (IBRD), the Danish government provides both paid-in capital and guarantee commitments. In the most recent IBRD capital increase, Denmark contributed DKK 0.371 billion in paid-in capital, which is fully reportable as ODA. In addition, the Danish government committed DKK 2.4 billion in guarantee exposure. For this contingent liability, an annual risk premium is calculated and reported as ODA, reflecting its grant-equivalent value. This constitutes a hybrid model that accounts for both direct financial transfers and guarantees and is compliant with DAC reporting standards.

Since IDA18, a considerable share of the Multilateral Investment Guarantee Agency's (MIGA) guarantee operations in IDA-eligible countries has been supported through the IDA Private Sector Window. Danish contributions to this facility are registered as ODA at the time of disbursement, i.e. when funds are transferred as part of Denmark's commitment to IDA replenishments. Although there may be a temporal disconnect between the initial transfer and the eventual deployment of guarantees in recipient countries, ODA eligibility is determined at the point of contribution.

In contrast, guarantees issued by the Impact Fund Denmark (IFDK), with financial backing from Danida, are not automatically classified as ODA. Only instruments with a clear concessional component, such as a subordinated tranche financed by Danida to absorb first losses, may be partially reported as ODA. The private capital mobilised through such guarantees is accounted for separately under the OECD DAC's framework for measuring private finance mobilisation and does not contribute to Denmark's core ODA figures.

However, under new development guarantee initiatives, the Danish government has implemented a framework that allocates an annual appropriation to cover the expected cost of risk associated with state-backed guarantees. One example is the Development Guarantee Facility (DGF), which encompasses subsidies for guarantee premiums, technical assistance, and administrative costs. This facility authorised a total guarantee exposure of up to DKK 2.0 billion. At the same time, DKK 0.145 billion was appropriated in the 2023-2025 Finance Acts to subsidise the grant-equivalent elements (DKK 25 million for administration, DKK 30 million for technical assistance, and DKK 90 million for premium subsidies to financial intermediaries). These appropriations were reported as ODA in accordance with DAC guidelines.

As of 2025, IFDK reports that two guarantees have been deployed under the DGF: one with the Asian Development Bank for DKK 0.706 billion and an SME-focused guarantee in Rwanda for DKK 40 million. This corresponds to a utilisation rate of 37.3% of the facility's guarantee envelope. As of August 2025, neither guarantee has been triggered, and Denmark has reported the full DKK 145 million in appropriated subsidy support as ODA.

Thus, while guarantees themselves are not ODA-eligible under DAC definitions, associated concessional elements, when properly structured, can be reported as ODA. The Danish approach exemplifies a pragmatic and transparent application of DAC rules, combining direct contributions with contingent instruments in a manner consistent with compliance requirements.

Source: Development Guarantee Facility - Grant for Guarantee Subsidies, Tech Assistance and Administration, July 2023.

3. BLENDED FINANCE FLOWS 2012-2023

3.1 Measurement of blended finance flows

Comparing recorded amounts of blended finance in 2021 illustrates the importance of the different definitions. According to Convergence (2024), applying the Blended Finance Taskforce definition and utilising proprietary data on certain private actors, blended finance transactions totalled USD 14 billion, with approximately 50% of the commercial capital mobilised per dollar of concessional input originating from private-sector actors. The Joint DFI Working Group (2023) reported total blended finance flows of USD 13.4 billion, of which USD 4.6 billion (34%) was attributable to private sector sources. Finally, the OECD DAC recorded mobilised private finance of USD 48.6 billion (OECD, 2023). These figures should be understood within the context of total public development finance. In 2021, the 33 OECD DAC countries collectively committed USD 178.9 billion in ODA. Thus, blended finance transactions amounting to USD 14 billion constitute approximately 8% of total ODA commitments, whereas USD 48.6 billion constitutes approximately 27%. Hence, regardless of definition, blended finance constitutes only a small share of total development finance and is far from transforming billions into trillions.

The OECD DAC is the only institution that provides detailed, publicly available data on blended finance. Accordingly, the blended finance data described in this section are drawn from the OECD DAC database. As with disagreements over the definition of blended finance, there has been criticism of the OECD DAC data. Concerns have been raised about the underlying causal assumptions embedded in the methodology used to measure private finance mobilisation. At the core of the OECD approach is a set of instrument-specific “key assumptions” that attribute all private co-investment in a transaction to the presence of an official development finance provider, such as a DFI or bilateral donor. For example, in the case of guarantees and syndicated loans, the methodology presumes that private investors would not have participated in the absence of the official actor (OECD, 2020). Critics argue that these assumptions are overly generous and risk systematically overstating the degree of mobilisation achieved. The Centre for Development Finance Studies characterises the assumption for syndicated loans as highly questionable, warning that such simplifications undermine the credibility and policy utility of the resulting statistics (CDFS, 2023). Relatedly, the United Nations Inter-Agency and Expert Group on SDG Indicators observes that the framework establishes causality based on generic ex ante assumptions about each instrument, rather than on verifiable

evidence of specific actions taken by DFIs in individual transactions, thereby blurring the distinction between genuine mobilisation and mere co-presence (IAEG-SDGs, 2020).

A second line of critique concerns the OECD methodology's relatively narrow coverage, which primarily focuses on long-term flows and transaction-level co-investment. Several authors argue that this leaves important mobilisation channels uncounted. The IAEG-SDGs (2020) notes that the approach does not systematically capture short-term instruments, such as trade finance, unfunded risk transfers, client bond issuances supported by official institutions, or direct advisory and transaction support. In a similar vein, BII argues that the OECD templates are well suited to accounting purposes but too narrow to reflect the full spectrum of mobilisation pathways, as they exclude, for example, commercial capital raised by DFIs themselves, downstream private investment into sub-investees of funds, and catalytic effects that materialise in follow-on transactions rather than at the initial co-investment stage (Tahir & Robinson, 2023; Gregory & Grubert, 2024). Gregory & Grubert (2024) explicitly conclude that the current OECD definition does not encompass all mobilisation pathways, thereby providing an incomplete picture of the contribution of official actors to private capital flows.

A third concern involves the OECD's rules for allocating mobilised funds among multiple public actors involved in the same transaction. The methodology outlines precise, mechanical rules for splitting mobilisation, such as between an official arranger of a syndicated loan and other participants, or among public investors in a structured fund. For syndicated loans, 50% of the private mobilisation is assigned to the arranger, with the remaining split among other official participants based on their commitments. In collective investment vehicles (CIVs), half of the mobilised volume is allocated equally to public investors in the riskiest tranche, while the remaining half is allocated in proportion to investment volume (OECD, 2020). Gregory & Grubert (2024) argue that these rules often do not reflect the actual roles and efforts of the institutions involved. For example, in syndicated loans, the arranger generally plays a key role in structuring the deal and attracting private lenders. Nevertheless, under OECD rules, only half of the mobilisation is attributed to the arranger. They recommend aligning with Multilateral Development Bank (MDB) practices, which attribute the full private syndication to the arranger. Similarly, in CIVs where a DFI acts as fund manager or lead fundraiser, Gregory & Grubert suggest that tranche-based allocation is irrelevant and that all mobilised private capital should be considered direct mobilisation by the managing DFI. They also propose measuring mobilisation by private parties' credit exposure rather than total financing volumes, which include official risk-taking. The OECD has acknowledged that maintaining these OECD rules alongside the separate MDB framework causes confusion and increases reporting burdens for institutions required to report under both systems (Habbel et al., 2021).

Finally, the suitability of the methodology as a strategic tool for DFIs and donors, rather than as a statistical standard designed to avoid double-counting, has been questioned. Tahir & Robinson (2023) characterise the OECD approach as primarily focused on accounting frameworks, arguing that it is insufficient for institutions seeking to formulate comprehensive mobilisation strategies or to manage their portfolios in line with catalytic objectives. Because the OECD metrics capture only a subset of co-investment scenarios, they do not reflect other forms of mobilisation that are important from a strategic perspective, such as the crowding-in of investors into DFIs themselves or the longer-term market-building effects of early, high-risk interventions (Tahir & Robinson, 2023; Gregory & Grubert, 2024).

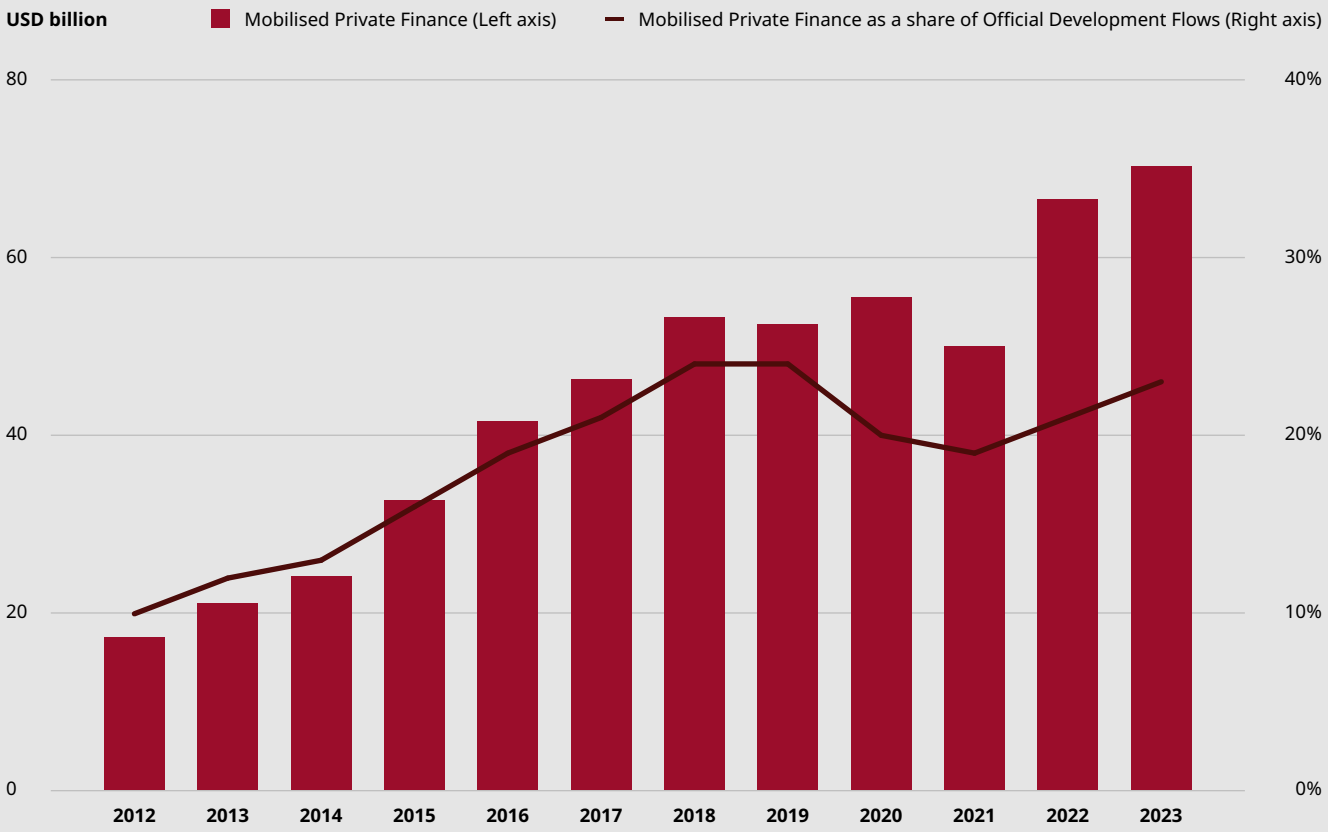
3.2 The mobilised amounts and mobilising organisations

In public reporting on blended finance, the OECD DAC Creditor Reporting System has been expanded and divided into subsets to capture blended finance information from donors. One set, the "CRS Flows" database, primarily contains information on Official Development Assistance, Other Official Flows, and Private Development Flows. Another dataset, the "CRS - Private: Mobilised private finance for development", provides information on private flows mobilised through blended finance instruments. There is no public link (e.g. CRSID) between the records in the two datasets, and it is not possible to establish a link based on the information provided. Thus, it is not possible to compute leverage ratios.

Data on mobilised private finance are reported for the six instruments used by development co-operation providers: (i) guarantees, (ii) syndicated loans, (iii) shares in CIVs, (iv) direct investment in companies and special purpose vehicles (DIC/SPVs), (v) credit lines, and (vi) simple co-financing arrangements. The reporting of amounts mobilised is defined on an instrument-by-instrument basis (OECD, 2020; DAC Working Party on Development Finance Statistics, 2024). The OECD DAC has several publications summarising the data. See Benn, Sangaré & Hos (2017), Basile & Dutra (2019), and OECD (2020, 2021, 2023).

Starting with the total mobilisation of private finance, according to OECD DAC statistics, more than USD 500 billion, in constant 2023 prices, was mobilised between 2012 and 2023. From a low base of less than USD 20 billion in 2012, equivalent to approximately 10% of total Official Development Flows (ODF), mobilised private finance has shown an upward trend, with the post-corona years of 2022 to 2023 indicating a strong recovery. The largest mobilisation occurred in 2023, reaching almost USD 70 billion (Figure 1). However, even at this level, total mobilised private flows amount to less than a quarter of the ODF.

