03/2020

DEval Discussion Paper

THE STATE OF THE EVIDENCE ON BLENDED FINANCE FOR SUSTAINABLE DEVELOPMENT

An Evidence Gap Map

2020

Monika Bertzky
Nathalie Doswald
Guido Fernández de Velasco
Gunnar Gotz
Valerie Habbel
Magdalena Orth
Johanna Richter
Jerónimo José Rocío Pérez
Luis Sánchez Torrente
Sven Harten

AAE Asesoramiento Ambiental Estratégico

DEval GERMAN INSTITUTE FOR DEVELOPMENT EVALUATION

Abstract

Blended finance, which aims to mobilise private capital towards sustainable development in developing countries (OECD, 2018), is becoming increasingly important for bridging the investment gap for the Sustainable Development Goals (SDGs). However, little is known about its development impact.

This report presents the findings of a systematic search on blended finance studies and evaluations, which are visualised as an evidence gap map (EGM). The EGM presents the results on a matrix of eight blended finance instruments and 14 sub-effects, which were grouped into four categories of effects: financial additionality, development additionality, market development and sector effects.

The search identified 33 publications that met the inclusion criteria, containing 87 individual pieces of evidence. Almost half of the blended finance instruments focused on results-based incentives, with grants and guarantees being the next most numerous. Most of the evidence was found in programme evaluation reports (67%), while (quasi-)experimental evidence was scarce (12%).

The comparison with a blended finance database (Convergence, 2020) showed that the increase in the size of the blended finance market from USD 16 billion in 2007 to USD 136 billion in 2018 did not trigger a similar increase in research. A particularly strong mismatch between frequency of use and lack of research was found for insurance, hedging and junior/subordinated capital, and for sector effects in energy and financial services.

Keywords: blended finance, evidence, Sustainable Development Goals

Zusammenfassung

Blended Finance zielt darauf ab, privates Kapital für die Finanzierung nachhaltiger Entwicklung zu mobilisieren (OECD, 2018) und wird immer wichtiger, um die Investitionslücke für die Erreichung der Nachhaltigkeitsziele (*Sustainable Development Goals*, SDGs) zu schließen. Bisher ist jedoch wenig über die entwicklungspolitische Wirkung von Blended Finance bekannt.

Dieser Bericht stellt die Ergebnisse einer systematischen Suche nach Blended Finance Studien und Evaluierungen vor, die als Evidenzkarte (*Evidence Gap Map*, EGM) visualisiert sind. Die EGM bildet die Evidenz auf einer Matrix von acht Blended-Finance-Instrumenten und 14 Subeffekten ab, die unter vier Kategorien fallen: finanzielle Additionalität, entwicklungspolitische Additionalität, Marktentwicklung und Sektoreffekte.

Die Suche ergab 33 Publikationen, die die Kriterien erfüllten. Diese enthielten 87 Einzelergebnisse *(pieces of evidence*), von denen sich fast die Hälfte auf das Blended-Finance-Instrument der ergebnisorientierten Anreize bezog, gefolgt von Garantien und Zuschüssen. Die meiste Evidenz stammt aus Programmevaluierungsberichten (67%), während (quasi-)experimentelle Evidenz nur selten vorhanden ist (12%).

Der Vergleich mit einer Blended-Finance-Datenbank (Convergence, 2020) zeigte, dass der Anstieg der Größe des Blended Finance Markts seit 2007 nicht mit einem ähnlichen Anstieg an Publikationen einherging. Eine besonders starke Diskrepanz zwischen tatsächlicher Nutzung und mangelnder Evidenz wurde bei Versicherungen, Hedging und nachrangigem/nachrangigem Kapital sowie bei Sektoreffekten in den Bereichen Energie und Finanzdienstleistungen festgestellt.

Keywords: *Blended Finance*, Evidenz, Nachhaltigkeitsziele

Imprint

Authors

Luis Sánchez Torrente[1]
Valerie Habbel[2]
Jerónimo José Rocío Pérez[3]
Dr Nathalie Doswald[4]
Dr Monika Bertzky[5]
Gunnar Gotz[6]
Magdalena Orth[7]
Johanna Richter[8]
Guido Fernández de Velasco[9]
Dr Sven Harten[10]

Design

MedienMélange:Kommunikation!, Hamburg
www.medienmelange.de

Editing

Jannet King

Bibliographical reference

Sánchez Torrente, L., V. Habbel, J. J. Rocío Pérez, N. Doswald, Bertzky, M., G. Gotz, M. Orth, J. Richter, G. Fernández de Velasco and S. Harten (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.

© German Institute for Development Evaluation (DEval), December 2020

ISBN 978-3-96126-119-2 (PDF)

Published by

German Institute for Development Evaluation (DEval)
Fritz-Schäffer-Straße 26
53113 Bonn, Germany

Phone: +49 (0)228 33 69 07-0
E-Mail: *info@DEval.org*
www.DEval.org

The German Institute for Development Evaluation (DEval) is mandated by the German Ferderal Ministry for Economic Cooperation and Development (BMZ) to independently analyse and assess German development interventions.

DEval Discussion Papers present the results of the ongoing scientific study of evaluation and the effectiveness of development cooperation, thus contributing to relevant expert debates on evaluation, social science methods and development cooperation. The discussion papers are geared towards academics and practitioners in the field of evaluation, methodology research and development cooperation.