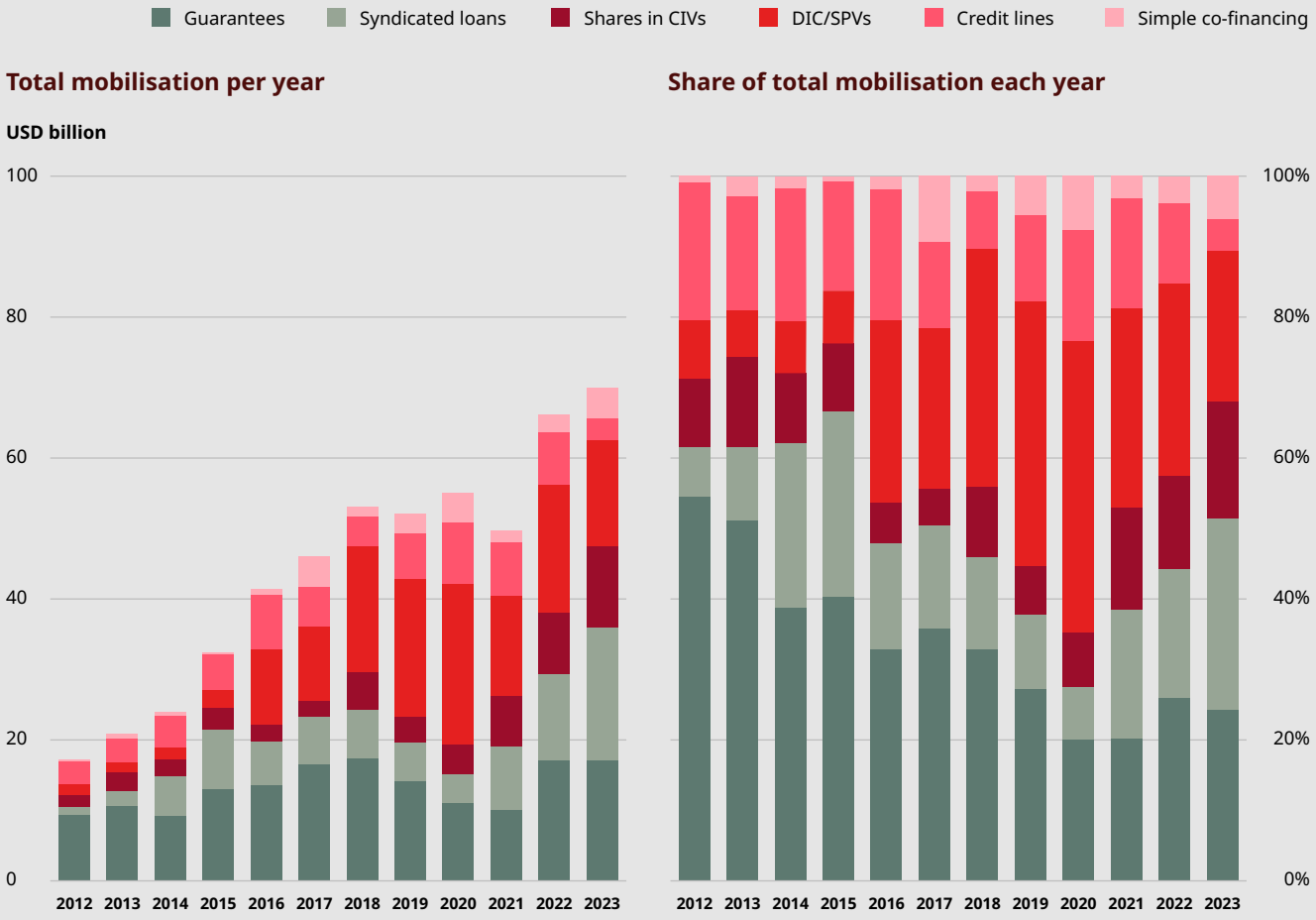
FIGURE 1: MOBILISED PRIVATE FINANCE 2012-2023



Note: USD billions at constant 2023 prices (left axis) and as a percentage of Official Development Flows (right axis).
Source: OECD, CRS – Private: Mobilised private finance for development and authors' calculations.

Guarantees mobilised nearly one-third (30%) of total private finance over the period, with DIC/SPVs a close second at 26% (Figure 2). However, mobilisation through guarantees has decreased in relative terms over the years. In 2012 to 2013, guarantees covered half of total mobilisation, falling to about one-quarter in later years. By contrast, mobilisation through DIC/SPVs was less than 10% in the early years, peaked at 40% in 2020, and fell to just above 20% in 2023. Thus, mobilisation through the different instruments has varied considerably over time, with guarantees and DIC/SPVs jointly dominating. Nonetheless, although the volumes mobilised through credit lines (13%), syndicated loans (11%), and simple co-financing (4%) were comparatively modest, these instruments can still be effective in specific contexts, for example, in countries with low domestic savings rates.

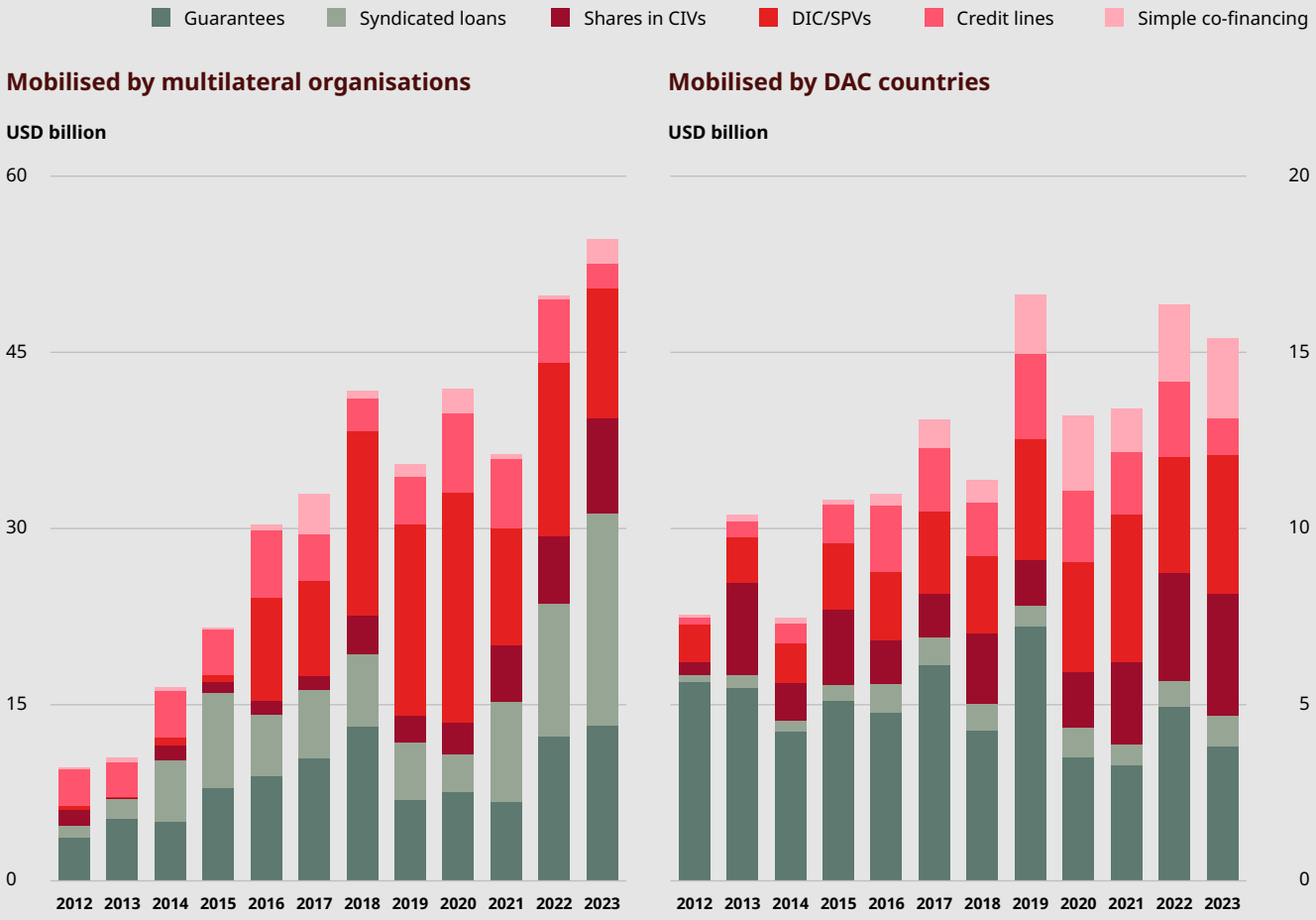
FIGURE 2: MOBILISED PRIVATE FINANCE BY INSTRUMENT



Note: USD billion at constant 2023 prices.
Source: OECD, CRS – Private: Mobilised private finance for development and authors' calculations.

The increase in mobilisation over time comes mainly from a five-fold increase in mobilisation by multilateral organisations (Figure 3). By contrast, mobilisation by DFIs in OECD DAC countries increased by only around 50% over the period. Accordingly, multilateral organisations were the leading actors, accounting for 72% of total mobilisation. In addition to guarantees and DIC/SPVs, multilateral organisations (mainly MDBs) used syndicated loans to leverage private finance, significantly more than national finance institutions in OECD DAC countries. The latter showed a strong preference for using guarantees as the primary instrument, although DIC/SPVs gained importance over the period.

FIGURE 3: MOBILISED PRIVATE FINANCE BY PROVIDER AND INSTRUMENT

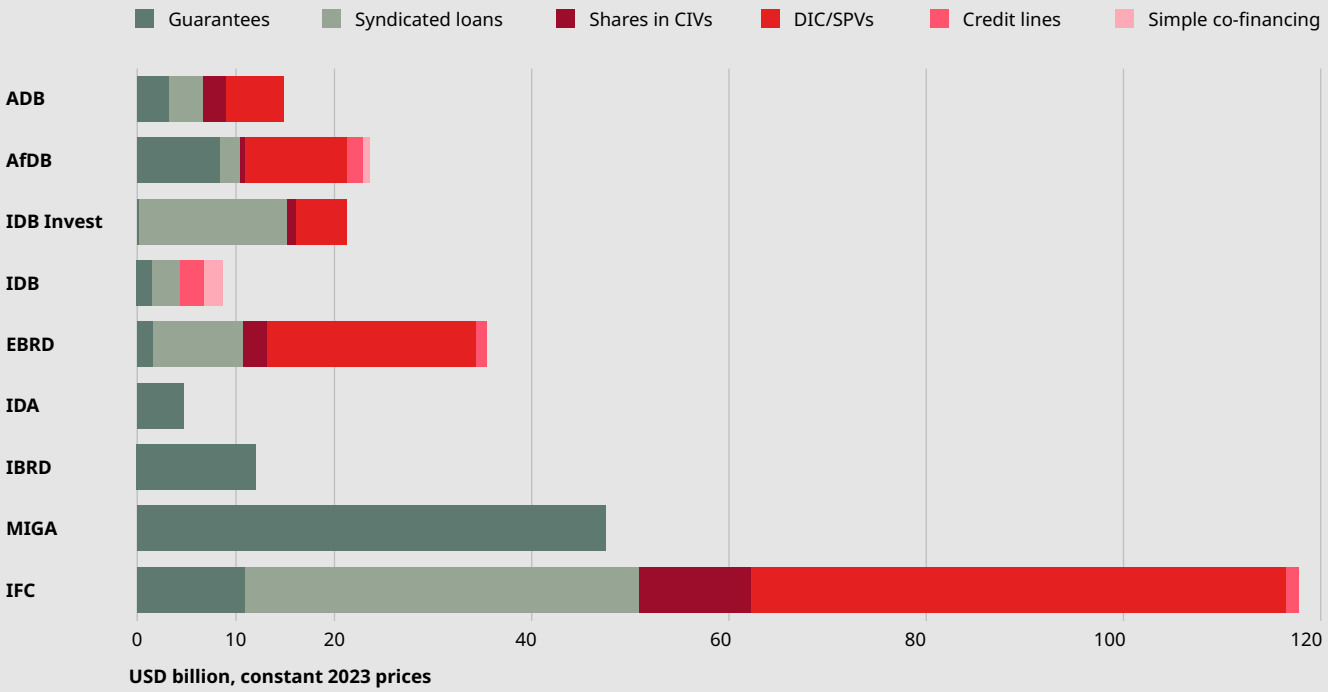


Note: USD billion at constant 2023 prices.
Source: OECD, CRS – Private: Mobilised private finance for development and authors' calculations.

The IFC mobilised almost USD 120 billion from 2012 to 2023, accounting for about 40% of the total mobilisation by the MDBs (Figure 4). The IFC's preferred instruments were DIC/SPVs and syndicated loans, while guarantees accounted for a relatively small share. By contrast, the other World Bank institutions, MIGA, IBRD, and IDA, only used guarantees to leverage private finance. More than half of the MDBs' mobilisation through guarantees can be attributed to the three World Bank institutions.

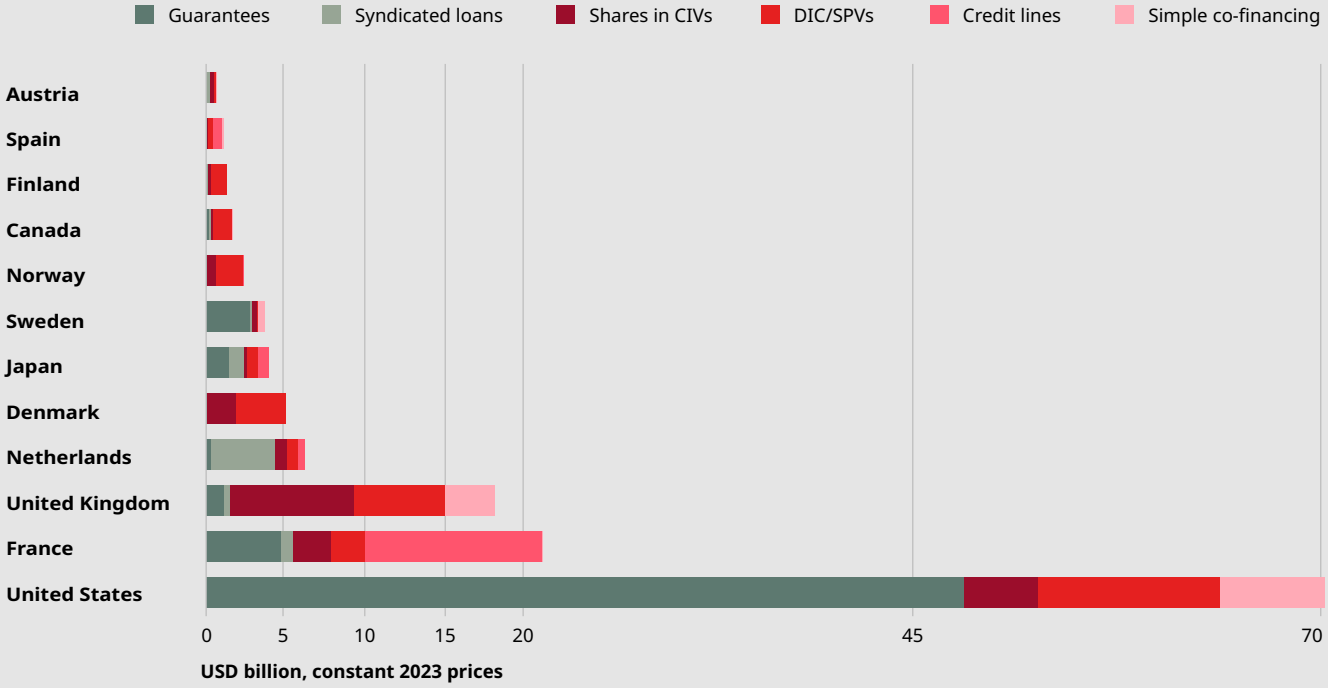
At USD 70 billion, the DFIs in the USA accounted for more than half of the total mobilisation by national DFIs, and US-based DFIs had a strong preference for guarantees, mobilising close to USD 50 billion between 2012 and 2023 (Figure 5). France, the second-largest OECD DAC-country provider, accounted for 15% of the total private finance mobilised by national DFIs in the DAC countries, with DFIs in the UK coming third at 13%.

FIGURE 4: PRIVATE FINANCE MOBILISED BY THE MULTILATERAL DEVELOPMENT BANKS



Source: OECD, CRS – Private: Mobilised private finance for development and authors' calculations.

FIGURE 5: PRIVATE FINANCE MOBILISED BY THE DAC COUNTRIES



Source: OECD, CRS – Private: Mobilised private finance for development and authors' calculations.

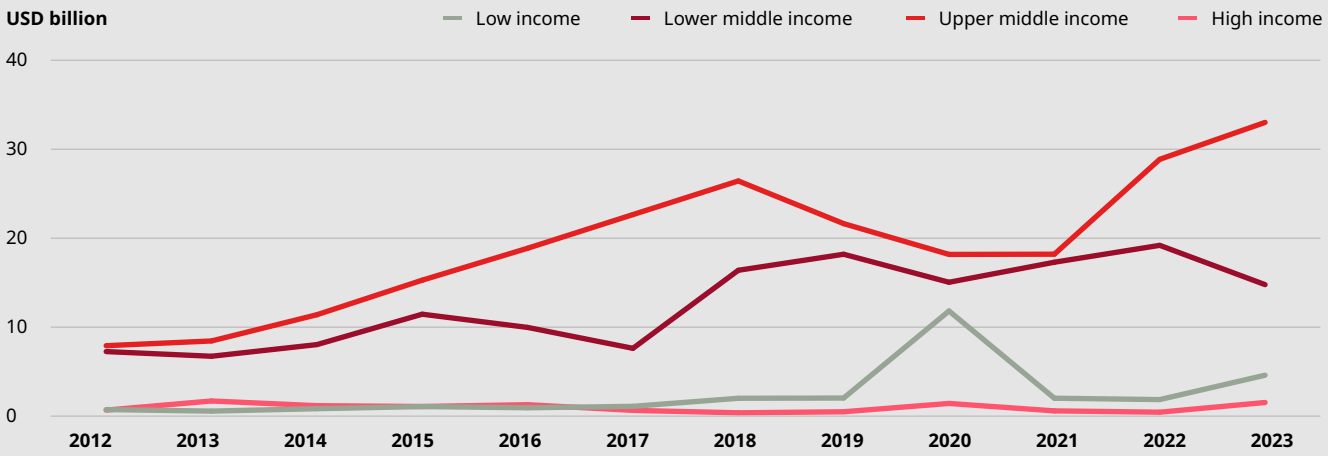
3.3 Recipient countries

Turning to the recipients of mobilised private finance, middle-income countries are by far the core beneficiaries (Figure 6). From 2012 to 2023, they received 92% of the country-allocable funds. As these funds constitute 92% of total mobilised finance, middle-income countries received at least 72% of the total, with only 5% allocated to low-income countries.

The allocation of funds has changed over time. In the early years, LICs received only 2.5% of the total amount. In 2020, Mozambique received more than USD 10 billion, driven by a significant increase in direct investments in companies and SPVs, as well as by a significant amount leveraged through guarantees. However, following the spike, private flows to LICs almost returned to the low levels seen in the early years. In contrast, in recent years, there have been substantial increases in flows to upper-middle-income countries.

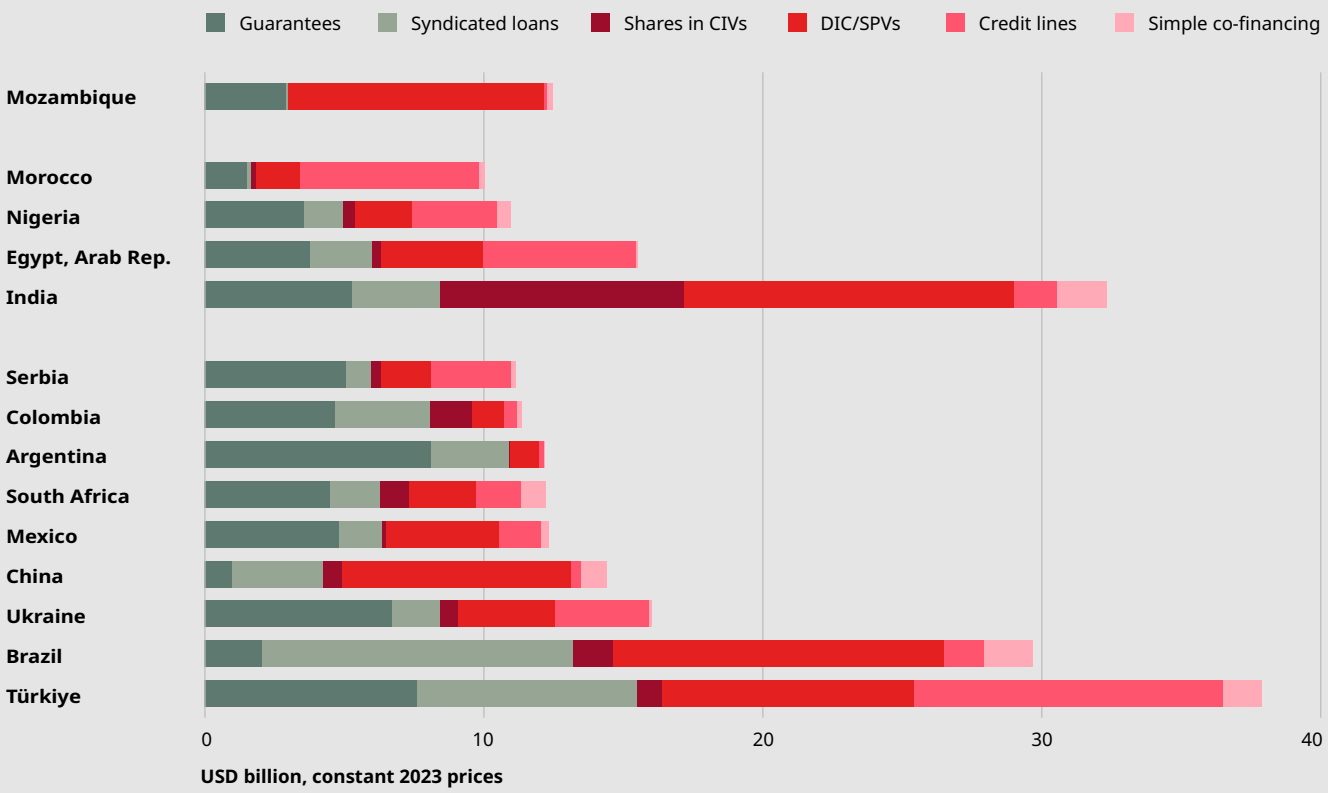
Of the small share of total finance directed to LICs, more than half (54%) takes the form of direct investments in companies or special purpose vehicles (DIC/SPVs). This contrasts with the few funds directed towards high-income countries, where only 6% is leveraged by CIV/SPVs, and there are no shares in CIVs. Instead, almost half (48%) of the mobilised private finance is leveraged by guarantees. This could reflect a constraints logic showing that LICs have low domestic savings rates and/or demand-side constraints, such as low productivity or low appropriability of returns. In contrast, in high-income countries, the constraints framework should point to supply-side constraints, presumably arising from relatively poor financial intermediation, leading to credit-constrained enterprises.

FIGURE 6: MOBILISED PRIVATE FINANCE BY COUNTRY INCOME GROUP (WORLD BANK CLASSIFICATION)



Note: USD billion at constant 2023 prices.
Source: OECD, CRS – Private: Mobilised private finance for development and authors' calculations.

FIGURE 7: MOBILISED PRIVATE FINANCE BY INSTRUMENT AND RECIPIENT COUNTRY



Source: OECD, CRS – Private: Mobilised private finance for development and authors' calculations.

Fourteen countries have received more than USD ten billion over the period (Figure 7). Of these, one is a low-income country (Mozambique), four are lower-middle-income countries (India, Egypt, Nigeria, and Morocco), and nine are upper-middle-income countries. The high mobilisation volumes among the thirteen middle-income countries illustrate the importance of local market dynamics and the need for profitable investment opportunities.

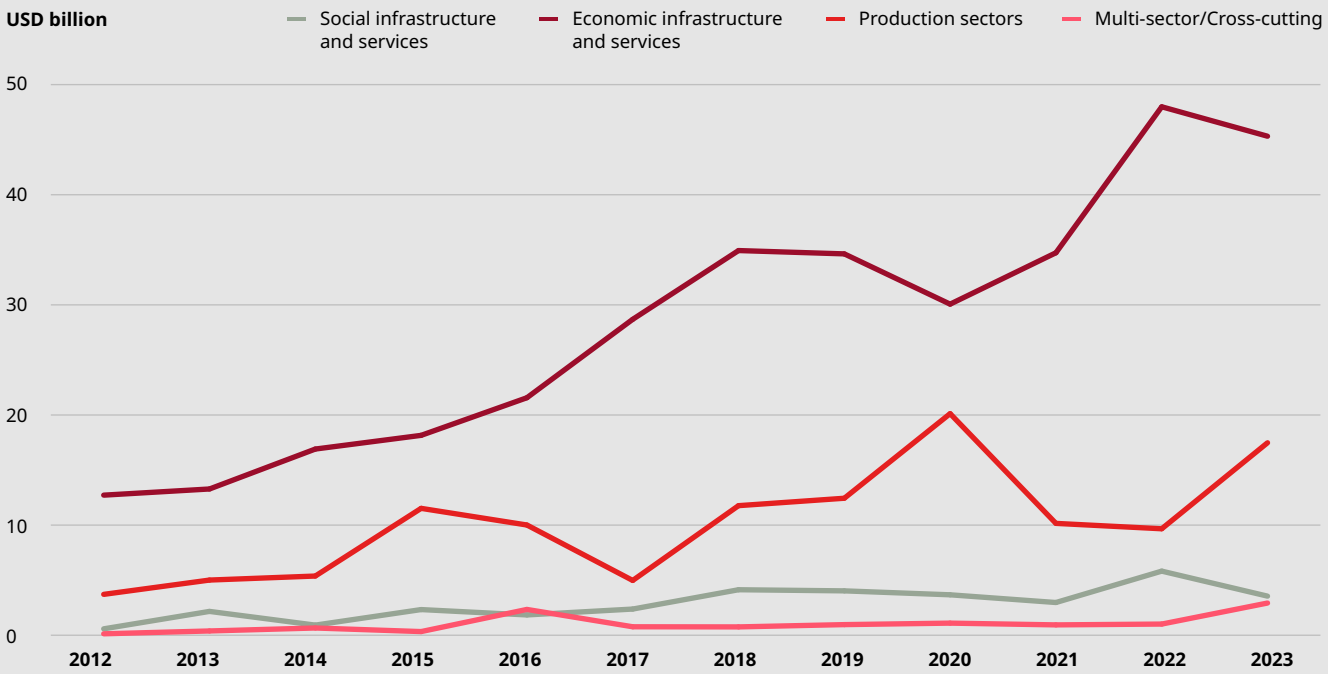
3.4 Allocation of mobilised private finance across sectors

The need for profitable investment opportunities is also a significant driver of sector allocation. The main increase in private finance has been in the "Economic infrastructure and services" sector. Over the period 2012-2023, two-thirds of mobilised private finance benefited projects in that sector, while a quarter was aimed at companies and projects in the "Production Sectors." Of the remaining 10%, two-thirds were directed to "Social infrastructure and services" (Figure 8).

The substantial growth in the "Economic infrastructure and services" sector is primarily driven by an exponential increase in funding for projects in the "Banking and financial services" sub-sector (Figure 9). This increase is across all instruments, except credit lines and simple co-financing. Mobilisation for projects in the energy sector is also substantial, but it has declined since 2015. In contrast, mobilisation for projects in the "Transport and storage" sector is rising strongly from a low base, with syndicated loans and CIV/SPVs as the main instruments. For the most part, projects in the two sectors support climate action.

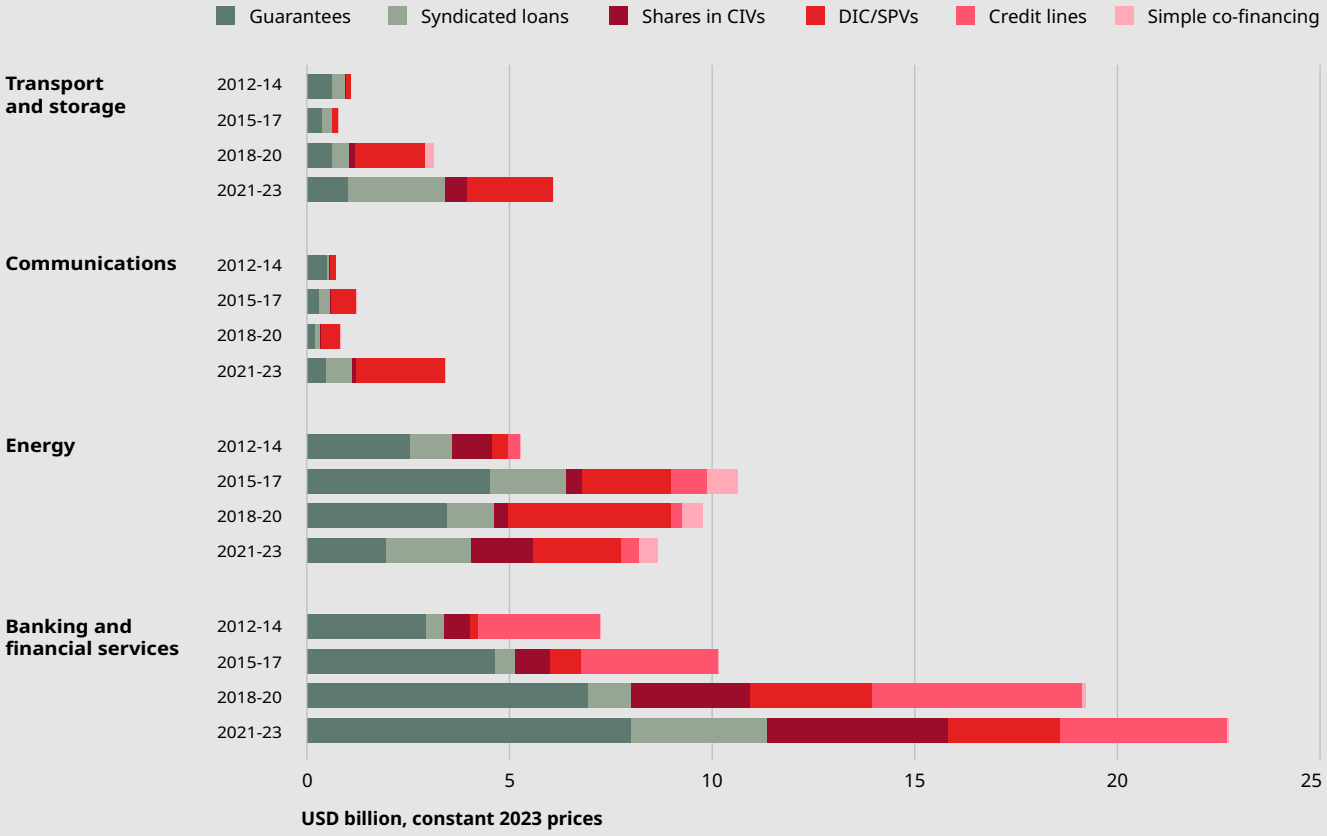
It is not possible to provide the exact reason for this sector allocation, as two forces are at play. Within the constraints framework and in accordance with targeting middle-income countries, the binding constraints should be credit constraints, which can be alleviated by increased financing, as reduced risk mobilises private finance. However, there is also the supply of blended finance. If private funders in blended finance projects prefer guarantees in "Banking and financial services", the significant mobilisation in this sector may well be driven more by its popularity among private investors than by its need in recipient countries. In any event, the allocation is consistent with the view of development finance articulated in Greene (2003) and Brown & Lee (2017), as explained in Hansen et al. (2020).

FIGURE 8: MOBILISED PRIVATE FINANCE BY SECTOR



Note: USD billion at constant 2023 prices.
Source: OECD, CRS – Private: Mobilised private finance for development and authors' calculations.

FIGURE 9: MOBILISED PRIVATE FINANCE IN THE ECONOMIC INFRASTRUCTURE AND SERVICES SECTOR



Source: OECD, CRS – Private: Mobilised private finance for development and authors' calculations.

The complexities of supply and demand in blended finance imply that, while the data provide a valuable overview of the scale, distribution, and sectoral focus of mobilised private finance, they do not, on their own, reveal whether blended finance interventions have been effective in achieving their stated objectives of market development, additionality, and impact. To assess these aspects, it is important to examine the growing body of empirical evidence on the outcomes and impacts of blended finance. The following section therefore presents a systematic literature review that synthesises academic studies, institutional evaluations, and policy analyses to critically evaluate what is known and what remains contested about the effectiveness of blended finance in mobilising capital, improving financial conditions, fostering market innovation, and delivering development additionality.

4. A SYSTEMATIC LITERATURE REVIEW

We have conducted a systematic literature review in accordance with established standards of transparency and methodological rigour. The review is guided by a transparent, theory-driven protocol that aligns with PRISMA standards and incorporates recognised tools for assessing methodological quality, including AMSTAR-2 and DART. Guided by the Hausmann et al. (2008) framework, the review seeks to identify, evaluate, and synthesise evidence on the impact of blended finance in developing countries. Clear eligibility criteria are applied, restricting inclusion to English-language studies from 2019 onwards that provide a documented methodology and a quantitative or qualitative assessment of *development impacts*. A structured search strategy has been implemented across major academic databases and targeted grey literature sources, ensuring comprehensive coverage of peer-reviewed studies, institutional evaluations, and policy reports.

All retrieved records were systematically screened in accordance with PRISMA guidelines, yielding 81 studies for inclusion (see Annex C for methodological details). The studies were categorised by publication type and summarised across key analytical dimensions, including objectives, methods, financial instruments, donor institutions, and findings. To complement the qualitative synthesis, the review incorporates a bibliometric network analysis to identify structural patterns in the literature, including clusters, citation flows, and divides across publication types and evaluative stances. This combination of transparent search and screening procedures, rigorous quality criteria, and structural mapping provides a comprehensive and methodologically robust basis for understanding the evidence on blended finance.

4.1 Bibliometric network analysis

We conduct a bibliometric network analysis of the 81 studies to better understand how the literature on blended finance is structured and how ideas circulate within it. This analysis reveals clusters of closely related studies, identifies influential documents that shape the field, and highlights conceptual or institutional divides that may not be apparent from traditional review methods. By mapping shared references and citation flows, network analysis helps interpret patterns in the evidence base (such as areas of consensus, fragmentation, or emerging lines of inquiry), thereby guiding our synthesis and clarifying how different strands of the literature contribute to the overall understanding of blended finance.

Two types of networks are generated:

1. *shared-reference networks*, which connect documents that cite at least one common source; and

2. *citation networks*, in which directional arrows indicate when one document explicitly cites another within the review corpus.[3]

All networks are constructed in Python and visualised in Gephi.[4] Each network is rendered in three versions, differentiated by the colouring of documents according to key attributes, see Annex D. These attributes capture distinct dimensions of the literature, including the evaluative stance towards blended finance, document type, and terminology. Together, they help interpret the structure and composition of the networks by highlighting patterns of support, institutional origin, and conceptual framing. Annex D, Table 1 summarises the colour coding for each attribute.

Network 1 presents the citation network, coloured by the level of support for blended finance (A), alongside the shared-reference network, coloured by document type (B). Additional graphs are provided in Networks 2 to 5. In the shared-reference networks (Networks 1B, 4, and 5), the thickness of connections reflects the number of references cited in common by two documents, serving as a proxy for intellectual proximity. In the citation networks (Networks 1A, 2, and 3), arrows are directional, extending from the citing document to the cited one, and highlight patterns of influence and citation flows within the corpus. Connection colours are blended to visually represent a mix of the attribute colours associated with the linked documents.

Taken together, the visualisations help us see how the literature is organised and how different studies relate to one another. However, several limitations should be noted. First, classifying studies as supportive or critical of blended finance requires interpretation, even when we follow a structured approach. Second, the citation networks only show connections within the set of studies included in our review; they do not capture influential work outside our sample, which may affect how central or connected a study appears. Third, newer publications may appear less connected simply because they have not yet been cited by others, not because they are unimportant. Finally, because the links between studies are identified using automated methods rather than manual checking, some connections may have been missed; for instance, when the same source is cited in slightly different ways across documents.

---

[3] The analysis includes reports without any citations and reference list (UN, 2024; Kenny, 2024a; 2024b; IFC, 2022; EBRD, 2025a; Convergence, 2023a; 2023b; 2024; 2025b).

[4] Matches were established using the fuzzywuzzy string similarity library in Python. Citation pairs were linked when the combination of first author's last name, publication year, and title met or exceeded a similarity score of 85%. This approach introduces some uncertainty, for example for citations to earlier versions of papers later formally published under slightly different titles.

The analysis reveals a moderately cohesive field with clear clusters, indicating a shared conceptual core and noticeable boundaries between subgroups. Peer-reviewed articles and institutional reports tend to form distinct communities, as shown by the document-type overlays (Networks 1B, 2). Academic journal articles and institutional reports rarely appear in the same clusters. This separation may reflect differences in methodological orientation, publication norms, or target audiences. Working and discussion papers appear to occupy a position between these two communities, serving as intermediaries that connect academic and policy-oriented work. Review and synthesis papers are fewer in number but also help link otherwise separate parts of the literature.

The patterns suggest that the literature on blended finance is not fully integrated. Academic studies, institutional evaluations, and policy papers often address different audiences and draw on distinct analytical traditions. As a result, insights and evidence do not always flow easily across these groups. The fact that peer-reviewed articles and institutional reports form separate clusters implies that academic work may not always inform policy practice, and policy evaluations may not fully engage with academic debates. Working papers play an important bridging role, helping to connect these otherwise separate communities. For our review, this means that relevant evidence may be scattered across distinct segments of the literature, requiring deliberate effort to synthesise findings across them. It also highlights the value of network analysis, which reveals where communication gaps exist and helps us understand how different types of studies contribute to the overall evidence base.

Supportive findings, those claiming effectiveness or positive outcomes of blended finance, are concentrated mainly in the central areas of both the citation and shared-reference networks. These are predominantly represented in orange and yellow, denoting positions that are either unambiguously positive or cautiously supportive. These documents often serve as bridges between otherwise disconnected parts of the field, underscoring their influential role in shaping the blended finance discourse. By contrast, more sceptical or critical assessments, shown in light blue and blue, tend to be located at the margins of the networks, with fewer connections and lower centrality. Their peripheral placement suggests that although dissenting views are present, they are less integrated into the mainstream conversation.

For our review, this insight is important: it alerts us to the possibility that supportive studies may disproportionately shape the dominant narrative in the literature, while critical perspectives remain somewhat isolated. Understanding this imbalance helps us interpret the evidence more carefully and ensures that minority viewpoints are not overlooked simply because they are less connected in the citation landscape.

The analysis also shows that the term "blended finance" is used unevenly across the literature (Networks 3, 4, and 5). Institutional and grey literature documents (especially those from MDBs and DFIs) tend to use the term explicitly, whereas academic studies often discuss similar financial mechanisms without using this specific label. Instead, they describe the same or related practices using terms such as catalytic capital, public-private co-financing, or risk-sharing instruments. This difference in terminology does not necessarily imply a fundamental conceptual divide. However, it does mean that studies addressing closely related topics may not always be immediately identifiable as part of the same conversation. For a systematic review, this matters because variations in terminology can make it harder to locate all relevant evidence and to synthesise findings consistently across sectors. Recognising this issue helps us interpret the literature more carefully and ensures that our search strategy and analysis account for these differences in wording.

A small number of highly connected documents play a structural role, particularly working papers by authors such as Leon (2024, 2025) and De Haas & Uribe-Gonzalez (2025). These working papers link otherwise distinct parts of the field and appear to act as epistemic brokers, connecting policy-oriented literature with academic papers.

Overall, the network patterns indicate that while many studies share common reference points, suggesting some degree of alignment around certain core concepts, the field is not fully integrated. Distinct clusters remain visible, particularly between academic articles and institutional reports, and these groups often use different terminology and express varying levels of support for blended finance. This means that although there is some convergence in the issues examined, the literature still shows fragmentation shaped by publication type, preferred conceptual language, and evaluative stance. Recognising these divides helps clarify why evidence and perspectives may differ across parts of the field and underscores the value of systematically synthesising contributions from all segments of the literature.

In the following, we present a synthesised analysis of the literature, drawing specifically on the work outlined in Annex E, Tables A, B, C, and D. The synthesis is structured around four key outcome dimensions: (i) Mobilisation and financial additionality; (ii) Improvement in loan conditions, terms, and financial characteristics; (iii) Market innovation and the alleviation of financial or institutional barriers; and (iv) Development impact and additionality. Annex E, Tables A, B, C, and D present an assessment of the reviewed studies, classifying them according to the nature of the evidence they report on blended finance. Specifically, studies are categorised as providing positive evidence in support of blended finance interventions (POS), reporting mixed or inconclusive evidence regarding their effectiveness (MIX), or finding no or only limited evidence in support of blended finance (NON).

4.2 Mobilisation and financial additionality[5]

As shown above, blended finance instruments have demonstrated the potential to mobilise private capital. However, evidence on financial additionality cannot be derived solely from the descriptive section. Aggregate data from different sources often report varying mobilisation ratios. According to Convergence (2025b), leverage ratios range widely, from 0.9 when DFI/MDB finance is treated as public to 3.8 when it is treated as private, highlighting inconsistencies in measurement and classification across the literature. Institutional reports using the former leverage ratio definition document only gradual improvements, with average mobilisation increasing modestly from USD 0.5 to USD 0.7 per dollar of concessional input between 2013 and 2018 (Attridge et al., 2019; Attridge & Engen, 2019; Attridge & Gouett, 2021). Moreover, one should be cautious when citing leverage ratios from larger, successful deals, as overreliance on these deals in reporting can distort actual average leverage ratios (Rust-Smith et al., 2024; Spratt et al., 2024).

The literature documents that DFIs and MDBs play a critical signalling role and can act as anchor investors to crowd in private finance (Avellan et al., 2024; Gatti et al., 2023). Syndicated loans coordinated by DFIs exhibit relatively high leverage ratios (up to 7:1) (Broccolini et al., 2021), but such figures are often overestimated due to unclear attribution (Carter et al., 2021). Similarly, climate-related mobilisation ratios reported by multilateral funds, such as the GEF and GCF, can reach 10:1 (Kotchen & Vogt, 2025). Equity investments and co-investments with venture capital appear particularly effective in mobilising additional financing in innovation-intensive sectors (Clo et al., 2022), while results-based subsidies (e.g. GET FiT Uganda) have helped mobilise private investors for renewable energy interventions (Probst et al., 2021). Guarantees show mixed results. Bozkurt & Günsür (2023) find positive firm-level mobilisation effects in Turkey, but IDB (2022) and Rust-Smith et al. (2024) highlight a broader lack of evidence on whether guarantees catalyse new investment.

As shown above, mobilisation is heavily skewed towards middle-income countries, with LICs and social sectors seeing limited private participation despite substantial concessional effort. In fragile states, blended finance often fails to shift risk appetite or unlock private flows at scale (Gregory, 2023; Kenny, 2024b). For instance, the IDA Private Sector Window (PSW) mobilised only a limited amount of additional private capital despite deploying USD 5.6 billion in subsidies. Additionally, IFC's share of investments in IDA countries has declined since its

[5] Financial additionality in this subsection refers to volumes of extra finance, without considering the related mechanisms, which are touched upon in the subsequent sub-section. Moreover, it should be noted that in the academic literature, co-financing is used as a pseudonym for blended finance and mobilisation, and they implicitly critique the "grey" literature for relabelling the term. In the following, we use the terms (traditional) co-financing arrangements and blended finance interchangeably without further engaging in the terminology debate.

inception (World Bank, 2024; Kenny, 2024b). However, Cole et al. (2025) demonstrate that IFC has successfully deployed capital across various sectors and locations, outperforming traditional investors. This suggests that impact investors are more likely to invest in marginal areas and emerging sectors. This was achieved without compromising investor returns, as demonstrated by the long-run risk-adjusted returns of IFC equity engagements, which were comparable to those of the S&P 500 (Cole et al., 2025). This underscores a key policy implication: the limited mobilisation seen under initiatives such as the IDA PSW may reflect structural issues in the design or targeting of blended finance instruments, rather than an intrinsic lack of viable investments. In contrast to the PSW's concessional capital, which did not result in proportionate private mobilisation, IFC's success implies that deploying capital with a strong mandate, local knowledge, and tolerance for patient risk can yield both developmental and financial returns.

Taken together, these observations suggest that effectively mobilising finance for marginal and fragile markets may require more than risk subsidies alone. It may demand active, mission-aligned investors with a demonstrated track record in navigating complex, underserved investment environments. Such results are consistent with the constraints framework, in which the most binding constraint would be on the demand side.

Across the literature, attributing private capital mobilisation to blended finance is complicated by the lack of credible counterfactuals, selection bias, and inconsistent reporting. DFIs often claim full credit for private participation without verifying whether it would have occurred in the absence of such involvement (Carter et al., 2021; Attridge et al., 2019). McHugh (2021, 2023) and Léon (2025) emphasise that current approaches are insufficient to verify whether interventions are truly additional or simply crowd out commercial capital. Bertzky et al. (2020) identify a glaring scarcity of rigorous evaluation. Of the 33 publications reviewed, only 4 employed quasi-experimental methods. The PSW, despite being a flagship initiative for high-risk markets, lacks completed impact evaluations of closed projects (World Bank, 2024). Similarly, IDB (2022) finds no conclusive evidence that guarantees induced new private investments.

Misaligned incentives, under-pricing of risk, and unclear mandates can erode additionality. In practice, this occurs when publicly backed financiers price capital or guarantees at levels that do not fully reflect underlying risks, or when their mandates emphasise volume and disbursement over catalytic effect. McHugh (2023) argues that development finance markets can resemble oligopolies, in which a small number of large public institutions dominate and can unintentionally suppress private sector participation. As such, public financiers displace, rather than mobilise, private investment by absorbing market share or setting

price benchmarks that are commercially unsustainable. This dynamic undermines additionality: instead of correcting a market failure, public capital becomes a substitute for private solutions. Asare (2024) provides empirical support for this concern in the African banking sector, showing that banks receiving DFI support expanded lending less than comparable banks without DFI support. This counterintuitive finding suggests that DFI interventions may have crowded out, rather than crowded in, private finance. Several mechanisms could explain this effect: DFI participation may signal elevated risk, prompting other lenders to withdraw; conditionality attached to DFI funding may constrain balance sheet flexibility; or subsidised DFI pricing may distort competitive dynamics and reduce incentives for other lenders to enter or scale. More broadly, the result highlights that concessional capital alone does not guarantee catalytic outcomes. Without careful structuring, transparent pricing, and aligned incentives, it may inadvertently depress private sector activity in the very markets it seeks to expand.

Calls for institutional reform are growing, as emphasised at the Fourth Finance for Development Conference in June/July 2025. Gregory (2023) advocates replicability, standardisation, and more strategic scaling. Reviews concur that achieving genuine financial additionality requires better monitoring, transparency, and rigorous evaluation of blended operations (Cull et al., 2024; Sharma et al., 2023; Léon, 2025).

Key takeaways

(a) Mobilisation success is real but overstated: Blended finance can mobilise private capital, yet reported leverage ratios are often lower than expected, especially in fragile contexts.

(b) Financial additionality is often claimed but seldom rigorously proven: Few studies credibly demonstrate that blended finance induced private investment that would not otherwise have happened.

(c) High-risk markets remain underserved: Private capital continues to bypass LICs and the social sectors.

(d) Positive cases exist but are not yet common: Targeted programmes can succeed, especially in Small and Medium-sized Enterprises (SMEs) or the climate sectors.

(e) Structural and methodological barriers persist: weak attribution, lack of transparency (as many blended finance transactions are confidential, with limited disclosure of pricing, risk-taking, and subsidy levels), and institutional crowding out undermine blended finance's transformative potential.

4.3 Improvement of loan conditions, terms, and characteristics

Blended finance can improve loan terms by lowering interest rates, extending maturities, and easing collateral requirements. However, the extent and sustainability of these improvements vary significantly depending on the instrument, context, and implementation design.

There is consistent evidence that blended structures can reduce borrowing costs, particularly when concessional capital is used to de-risk transactions or subsidise rates (Flammer et al., 2025; Léon, 2025). In practice, concessional tranches or guarantees help reduce the weighted average cost of capital, especially in fragile settings or capital-intensive sectors. Examples include IFC-supported agribusiness and climate finance deals where concessional capital helped lower the cost of funds by up to 5% (IFC, 2019, 2022). Barboza et al. (2023) demonstrate that BNDES loans in Brazil, offered at below-market rates, filled a maturity and pricing gap left unmet by private banks. However, these effects are not universal. In higher-risk environments, concessional finance can co-exist with high spreads, reflecting persistent risk premiums (Gurara, 2020).

A widely observed benefit is the extension of loan maturities. MDB and DFI participation is strongly associated with longer tenors, often 12 to 15 years for infrastructure and energy projects (Gong et al., 2023; IFC, 2019, 2022). Hu et al. (2022) and Gurara (2020) find that NDBs and MDBs allocate significantly more funding to long-term credit compared to private banks, enabled by patient capital and stable funding bases. These extended tenors are essential in markets with short domestic financing horizons.

Blended finance often relaxes collateral requirements and provides more flexible covenant structures. Fotak & Lee (2020) show that public-private syndicates reduce collateral requirements and improve borrowers' access without compromising covenant enforcement. Similarly, Agnese et al. (2019) document that partial guarantees lower collateral thresholds and increase SME credit access globally. However, smaller syndicates in high-risk deals (Gong et al., 2023) and evidence of risk aversion among intermediaries (Gajigo et al., 2022) suggest that conservatism persists even within blended structures.

Guarantees and subordinated capital are frequently used to improve loan conditions by shifting risk away from private lenders. Sharma et al. (2023) demonstrate, in an empirical exercise, that partial guarantees reduce expected losses, thereby enabling banks to lend to previously excluded sectors. These instruments are particularly important in contexts where adequate collateral or credit histories are lacking (Flammer et al., 2025; Agnese et al., 2019). However, moral hazard

concerns persist. Overly generous guarantees may weaken credit discipline, as some schemes have been empirically associated with higher default probabilities (Agnese et al., 2019).

Despite many successes, concerns about targeting and additionality remain. Empirical evidence shows that improved loan terms offered through DFI credit lines (such as below-market interest rates, longer maturities, or reduced collateral requirements) do not always reach the intended beneficiaries. Gajigo et al. (2022) and Léon (2024) find that these concessional or preferential terms often accrue to large, well-capitalised banks that would have lent to similar clients even without DFI support. As a result, the financial advantage remains "upstream", with limited pass-through to SMEs or underserved borrowers. Léon (2024) documents an 8% decline in loan growth among DFI-supported banks in Africa following the intervention, with no evidence of broader market spillovers. These findings challenge the assumption that improving lenders' funding conditions automatically translates into expanded credit access, improved affordability, or systemic deepening.

A key challenge, therefore, is ensuring that improved loan terms do not inadvertently crowd out private finance or weaken the incentives of participating institutions. More concessional pricing, guarantees, or blended packages can reduce lenders' risk exposure to the point that they have weaker incentives to screen and monitor additional risky loans. De Haas & Gonzalez-Uribe (2025) show that when concessional funds, guarantees, and technical assistance are bundled, lenders may face less discipline, leading to the misallocation of credit. McHugh (2021) emphasises the need for "minimum concessionality" to prevent DFI funding from undercutting commercial lenders or distorting price signals. Léon (2025) argues that DFIs should use concessionality more boldly in genuinely frontier markets and more transparently, ensuring that favourable terms are explicitly linked to risk-taking and development outcomes, rather than passed on to already comfortable intermediaries.

Despite widespread claims of improved terms, systematic data remain scarce. IDB (2022) notes a lack of reporting on pricing improvements or borrower-level outcomes. Most evidence remains project-specific or anecdotal. The literature broadly supports the idea that improved loan terms are a key mechanism for mobilisation (De Haas & Gonzalez-Uribe, 2025; Bertzky et al., 2020), but also calls for better metrics and impact tracking.

Key takeaways

(a) Blended finance often reduces loan pricing and extends maturities, especially through concessional tranches and guarantees, but the effects are context-dependent and uneven.

(b) Term improvements are most pronounced in infrastructure and SME finance, where long tenors and relaxed collateral requirements address key financing gaps.

(c) Targeting remains a concern: Many concessional credit lines are absorbed by well-capitalised banks, undermining additionality and developmental reach.

(d) Design trade-offs are significant: Poorly calibrated concessionality can crowd out private finance or create moral hazard.

4.4 Market innovation and alleviation of financial or institutional market barriers

As noted above, blended finance has often been promoted as a tool to overcome supply-side constraints, as these are assumed to be the binding constraint on private investment. The literature offers partial support for this claim, but the impact varies by instrument, institutional actor, and context.

There is limited evidence that development banks can act as market shapers and risk absorbers. One study finds that MDBs co-lend in high-risk infrastructure and frontier sectors (Gurara, 2020), while another study shows that DFIs provide smaller, longer-term loans in high-uncertainty areas (Gong et al., 2023). During crises, public banks have expanded lending as private banks have retreated, highlighting that MDB/DFI engagements can have a stabilising function (Gong et al., 2023; Cerda et al., 2023).

Nevertheless, the risk-sharing role of DFIs is often constrained by institutional conservatism. Many operate in relatively safe markets or with established firms (Léon, 2025), limiting their catalytic potential. Blended finance structures can reduce risk exposure and improve oversight (Degl'Innocenti et al., 2022; Jud et al., 2024), but DFIs rarely assume the first-loss position needed to unlock transformative investment (Lee & Cardenas, 2020). Andonov et al. (2025) show that DFIs are less active in early-stage deals than traditional private Venture Capitalists (VCs), but also find that DFIs, to a greater extent, prioritise sectors with positive externalities and target underrepresented fund managers. Moreover, MDB participation improves investor confidence via a "halo effect" (Gurara, 2020), and local bank leadership reduces loan spreads by signalling project viability (Ahiabor & James, 2019). These effects are context-specific and depend on institutional capacity. The presence of DFIs can crowd in private actors, especially during politically sensitive periods (Jud et al., 2024; Mishra, 2023), but demonstration effects often remain localised.

Blended finance has also shown promise in easing credit constraints for underserved segments. Programmes such as the Turkey Women in Business initiative have combined technical assistance with credit guarantees to shift bank behaviour and expand lending to women without increasing default rates (Flammer et al., 2025). Similar efforts in microfinance and SME lending have demonstrated temporary gains, but evidence of sustained behavioural change among lenders is limited (De Haas & Gonzalez-Uribe, 2025). Overall, rigorous evidence remains scarce.

Turning to demand-side constraints, many DFIs have strategically targeted nascent sectors and low-income markets (Cole et al., 2024), achieving returns comparable to commercial benchmarks. Sponsorship models, in which DFIs assume equity control to incubate ventures (ODI, 2025), show promise, though they are resource-intensive and underutilised. Examples from renewable energy (Polzin et al., 2019) and SME lending (Barboza et al., 2023) illustrate how DFIs can introduce new financial products and catalyse follow-on investment, typically in specific country-sector contexts. Broader spillovers are rare (or still undocumented).

Despite theoretical expectations, robust evidence of sustained market transformation is scarce. Bertzky et al. (2020) find that market development effects (e.g. replication, exit from subsidies) are among the least studied and most elusive outcomes of blended finance. Léon (2025) and Kenny (2024b) criticise DFIs for slow disbursement, conservative risk postures, and failure to exit markets, thereby undermining claims that DFI capital is catalytic. De Haas & Gonzalez-Uribe (2025) highlight the lack of follow-up to assess whether blended interventions lead to permanent changes in market behaviour or benefit final borrowers.

As explained, finance alone is typically insufficient to overcome the barriers to demand-side constraints. Asare (2024) shows that in African banks, DFI credit lines had a limited effect without institutional capacity building. Similarly, without enabling reforms, even generous de-risking cannot mobilise private capital in fragile contexts (Rust-Smith et al., 2024; Spratt et al., 2024). Reviews stress that successful market development requires alignment among finance, advisory support, and policy reform (World Bank, 2024).

Key takeaways

(a) Partial success in risk mitigation: DFIs reduce perceived risk and expand access in niche markets, but catalytic spillovers are context-specific and often short-lived.

(b) Structural constraints limit impact: Market innovation is constrained by weak institutions, shallow financial systems, and conservative DFI practices.

(c) Sponsorship and guarantees show promise: When DFIs take entrepreneurial risks and use guarantees strategically, blended finance can incubate new markets, but such models remain rare.

(d) Transformation remains unproven: Evidence of long-term market development, replication, or sustainable private sector engagement remains scarce.

4.5 Development impact

While blended finance is often justified by its potential to unlock private investment and improve financial conditions, its ultimate value is usually cited as depending on the delivery of development outcomes that would not otherwise occur (Mazzucato, 2025), a concept often referred to as "development additionality." Unfortunately, the empirical foundation for such claims remains weak.

Positive development outcomes have been documented across specific sectors and contexts, especially where public goods or significant externalities are involved. Aydın et al. (2024) find that Türkiye's Women in Business initiative, backed by blended finance, enhanced sales, employment, and survival rates among women-led firms. Clo et al. (2022) demonstrate that DFI equity investments increase patent registrations when combined with venture capital, particularly in green sectors and high-governance environments. Similarly, Probst et al. (2021) report environmental additionality from results-based renewable energy subsidies in Uganda.

Nevertheless, many interventions show only modest or indirect effects. Asare (2024) finds limited transmission of blended DFI credit lines to firm-level performance in Africa, and Lee and Cardenas (2020) point to stagnant private investment in LICs as evidence of underwhelming macroeconomic transformation. Even BNDES programmes, which Barboza et al. (2023) associate with higher investment and employment, yield weak productivity outcomes, arguably a key long-term development metric. Agnese et al. (2019) similarly observe that credit guarantees have ambiguous effects on productivity and, at times, increase default risk, highlighting potential negative spillovers.

Blended finance has made inroads in promoting inclusive growth, supporting underserved segments such as SMEs, women-led enterprises, and base-of-the-pyramid consumers (De Haas & Uribe-Gonzales, 2025). Interventions in infrastructure and climate resilience, such as those backed by the Green Climate Fund (GCF), also appear to yield both public and private benefits (Kotchen & Vogt, 2025).

However, attribution remains tenuous. While the World Bank (2024) reports significant achievements through the IDA PSW (in terms of jobs, emissions reductions, and healthcare), these outcomes lack rigorous counterfactuals. Reviews such as Bertzky et al. (2020) and Carter et al. (2019) emphasise that most studies stop at output measurement, rarely extending to welfare or equity outcomes. Only a handful employ robust identification strategies that allow for causal inference.

Development outcomes depend heavily on institutional design and governance quality. IFC's politicised investment patterns (Dreher et al., 2019) contrast with BNDES's more development-oriented approach (Gomes & do Valle, 2023). Léon (2025) warns that DFIs may prioritise scale or financial leverage over targeting high-additionality niches such as fragile states or start-ups, a concern echoed in Attridge & Engen (2019) and Attridge & Gouett (2021). There is also an increasing push for DFIs to shift focus from input/output metrics to impact-based performance indicators.

Blended finance projects often incorporate technical assistance and ESG frameworks. For instance, BII-supported funds have enhanced governance in investee firms (Rust-Smith et al., 2024), and MDB infrastructure investments may raise the economy-wide marginal productivity of capital (Cull et al., 2024). However, as De Haas & Gonzalez-Uribe (2025) stress, the contribution of these non-financial components to development is rarely disentangled from that of concessional capital.

The most persistent critique is methodological. The absence of robust counterfactuals makes it difficult to determine what would have occurred without blended finance. Reviews consistently highlight an overreliance on self-reported programme data (Bertzky et al., 2020) and the scarcity of studies tracking long-term or household-level welfare effects. Even microfinance interventions, intended to empower small entrepreneurs, often yield only marginal gains in business creation and have little impact on income or welfare.

While some authors, such as Sharma et al. (2023), argue that blended finance is crucial for achieving SDG-aligned outcomes, others caution against it. Development additionality is often assumed rather than demonstrated, and the pressure to mobilise capital can dilute impact goals.

Key takeaways

(a) Evidence of development additionality is weak/mixed: Some positive outcomes (e.g. jobs, investment, innovation) are observed, but effects on productivity, income, and poverty remain limited.

(b) Methodological shortcomings persist: Most studies lack robust evaluation designs, limiting claims of causality.

(c) Impact depends on context: Results are strongest when concessionality is well-targeted, and institutions are well-governed.

(d) Non-financial contributions matter: Technical assistance, ESG standards, and capacity building can enhance development impact, but are methodologically hard to isolate.

4.6 Results summary

Although blended finance has become increasingly prominent in development discourse, the literature suggests that its transformative potential remains limited, particularly in the poorest and most fragile contexts where it is most needed.

In middle-income countries, blended finance has demonstrated the ability to mobilise private capital through the catalytic role of MDBs and DFIs. In these settings, there is evidence that these institutions act as "anchor investors," reducing perceived risk and crowding in private actors. However, claims of financial additionality are frequently overstated, hindered by weak transparency, limited deal-level data, and methodological difficulties in verifying counterfactual scenarios. Several studies caution that aggregate mobilisation figures mask substitution effects in LICs, where concessional finance replaces rather than induces private investment.

In terms of loan conditions, blended finance often lowers interest rates, extends maturities, and relaxes collateral requirements. However, these improvements are highly context-dependent and have yet to materialise in riskier or less developed markets. In some cases, concessional interventions have inadvertently reduced overall lending activity or reinforced market concentration by channelling funds to large, risk-averse banks.

Blended finance is often promoted as a tool for market development and innovation, yet the review finds that these impacts are highly uneven. While there is evidence of innovation financing and some success in nascent sectors, such effects tend to be localised and fail to produce systemic change. DFIs have been hesitant to deploy more innovative or risk-tolerant instruments, and their operations continue to gravitate towards bankable projects in safer markets.

The most critical test of development impact yields mixed results at best. Although some programmes have demonstrated measurable improvements in firm growth, innovation, and environmental sustainability, the broader evidence base remains weak. Most evaluations focus on outputs rather than long-term outcomes, and many interventions lack robust evaluation designs. In fragile and low-income settings, blended finance often fails to reach its intended beneficiaries, frequently overlooking

small enterprises and marginalised populations. Worse, some projects would likely have proceeded without concessional support, raising concerns about selection bias and the misallocation of scarce public funds.

In sum, the systematic literature review shows that while blended finance has achieved isolated successes, its broader impact is constrained by uneven mobilisation, weak evidence of financial additionality and development impact, limited reach in LICs, and institutional practices that sometimes reinforce rather than overcome existing market biases.

5. DISCUSSION

Cumulatively, more than half a trillion USD has been mobilised through blended finance interventions from 2012 to 2023, with an overall upward trajectory and a post-pandemic surge that peaked at nearly USD 70 billion in 2023. However, the scale remains far from meeting expectations to transform billions into trillions in development finance.

Credit guarantees constituted roughly one-third of total mobilisation. However, their relative prominence declined from about half of all mobilised funds in the early 2010s to nearly one-quarter in recent years. In parallel, direct investment vehicles and special purpose vehicles gained share, at one point contributing almost 40% of annual mobilisation, so that, together, these two instruments dominated the overall portfolio. Other blended finance instruments, including syndicated loans, credit lines, and simple co-financing arrangements, played modest roles, collectively accounting for 28% of the funds.

The distribution of mobilised private finance reveals a concentration in specific countries and sectors. More than 90% of country-specific private finance mobilised between 2012 and 2023 was directed to middle-income countries, whereas low-income countries received only around 5%. This pattern suggests that, despite global calls to "leave no one behind", the poorest countries have so far benefited only marginally from blended finance mobilisation, reflecting underlying market hesitancy and structural barriers in those environments. The composition of instruments also varied by income group. For example, more than half of the limited finance reaching LICs took the form of direct equity investments. In contrast, guarantees accounted for a larger share of mobilisation in higher-income settings. These disparities highlight the challenge of extending risk-sharing finance to frontier markets and the importance of tailoring instruments to local conditions.

To improve our understanding of the use and allocation of blended finance, a conceptual discussion is organised around a simple welfare-economic logic and an explicit diagnostic for instrument choice. Blended finance is justified either on efficiency grounds, when market failures create a wedge between social and private returns, or on equity grounds, where distributional objectives motivate intervention even when purely commercial finance might be available. In practice, the key analytical question is why private investment remains below the level implied by development objectives, and whether this reflects a demand-side wedge (social value exceeds what private investors can appropriate) or a supply-

side wedge (projects are in principle privately viable but cannot obtain finance on reasonable terms). This distinction is operationalised through a constraints tree, following Hausmann et al. (2008), to structure both the theory of change and the subsequent discussion of financing instruments.

This framing clarifies the role of additionality and the rationale for blending. Donor involvement is warranted only when it changes the counterfactual, either by enabling finance that would not otherwise be available on comparable terms (financial additionality) or by altering project design and implementation to raise development impact while minimising the risk of crowding out purely private finance. The logic of blending is therefore not simply to increase volumes, but to deploy scarce concessional resources in a targeted way that relaxes diagnosed constraints while leveraging the screening and discipline of market-based co-financiers, consistent with OECD DAC guidance. Against this backdrop, the discussion examines, in turn, supply-side constraints (cost and availability of finance) and demand-side constraints (returns and appropriability), and maps common blended finance instruments to the specific constraints they best address.

In this conceptual framework, private investment is low when the project's risk-adjusted financial return falls below the threshold required by commercial investors, either because financing is expensive/unavailable (supply-side constraints) or because expected/appropriable returns are low due to country- and market-level risks (demand-side constraints). Given that only a small fraction of mobilised finance reaches LICs, donor agencies that identify a binding financing/risk constraint may need to combine guarantees with deeper concessional elements so that de-risking raises the risk-adjusted financial return to a commercially acceptable level without overshooting. In practice, this could involve first-loss provisions or higher coverage ratios for projects in LICs to compensate for elevated perceived risk, coupled with capacity-building for local financial institutions to address the information and intermediation frictions highlighted in the framework. However, the framework also implies that if LICs primarily face demand-side constraints (lack of 'bankable' projects, weak supply chains, or poor infrastructure), then supply-side risk sharing alone is unlikely to mobilise meaningful investment; in such cases, project preparation support and broader investment-climate reforms are a precondition for effective mobilisation. Finally, where guarantees are used in LICs, donors and MDBs may need to absorb more risk (or provide reinsurance) to mitigate country-level risks without transferring large contingent liabilities onto LICs.

Any such approaches, however, should be time-bound and paired with efforts to strengthen the underlying investment climate, because blended finance is a second-best solution, i.e. a means of attracting private capital despite low risk-adjusted financial returns. Indeed, a clear lesson from the literature is the importance of complementary institu-

tional reforms. Guarantees can ease specific financing constraints in the short run, but sustainable financial development ultimately requires improvements to the legal and regulatory environment. Donor support should therefore be accompanied by initiatives to enhance credit information systems, collateral registries, contract enforcement, and overall financial sector governance in partner countries. Such reforms reduce the fundamental risks and transaction costs that make purely commercial lending scarce in the first place, thereby gradually obviating the need for external guarantees. In countries where guarantees have catalysed new lending, an orderly transition plan is critical. As banks become more familiar with new sectors or borrower groups, the share of public guarantees can be reduced, ensuring the market evolves rather than hardens under perpetual subsidy.

The limited engagement in LICs calls for a rethink of strategies in the poorest markets. Our systematic literature review reveals that mobilisation in LICs is limited and typically relies on heavy concessional "sweeteners," suggesting that, without significant subsidies, private investors often bypass these high-risk markets. This imbalance means that many success stories and data points come from "easier" environments with fewer barriers, raising doubts about how well findings generalise to low-income, fragile contexts. The availability and rigour of evidence in LICs lag far behind those in emerging economies, a structural gap that leaves the developmental impact of blending in high-need countries largely unproven.

Despite several rigorous evaluation studies outlined in the systematic literature review, most studies and reports emphasise that the evidence base on blended finance outcomes remains limited and contains substantial gaps, even in middle-income countries. Most studies on blended finance to date are programmatic evaluations or case studies commissioned by the very institutions funding the engagement, with far fewer independent studies employing rigorous methods. As a result, attributing causality (i.e. proving that blended finance caused specific development outcomes) is difficult. Many reports document inputs (mobilisation) and outputs (projects financed, people reached), but cannot conclusively measure changes in welfare or economic development attributable to blended finance. The need for a more robust evaluation of blended finance is widely acknowledged.

A mismatch exists between the blended finance instruments used in practice and those that have been rigorously studied. Evidence from the data section and the 81 studies indicates a clear mismatch between the allocation of financial resources and the depth of existing empirical analysis. In particular, the sectors that receive the largest shares of financing have not been subjected to rigorous or systematic evaluation. Furthermore, the evaluation literature has focused disproportionately on loan instruments, while guarantees have received comparatively limited scrutiny. This imbalance persists even as many DFIs increasingly shift their

portfolios towards guarantee instruments. Moreover, instruments such as junior/subordinated capital are considered important risk-mitigation tools within blended finance schemes, but their effectiveness remains poorly understood. Similarly, specific sectors (notably energy) have seen relatively few rigorous studies on development impacts, despite the focus energy has received in actual blending structures. On the other hand, the literature has perhaps overemphasised results-based financing schemes.

Many deals involve multiple parties, making data aggregation challenging. Even basic information, such as the amount of private capital mobilised, the terms of concessional support, or the development results of projects, is not consistently disclosed. Blended finance often involves multiple interventions simultaneously, making it methodologically challenging to identify which element drives outcomes. Even in the relatively few cases where outcomes were measured, the attribution problem looms large. Moreover, selection bias may be a concern in some cases. Projects chosen for blending may be systematically different (often more challenging) than those that receive pure private finance, or less problematic than 100% donor-funded project portfolios. Some reviews therefore point out that many blended finance projects will lack proper control groups or counter-factuals, risking misattribution of observed outcomes to blended finance when other factors could be at play (Barboza, 2023).

It is evident from the systematic literature review that a critical gap remains in understanding the development impact of blended finance. There has been too much focus on financial leverage. While mobilisation is one goal, the ultimate aim from a developing-country perspective is to achieve better development outcomes than would otherwise occur. As highlighted by the World Bank (2025), despite MDBs continuing to operate in increasingly risky environments, outcome ratings have stagnated or declined due to persistent challenges, including weak institutional capacity, flawed project design, inadequate results monitoring, and insufficient client adaptation. A deeper evaluation is needed to determine whether blended finance is merely scaling up existing activity (which could have occurred at a slower pace anyway) or creating transformative development impact. Currently, evidence of the latter is limited. In the context of the SDGs, this raises the question: Are we mobilising private finance at any cost, or are we doing so in a way that maximises real development outcomes?

Further reflection on opportunity cost and the optimal allocation of scarce public funds is also needed. For example, if DFIs are using significant subsidies, what are the trade-offs, and are there unintended effects on markets? Léon (2025) notes that the side effects of subsidies in blended finance are relatively unknown and unquantified. Transparency on how much subsidy is used to catalyse each dollar of private money (the leverage ratio) is essential. If the public subsidy per dollar mobilised

is too large, the value can be questioned. Improving cost-effectiveness metrics is another gap identified in the systematic literature.

Moving forward, there is a pressing need to improve data and evaluation practices surrounding blended finance. While current reporting (e.g. the OECD's dataset on mobilised private finance) quantifies volumes, far less is known about development impact. Donor governments should invest in rigorous monitoring and evaluation frameworks to track not only how much private finance is mobilised, but also its effectiveness in achieving sustainable development impact. This includes transparent reporting on guarantee utilisation rates, defaults, and payouts, as well as the performance of supported investments over time. Enhanced data sharing among DFIs and the adoption of common standards for assessing financial and developmental additionality would greatly aid learning. Future metrics should better reflect how DFIs enable private finance before, during, and after project implementation, thereby improving accountability and informing future development finance strategies.

Measuring the long-term impact of blended finance at scale will take time. However, the systematic literature review provides evidence that rigorous ex post evaluations of blended finance operations are feasible across different levels of analysis. One example of a rigorous ex post evaluation at the deal level is Broccolini et al. (2021), who use loan-level data on syndicated lending from a large sample of developing countries over 25 years to estimate the mobilisation effects of MDBs. Another deal-level ex post study is Degl'Innocenti et al. (2022), which explores whether development banks affect syndicate structures by analysing loans across 48 countries over 15 years, specifically investigating whether syndicates with development banks are less concentrated and have greater diversification of risk exposure across lenders. Such micro-level, project- or deal-specific evaluations can generate meaningful insights into financial and development outcomes. At the meso-level, instrument- or sector-based studies offer comparative assessments of blended finance modalities and sectoral effectiveness. Finally, although more limited in scope, macro-level evaluations can explore broader, system-wide impacts, including market dynamics and potential externalities. However, empirical work at this level remains sparse, largely due to data limitations and methodological complexity. As reporting standards, transparency, and documentation practices improve, there is good reason to expect that both the volume and analytical quality of such evaluations will increase.

In contrast, approaches to assessing the ex ante expected impact of blended finance interventions remain underdeveloped. While several operational frameworks have been proposed, notably by the MDB (2018) and CPI (2018), their practical implementation has been limited, especially in low-income countries. The MDB (2018) framework advocates demonstrating financial additionality ex ante through a combination of market benchmarks, observed financing gaps in recent or analogous projects,

evidence of the client's inability to secure commercial finance, and instruments such as willingness-to-pay studies or market tests. However, these methods presuppose the availability of robust market data and micro-level financial diagnostics, which are frequently lacking in low-income countries.

CPI (2018) proposes a barrier-based framework that identifies four structural impediments to private investment. The underlying premise is that blended finance is more likely to be additional in environments where structural constraints are pronounced, as higher levels of investment risk and institutional uncertainty generally characterise such settings. However, Hansen & Rand (2023) caution that in economies with more developed value chains and strong inter-sectoral linkages, the likelihood of additionality may be lower due to naturally higher investor interest and private capital flows. That said, the logic assumes that public and private actors evaluate externalities symmetrically, an assumption that may not hold in practice. Donors, MDBs, and DFIs often place greater weight on positive social or environmental externalities than commercial investors do. Thus, even in countries with advanced interlinkages and relatively developed markets, a blended finance intervention may still be justified if it generates substantial external benefits that are not reflected in the market price. In this context, identifying and measuring externalities at the country or sector level can significantly enhance the quality of ex ante assessments by highlighting where development-oriented capital is likely to be most catalytic.

To address these methodological gaps, Hansen & Rand (2023) propose a hybrid framework for ex ante evaluation of financial additionality that combines economic theory, specifically the approach by Hausmann et al. (2008), also used in this evaluation study, with empirical data and structured qualitative assessments. More specifically, Hansen & Rand (2023) develop two linked assessment tools: (i) a qualitative tool based on a project/deal-specific narrative approach and (ii) a theory-based quantitative Excel screening tool informed by the diagnostics approach, rooted in readily available country- and sector-level data to maintain simplicity and replicability.[6] Neither of the assessment tools can stand alone, as the former relies on subjective assessments at the project/deal level and the latter is too aggregate for the specificity needed at that level. However, the country- and sector-specific quantitative screening tool can provide valuable information on each deal by guiding the qualitative narratives to where they must be even stronger to make an ex ante claim of financial additionality. In addition, by ensuring that the documented qualitative narratives are assessed by an independent controller, checks and balances are maintained in the financial additionality assessment

[6] Hansen & Rand (2023) created a data dashboard for more than 100 countries grouping available data into four different categories (Domestic Finance, International Finance, Appropriability of Returns and Private Sector Performance/Productivity) giving a cross-country comparative overview of the types of financial constraints facing each country. In addition, the quantitative tool recommended utilising the Theory of Economic Complexity (https://atlas.cid.harvard.edu/) to pinpoint strategic sectors that hold the greatest promise for advancing the growth potential of a country.

process. This integrated method enables more nuanced, context-specific judgements about financial and development additionality, particularly in data-scarce and high-risk settings. The approach enhances both credibility and operational feasibility, particularly in contexts where data is limited and projects are complex. Critically, additionality (financial and development) should be viewed not just as a compliance box, but as a central filter for prioritising blended finance engagement where it is most impactful and least likely to displace private finance.

5.1 Important considerations when designing blended finance initiatives

It is essential to ensure that each blended finance intervention explicitly articulates and seeks to verify its additionality. This entails rigorous verification that a project would not proceed, or would not proceed at the same scale or speed, in the absence of concessional support. Donors are advised to enhance their project appraisal frameworks to incorporate an additionality assessment, including a justification for why private investors cannot fully finance the project and a delineation of the unique contributions of public funds, such as extended tenors or risk mitigation. Beyond financial mobilisation, the impact assessment should evaluate whether the project yields development outcomes that justify the use of concessional resources. Implementing agencies, particularly DFIs, should be mandated not only to monitor the volume of mobilised finance but also to substantiate its developmental impact, employing clear, outcome-oriented targets that extend beyond output metrics and encompass longer-term social, environmental, and economic effects. To ensure robustness and facilitate learning, comprehensive ex post evaluations should be instituted, with DFIs responsible for coordination and for ensuring that evaluations are conducted independently by external assessors to uphold objectivity. Regular, publicly accessible ex post evaluations would enable verification of both financial and developmental additionality, reinforce accountability in the utilisation of concessional resources, and contribute to a more evidence-based understanding of the achievable impacts of blended finance.

Higher risk profiles and lower expected returns deter private-sector investment in low-income countries. The systematic literature review suggests that, to mitigate these barriers, donors may need to adapt their blending models for frontier markets, potentially by offering greater concessional incentives or risk coverage. For instance, a standard 50% partial guarantee effective in emerging markets may require a larger first-loss component to attract private lenders in fragile contexts. Incorporating grant elements or technical assistance, such as project preparation facilities or currency hedging, could also enhance project feasibility. While deeper subsidies and risk-mitigation measures are justified for low-income country projects, they should be treated as temporary, transitional

measures. Policymakers are encouraged to establish time-bound or sunset provisions for concessional support to prevent long-term dependency. Concurrently, efforts should focus on strengthening the underlying investment climate in low-income countries to reduce systemic risks and enable increased private-sector engagement over time.

In accordance with the proposed framework and the systematic review findings, various blending instruments are suitable to varying degrees depending on the specific issues; hence, policy guidance should advocate a contextualised approach. Guarantees may be preferred to address particular high risks, such as political or credit risk, in projects with moderate bankability, thereby offering targeted risk mitigation without significant distortions. Equity investments may be more appropriate for early-stage ventures or sectors with inherently low returns, such as social or climate initiatives, where a higher expected return could attract investors. For projects nearing commercial viability but requiring additional support, modest interest rate subsidies or subordinated loans may suffice, whereas projects that are far from market readiness yet hold developmental importance might justify larger concessional shares or outright grants. Policymakers should emphasise the importance of aligning instrument choice with the specific problem diagnosis, whether it pertains to cost-of-capital biases or low-return challenges. Additionally, fostering innovation in instrument design is crucial; developments such as blended finance facilities that enable portfolio approaches or outcome-based financing models can diversify risk and improve effectiveness. However, such innovation must uphold accountability standards, ensuring that all instruments meet the criteria for additionality and transparency.

Given the limited empirical evidence on impact, a critical takeaway is the need to improve data collection, transparency, and rigorous impact evaluation for blended finance initiatives. Currently, deal-specific information, such as project risk assessments, underlying assumptions, and the rationale for concessionality, is frequently undisclosed, undermining oversight and independent verification of development impact. To address this gap, donor agencies and DFIs should embed robust monitoring and evaluation frameworks into blended finance programmes from inception, accompanied by enhanced transparency requirements. This includes, where feasible, disclosing the evidence underpinning additionality and impact claims; establishing baselines and control groups; tracking not only capital mobilised but also associated development outcomes; and providing counterfactual analyses. Greater transparency regarding risk pricing, concessionality levels, and investor participation would significantly bolster the credibility of additionality evaluations. Moreover, data sharing among DFIs and independent portfolio evaluations should be promoted. Ultimately, increased transparency, combined with rigorous monitoring and ex post assessments, is vital for strengthening accountability and understanding of when and how blended finance can deliver value that exceeds that of pure market mechanisms.

REFERENCES

* = included in the systematic literature review (SLR)

= "*" and the concept of blended finance is used explicitly in the document

*ADB (2022). Additionality of the ADB's Non-sovereign Operations. ADB Thematic Evaluations.

Akçiğit, U., Seven, Ü., Yarba, İ., & Yılmaz, F. (2021). Firm-level impact of credit guarantees: Evidence from the Turkish Credit Guarantee Fund. Working Paper No. 21/10, Central Bank of the Republic of Turkey.

*Agnese, P., Rizzo, M., & Vento, G.A. (2019). The impact of credit guarantee schemes on SMEs bankruptcies: an international overview. *Journal of Applied Finance and Banking*, 9(4), 1-9.

*Ahiabor, F.S. & James, G.A. (2019). Domestic lead arranger certification and the pricing of project finance loans. *International Journal of Financial Economics*, 24, 150-167.

Andersson, P. Å. (2019). Sida and innovative finance: The case of loan guarantee schemes. Working Papers in Economics No. 752, Department of Economics, University of Gothenburg.

Andonov, A., Li, A., & Smeets, P. (2025). Do Development Financial Institutions Create Impact through Venture Capital Investments? S&P Global Market Intelligence Research Paper, May 2025.

Anginer, D., de la Torre, A., & Ize, A. (2014). Risk-bearing by the state: When is it good public policy?, *Journal of Financial Stability*, 10, 76-86.

Arping, S., Loranth, G., & Morrison, A.D. (2010). Public initiatives to support entrepreneurs: credit guarantees versus co-funding. Journal of Financial Stability, 6(1), 26–35.

Arrow, K.J. & Lind, R.C. (1970). Uncertainty and the evaluation of public investment decisions. *American Economic Review*, 60(3), 364–378.

#Attridge, S., Calleja, R., Gouett, M., & Lemma, A. (2019). The impact of development finance institutions: rapid evidence assessment. Technical report, Department for International Development.

#Attridge, S. & Engen, L. (2019). Blended finance in the poorest countries: the need for a better approach. Technical report, ODI Report.

#Attridge, S. & Gouett, M. (2021). Development finance institutions: the need for bold action to invest better. ODI Report, Overseas Development Institute (ODI), London.

#Asare, J. (2024). Blended finance in fragile settings: P-RECs and the P-REC Aggregation Facility. EPP and IGC Report.

*Avellan, L., Galindo, A.J., Lotti, G., & Rodríguez, J.P. (2024). Bridging the gap: Mobilisation of Multinational Development Banks. *World Development*, 176: 106498.

#Aydin, H. I., Bircan, C., & De Haas, R. (2024). Blended finance and female entrepreneurship. CEPR Discussion Paper, 18763: 1–69.

Bandura, R. & Ramanujam, S.R. (2019). Innovations in guarantees for development. Report of the CSIS Project on Prosperity and Development, Center for Strategic and International Studies (CSIS).

*Barboza, R., Pessoa, S., Roitman, F., & Ribeiro, E.P. (2023). What have we learned about national development banks? Evidence from Brazil. *Brazilian Journal of Political Economy*, 43, 646–669.

*Barboza, R. & Vasconcelos, G.F. (2019). Measuring the aggregate effects of the Brazilian Development Bank on investment. *North American Journal of Economics and Finance*, 47, 223–236.

#Basile, I., Bellesi, V., & Singh, V. (2020). Blended finance funds and facilities – 2018 survey results part II: Development Performance. OECD Development Co-operation Working Paper, No. 67, OECD Publishing, Paris.

Basile, I. & Dutra, J. (2019). Blended finance funds and facilities: 2018 Survey Results. OECD Development Co-operation Working Paper, No. 59, OECD Publishing, Paris.

Beck, T., Klapper, L., & Mendoza, J. C. (2010). The typology of partial credit guarantee funds around the world. *Journal of Financial Stability*, 6(1), 10–25.

Behrman, G. (2007). *The Most Noble Adventure: The Marshall Plan and the Time When America Helped Save Europe*, London: Aurum.

Benn, J., Sangaré, C., & Hos, T. (2017). Amounts mobilised from the private sector by official development finance interventions: Guarantees, syndicated loans, shares in collective investment vehicles, direct investment in companies, and credit lines. OECD Development Co-operation Working Paper, No. 36, OECD Publishing, Paris, https://doi.org/10.1787/8135abde-en.

#Bertzky, M., Sánchez Torrente, L., Habbel, V., Rocío Pérez, J.J., Doswald, N., Gotz, G., Orth, M., Richter, J., Fernández de Velasco, G., & Harten, S. (2020). The state of the evidence on blended finance for sustainable development. An evidence gap map. DEval Discussion Paper 3/2020, German Institute for Development Evaluation (DEval), Bonn.

Bielenberg, A., M. Kerlin, J. Oppenheim, & M. Roberts (2016). Financing change: How to mobilize private-sector financing for sustainable infrastructure. McKinsey Centre for Business and Environment.

*Bozkurt, A.T. & Günsür, B.T. (2023). Pricing the net benefits of a public loan guarantee scheme in a developing market. *Economics Letters*, 232, 111353.

#Broccolini, C., Lotti, G., Maffioli, A., Presbitero, A.F., & Stucchi, R. (2021). Mobilisation effects of multilateral development banks. *World Bank Economic Review*, 35(2), 521-543.

Brown, R. & Lee, N. (2017). The theory and practice of financial instruments for small and medium-sized enterprises. *EC-OECD Seminar Series on Designing Better Economic Development Policies for Regions and Cities.* OECD.

*Café, R.M. (2024). Access to loans and local development: Evidence from Brazilian municipalities. IDB Working Paper.

#Carter, P., Van de Sijpe, N., & Calel, R. (2021). The elusive quest for additionality. *World Development*, 141, 105393.

CDFS (2023). Measurement and reporting in a time of mobilisation. The CDFS Short Read, May 2023.

*Cerda, M., Gertler, P., Higgins, S., Montoya, A.M., Parrado, E. & Undurraga, R. (2023). The causal impact of Covid-19 government-backed loans on MSME liquidity and earnings. IDB Working Paper, No. 1430.

#Clo, S., Frigerio, M., & Vandone, D. (2022). Financial support to innovation: the role of European development financial institutions. *Research Policy*, 51(10), 104566.

*Cole, S., Melecky, M., Mölders, F., & Reed, T. (2025). Long-run returns to private equity in emerging markets. *Management Science*, https://doi.org/10.1287/mnsc.2023.03313.

Collier, P., Kriticos, S., Logan, S., & Sacchetto, C. (2021). Strengthening development finance in fragile contexts. International Growth Centre.

Convergence (2019). *The state of blended finance 2019.* Convergence. https://www.convergence.finance/resource/13VZmRUtiK96hqAvUPk4rt/view.

#Convergence (2023a). Best practices for donor governments engaging in blended finance. Convergence Report.

#Convergence (2023b). Evaluating the impact of blended finance: Convergence's case study portfolio revisited. Convergence Learning Report.

#Convergence (2024). Blended finance best practice: Case studies and lessons learned. Convergence Report.

#Convergence (2025a). *How can African SME funds mobilise more capital: Data and lessons from pioneering LPs and GPs.* Convergence Report.

#Convergence (2025b). *State of blended finance*. Convergence Report.

CPI (2018). Approaches to assess the additionality of climate investments. Climate Policy Initiative Report.

*Cull, R., Gill, I., Pedraza, A., Ruiz-Ortega, C., & Zeni, F. (2024). Mobilising private capital for sustainable development goals. World Bank Policy Research Working Paper, No. 10838, World Bank.

DAC Working Party on Development Finance Statistics (2024). Handbook on measuring and reporting in mobilised private finance in OECD DAC statistics. DCD/DAC/STAT(2024)38, OECD.

#De Haas, R. & Uribe-Gonzales, J. (2025). Public policies for private finance. *Annual Review of Financial Economics*, 17, 243–266.

*Degl'Innocenti, M., Frigerio, M., & Zhou, S. (2022). Development banks and the syndicate structure: Evidence from a world sample. *Journal of Empirical Finance*, 66, 99–120.

#DEval (2020). Structured Funds: A balancing act between financial sustainability and development impact. German Institute for Development Evaluation (DEval), Bonn.

DFI (2018). DFI Working Group on blended concessional finance for private sector projects. Joint Report, October 2018 Update. https://www.ifc.org/content/dam/ifc/doc/mgrt/201810-dfi-blended-finance-report.pdf

Diekemper, R.L., Ireland, B.K., & Merz, L.R. (2015). Development of the Documentation and Appraisal Review Tool for Systematic Reviews. *World Journal of Meta-Analysis*, 3(3), 142–150.

#Dreher, A., Lang, V. F., & Richert, K. (2019). The political economy of International Finance Corporation lending. *Journal of Development Economics*, 140, 242–254.

#EBRD (2024). Forging resilience. An evaluation of the transition impact and additionality of the EBRD's MREL and bail-in-able products (2016-2023). Independent EBRD Evaluation Report.

#EBRD (2025). Connecting the dots: Evidence that drives change. Independent EBRD Evaluation Report.

#EC (2021). Evaluation of EU budget support and blending in the Kyrgyz Republic 2010-2019. Independent Evaluation Report.

Eslava, M., & Freixas, X. (2021). Public development banks and credit market imperfections. *Journal of Money, Credit and Banking*, 53(5), 1121–1149.

Fernández-Arias, E., Hausmann, R., & Panizza, U. (2020). Smart development banks. *Journal of Industry, Competition and Trade*, 20, 395–420.

#Flammer, C., Giroux, T., & Heal, G. (2025). Blended finance. ECGI Finance Working Paper, No. 973.

*Fotak, V. & Lee, H. (2020). Public-private co-lending: Evidence from syndicated corporate loans. *Journal of Banking and Finance*, 119, 105898.

*Frigerio, M. & Vandone, D. (2020). European development banks and the political cycle. *European Journal of Political Economy*, 62, 101852.

*Gajigo, O., Nyantakyi, E.B. Kemeze, F.H., & Bah, M. (2022). Do development finance institutions put their funds where their mandate is? AfDB Working Paper, No. 369.

*Gatti, M., Gorea, D., & Presbitero, A.F. (2023). The effects of EIB operations on private lending outside the European Union. EIB Working Paper, No. 2023/03.

*Gomes, M.D.C. & do Valle, M.R.D. (2023). Do companies that benefit from development banks' funding invest more? New evidence from Brazil. *Economic Modelling*, 127, 106476.

*Gong, D., Xu, J., & Yan, J. (2023). National development banks and loan contract terms: Evidence from syndicated loans. *Journal of International Money and Finance*, 130, 102763.

Greene, A. (2003). Credit guarantee schemes for small enterprises: An effective instrument to promote private sector-led growth? UNIDO SME Technical Working Paper Series, No.10.

#Gregory, N. (2023). Taking stock of MDB and DFI innovations for mobilising private capital for development. CGD Policy Paper, No. 290.

Gregory, N. & Grubert, M. (2024). Private capital mobilisation: Concepts and definitions. Brighton: Itad.

*Gurara, D., Presbitero, A., & Sarmiento, M. (2020). Borrowing costs and the role of multilateral development banks: Evidence from cross-border syndicated bank lending. *Journal of International Money and Finance*, 100, 102090.

*Gurmessa, N.E., Ndinda, C., Agwanda, C., & Akiri, M. (2022). Partial credit guarantee and financial additionality for smallholders' coffee cooperatives: Experience from Ethiopia. *Development in Practice*, 32 (8), 1049-1062.

Habbel, V., Jackson, E.T., Orth, M., Richter, J., & Harten, S. (2021). Evaluating blended finance instruments and mechanisms: Approaches and methods. OECD Development Co-operation Working Paper, No. 101.

Hall, B. H., & Lerner, J. (2010). The financing of R&D and innovation. *In Handbook of the Economics of Innovation* (Vol. 1, pp. 609–639). North-Holland.

Hansen, H., Rand, J., & Winckler Andersen, O. (2020). Evaluation study: Guarantees and incentives in development aid. Copenhagen: Ministry of Foreign Affairs of Denmark (Danida).

Hansen, H. & Rand, J. (2023). Approach for assessing financial additionality. Technical report prepared for IFDK, Denmark.

Hausmann, R., Klinger, B., & Wagner, R. (2008). Doing growth diagnostics in practice: A 'Mindbook'. CID Working Paper, Center for International Development at Harvard University.

Hjertholm, P. & White, H. (2000). Foreign aid in historical perspective: Background and trends. In F. Tarp (Ed.), *Foreign Aid and Development: Lessons Learnt and Direction for the Future.* London: Routledge.

*Hu, B., Schclarek, A., Xu, J., & Yan, J. (2022). Long-term finance provision: National development banks vs commercial banks. *World Development*, 158, 105973.

*Humphrey, C. (2019). Minilateral development banks: What the rise of Africa's Trade and Development Bank says about multilateral governance. *Development and Change*, 50(1), 164–190.

*Humphrey, C. & Michaelowa, K. (2019). China in Africa: Competition for traditional development finance institutions? *World Development*, 120, 15–28.

IAEG-SDGs (2020). Mobilization of private finance for developing countries by official bodies. Research Note, July 2020. https://unstats.un.org/sdgs/files/meetings/working-group-on-measurement-of-development-support/WGMDS-R3-01-Mobilization-of-private-finance-2020-07-31.pdf.

*IDB (2022). Evaluation of guarantee instruments at the IDB group. IDB and IDB Invest.

#IEG (2023). International Finance Corporation additionality in middle-income countries. Independent Evaluation Group. Washington, DC: World Bank.

#IFC (2019). The International Finance Corporation's blended finance operations: Findings from a cluster of project performance assessment reports. Independent Evaluation Group. Washington, DC: World Bank.

#IFC (2022). Banking on SMEs: Driving growth, creating jobs. Global SME Finance Facility Progress Report. IFC, World Bank.

Joint DFI Working Group (2023). DFI Working Group on blended concessional finance for private sector projects: Joint report 2023.

#Joint (2024). Mobilisation of private finance. Joint Report Published April 2024.

#Joint (2025). Mobilisation of private finance. Joint Report Published February 2025.

*Jud, S. (2024). Diffusing Risk: Bureaucratic agency, UN Security Council horse-trading, and the role of co-financing. *International Studies Quarterly*, 68, sqae140.

#Kenny, C. (2019). Marginal, not transformational: Development finance institutions and the sustainable development goals. CGD Policy Paper, No. 156. Washington, DC: Center for Global Development.

*Kenny, C. & Yang, G. (2020). Measuring the development impact of the IFC and development finance. CGD Working Paper. Washington, DC: Center for Global Development.

Kenny, C. & Moss, T. (2020). What to do when you can't prove DFI additionality. CGD Note. Washington, DC: Center for Global Development.

#Khatri-Chhetri et al. (2021). Financing climate change mitigation in agriculture: Assessment of investment cases. *Environmental Research Letters*, 16, 124044.

*Kotchen, M.J. & Negi, N.K. (2019). Cofinancing in environment and development: Evidence from the Global Environment Facility. *World Bank Economic Review*, 33(1), 41–62.

*Kotchen, M.J. & Vogt, A. (2025). Is the emphasis on cofinancing good for environmental multilateral funds? *World Development*, 187, 106831.

Kragh, M. V., Mortensen, J.B., Shaumburg-Müller, H., & Slente, H.P. (2000). Foreign aid and private sector development. In F. Tarp (Ed.), *Foreign Aid and Development: Lessons Learnt and Direction for the Future*. London: Routledge.

#Lee, N. & Cardenas M.G. (2020). The future of private finance for development in poor countries. Center for Global Development. CGD Policy Paper, No. 196.

#Leon, F. (2024). Blended binds: How DFI's support programs stifle bank lending in Africa. FERDI Working Paper, No. 342.

#Leon, F. (2025). Development finance institutions in developing countries: *A literature review*. FERDI Working Paper, No. 350.

Mazzucato, M. (2025). Reimagining financing for the SDGs: From filling gaps to shaping finance. UN Policy Brief No. 170. Special issue in collaboration with the United Nations High-level Advisory Board on Economic and Social Affairs.

#McHugh, C.A. (2021). Mobilising private funding of development finance. *Journal of Development Studies*, 57(12), 1979–2001.

*McHugh, C.A. (2023). Competitive conditions in developing finance. *Journal of International Financial Markets, Institutions and Money,* 83, 101741.

MDB (2018). Multilateral Development Banks' harmonized framework for additionality in private operations. Working Paper.

Meh, C. A. & Schmukler, S. L. (2025) Financing firm growth: The role of capital markets in low- and middle-income countries. International Finance Corporation Research Series. Washington, DC. doi:10.1596/978-1-4648-2191-2.

Nightingale, P., Murray, G., Cowling, M., Baden-Fuller, C., Mason, C., Siepel, J., Hopkins, M., & Dannreuther, C. (2009). *From funding gaps to thin markets: UK Government support for early-stage venture capital.* NESTA, London.

*Mishra, A. (2023). The infrastructure catalyst: Analysing the impact of development finance institutions on private infrastructure financing in developing countries. CSAE Working Paper, No. WPS/2023-13.

Mutambatsere, E. & Schellekens, P. (2020). The why and how of blended finance: Recommendations to strengthen the rationale for and efficient use of concessional resources in development finance institutions' operations. International Finance Corporation. http://hdl.handle.net/10986/35169.

*Norad (2024). Evaluation of Norfund's investments in renewable energy. Department of Evaluation, Report No. 9, 2024. Norad.

OECD/World Economic Forum (2015). Blended finance Vol. 1: A primer for development finance and philanthropic funders. OECD/World Economic Forum, Paris/Cologny, Switzerland. https://www3.weforum.org/docs/WEF_Blended_Finance_A_Primer_Development_Finance_Philanthropic_Funders.pdf

OECD (2018a). OECD DAC blended finance principles: For unlocking commercial finance for the Sustainable Development Goals. Best Practices in Development Co-operation, OECD Publishing, Paris. https://doi.org/10.1787/dc66bd9c-en.

OECD (2018b). Making blended finance work for the Sustainable Development Goals. OECD Publishing, Paris. https://dx.doi.org/10.1787/9789264288768-en.

OECD (2019). Better criteria for better evaluation: Revised evaluation criteria definitions and principles for use. OECD Publishing, Paris. https://doi.org/10.1787/15a9c26b-en.

OECD (2020). DAC methodologies for measuring the amounts mobilised from the private sector by official development finance interventions. Draft, OECD Publishing, Paris.

OECD (2021). The OECD DAC blended finance guidance. Best Practices in Development Co-operation, OECD Publishing, Paris, https://doi.org/10.1787/ded656b4-en.

#OECD (2023). Private finance mobilised by official development finance interventions. OECD Development Perspectives, No. 29, OECD Publishing, Paris. https://doi.org/10.1787/c5fb4a6c-en.

#OECD (2024). Climate finance provided and mobilised by developed countries in 2013–2022. OECD Report.

#ODI (2025). DFI sponsorship of new platforms and ventures: Why and how? ODI Global Synthesis Report.

Page, M.J., McKenzie, J.E., Bossuyt, P.M., Boutron, I., Hoffmann, T.C., & Mulrow, C.D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. BMJ, 372(71).

Pegon, M. (2023). Beyond leverage ratios: A strategic approach to blended finance. Inter-American Investment Corporation (IIC). https://www.idbinvest.org/en/download/19753.

*Polzin, F., Egli, F., Steffen, B., & Schmidt, T.S. (2019). How do policies mobilise private finance for renewable energy? A systematic review with an investor perspective. *Applied Energy*, 236, 1249–1268.

*Probst, B., Westermann, L., Anadon, L.D., & Kontoleon, A. (2021). Leveraging private investment to expand renewable power generation: Evidence on financial additionality and productivity gains from Uganda. *World Development*, 140, 105347.

*Ray, R. & Kamal, R. (2019). Can South-South Cooperation Compete? The Development Bank of Latin America and the Islamic Development Bank. *Development and Change*, 50(1), 191–220.

#Rust-Smith, J., Spratt, S., Macdonald, K., Barnett, C., & Sutherland, Z. (2024). Analysis of mobilisation in three BII renewable energy investments. An evaluation commissioned by the FCDO, March 2024.

Sahay, R., Cihák, M., N'Diaye, P., Barajas, A., Bi, R., Ayala, D., Gao, Y., Kyobe, A., Nguyen, L., Saborowski, C., Svirydzenka, K., & Yousefi, S.R. (2015). Rethinking financial deepening: Stability and growth in emerging markets. IMF Staff Discussion Note, No. 15/08. Washington: International Monetary Fund.

Saran, A. & White, H. (2018). Evidence and gap maps: A comparison of different approaches. *Campbell Systematic Reviews*, 14(1), 1–38.

Schalken, N., & Rietbergen, C. (2017). The reporting quality of systematic reviews and meta-analyses in industrial and organizational psychology: A systematic review. *Frontiers in Psychology*, 8, Article 1395.

#Sharma, K., Mahna, T., Jain, S., Dhir, S., Rao, N., Biyani, A., Sikka, H., Yadav, R., Dua, S., & Gupta, A. (2023). Bibliometric review of blended finance and partial risk guarantee: Establishing needs and advantages. *International Journal of Financial Studies*, 11, 103.

Shea, B.J., Reeves, B.C., Wells, G., Thuku, M., Hamel, C., & Moran, J. (2017). AMSTAR 2: A critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions. *BMJ*, 358, 4008.

Spratt, S., Lawlor, E., & Coppens, V. (2021). Core concepts in blended finance: Assessment of uses and implications for evaluation. OECD Development Co-operation Working Paper No. 90, OECD Publishing, Paris. https://doi.org/10.1787/711006b7-en.

#Spratt, S., Barnett, C., & Macdonald, K. (2024). Analysis of mobilisation in four BII-backed funds. An evaluation commissioned by the FCDO, March 2024.

#Taguchi, H. & Yasumura, K. (2021). Financial additionality of MDBs in private participation in infrastructure projects. *Sustainability*, 13, 8412.

Tahir, W. & Robinson, M. (2023). Understanding mobilisation. BII Discussion Paper, February 2023. https://assets.bii.co.uk/wp-content/uploads/2023/03/13125506/Understanding_Mobilisation.pdf.

Tew, R., Caio, C., & Lonsdale, C. (2016). The role of blended finance in the 2030 agenda: Setting out an analytical approach. Discussion paper, Development Initiatives. https://www.publicfinanceforwash.org/resources/DI-2016-role-blended-finance-2030-agenda-analytical-approach.

The Blended Finance Task Force (2018). Better finance better world. Business and Sustainable Development Commission.

Uesugi, I., Sakai, K., & Yamashiro, G. M. (2010). The effectiveness of public credit guarantees in the Japanese loan market. *Journal of the Japanese and International Economies*, 24(4), 457–480.

#UN (2024). Financing for development report 2024. UN Report.

Warner, A. M. (2013). A framework for efficient government investment. IMF Working Paper, No. WP/13/58, International Monetary Fund. https://www.imf.org/external/pubs/ft/wp/2013/wp1358.pdf.

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://doi.org/10.1787/4c1fc76e-en.

Winckler Andersen, O., Hansen, H., & Rand, J. (2021). Evaluating financial and development additionality in blended finance operations. OECD Development Co-operation Working Paper, No. 91, OECD Publishing, Paris, https://doi.org/10.1787/a13bf17d-en.

World Bank (2016). IFC the first six decades: Leading the way in private sector development – *A history*. Washington, DC: World Bank Group. http://documents.worldbank.org/curated/en/668851478627391927.

#World Bank (2024). A focused assessment of the International Development Association's private sector window (PSW): An update to the Independent Evaluation Group's 2021 early-stage assessment. Independent Evaluation Group. Washington, DC: World Bank.

#World Bank (2025). Results and performance of the World Bank Group 2024: Managing results in an uncertain world. Independent Evaluation Group. World Bank.

World Bank (2025). *Financing firm growth: The role of capital markets in low- and middle-income countries*. Washington, DC: World Bank.

MINISTRY OF FOREIGN AFFAIRS
OF DENMARK

2 Asiatisk Plads
DK-1448 Copenhagen K
Denmark

Tel +45 33 92 00 00
Fax +45 32 54 05 33
um@um.dk
www.um.dk

ISBN: 978-87-94339-91-9