DEval Discussion Papers are written by DEval evaluators and external guest authors. In contrast to our evaluation reports, they do not contain any direct recommendations for German and international development organizations.

Although DEval Discussion Papers are internally peer-reviewed, the views expressed in them are only those of the authors and – unlike our evalua-tion reports – do not necessarily reflect those of DEval.

All DEval Discussion Papers can be downloaded as a PDF file from the DEval website:
www.deval.org/de/discussion-papers

[1] Luis Sánchez Torrente, AAE Associated Consultant. Contact : l.sanchez.tor@gmail.com

[2] Valerie Habbel, Evaluator at the German Institute for Development Evaluation (DEval). Contact: valerie.habbel@deval.org.

[3] Jerónimo José Rocío Pérez, AAE Associated Consultant. Contact: jeronimojrp@gmail.com

[4] Dr Nathalie Doswald, AAE Associated Consultant. Contact: natdoswald@gmail.com

[5] Dr Monika Bertzky, AAE Senior Consultant & Head of Safeguards Division. Contact: mbertzky@aae.com.uy

[6] Gunnar Gotz, Economist at the Inter-American Development Bank (IDB), contact: gunnarg@iadb.org

[7] Magdalena Orth, Team Leader at the German Institute for Development Evaluation (DEval). Contact: magdalena.orth@deval.org.

[8] Johanna Richter, Evaluator at the German Institute for Development Evaluation (DEval). Contact: johanna.richter@deval.org.

[9] Guido Fernández de Velasco, AAE Director. Contact: gvelasco@aae.com.uy

[10] Dr Sven Harten, Deputy Director at the German Institute for Development Evaluation (DEval). Contact: sven.harten@deval.org

TABLE OF CONTENTS

Figures

Tables

ABBREVIATIONS AND ACRONYMS

DAC	Development Assistance Committee
DFI	development finance institutions
EGM	evidence gap map
GNI	gross national income
ODA	official development assistance
OECD	Organisation for Economic Cooperation and Development
OOF	other official flows
MSMEs	micro, small and medium enterprises
RBF	results-based finance
ToC	theory of change
SDGs	Sustainable Development Goals

1. INTRODUCTION

It is estimated that up to USD 4.5 trillion in global investment is needed every year to achieve the Sustainable Development Goals (SDGs) in developing countries (UNCDF, 2018). Even a substantial increase in the official development assistance (ODA) by OECD countries, such as an increase to 0.7% of gross national income, in line with the so-called "0.7% target" (GNI), would not be sufficient to close the financing gap (Move Humanity, 2018). To meet the SDGs, the global community therefore needs to move the discussion from "billions" of ODA to "trillions" of private sector business and foreign direct investments. To channel the available global capital flows to developing and emerging countries, donor countries argued in the Addis Ababa Action Agenda in 2015 (UN, 2015) for the increased use of innovative financing mechanisms and approaches.

One approach to innovative finance is blended finance, the "strategic use of development finance for the mobilisation of additional finance towards sustainable development in developing countries" (OECD, 2018). Development finance may include not only ODA, but also "other official flows" (OOF), such as from development finance institutions (DFIs) and philanthropic investments. Additional investments are then sought, in particular from commercial private investors, who demand market-standard risk–return profiles (WEF and OECD, 2015). The real or perceived risk of investing in emerging markets is often too high for private investors. Blended finance addresses the risk–return ratio by either mitigating risks or enhancing returns for private investors. For example, development funds may provide a guarantee or cover the riskiest asset tranche of an investment facility, reducing the risk that private investors will suffer losses. Blended finance is becoming increasingly important. According to Convergence, which hosts a global platform and database on blended finance, investments in blended finance instruments by public and private investors totalled USD 136 billion in 2018 (Convergence, 2020).

Using the full potential of blended finance means moving to "Blended Finance 2.0", where development finance is used much more strategically to mobilise commercial capital at scale and where it targets a range of development issues and contexts (OECD, 2018). Movement towards Blended Finance 2.0 is currently hindered by the limited evidence base, which restricts the efficient pricing of capital by potential private investors and raises concerns about the effective use of blended finance to support the SDGs (OECD, 2018). Blended Finance 2.0 therefore entails "consistent estimates of blended finance market, assessment of effectiveness of blended finance" (OECD, 2018).

This document identifies where the gaps in the evidence are by developing an evidence gap map (EGM) on blended finance in developing and emerging countries. An EGM is a systematic and visual presentation of the availability of "rigorous evidence for a particular policy domain" (Campbell Collaboration, 2020). The EGM takes stock of what we know and do not know about the effects of blended finance by mapping existing and ongoing systematic reviews, impact evaluations, and other studies and evaluations in this field. It looks at concentrations and gaps of evidence both in terms of quantity (i.e. number of studies and evaluations) and quality (i.e. rigour of the evidence). The EGM aims to inform future research, investment and policy decisions on blended finance. For example, decision makers can use the EGM to identify areas where further research is most needed and others where duplicate efforts may be avoided, while investors may use the EGM to understand which interventions and outcomes are backed up by evidence. While the EGM itself does not show the direction or magnitude of any effects, it identifies all relevant studies and evaluations, which can then be obtained to learn about their findings.

2. KEY CONCEPTS AND DEFINITIONS

The EGM framework consists of a matrix with eight blended finance interventions (rows) and four categories of effects, with 14 sub-effects (columns). The intervention and outcome types were developed based on an extensive literature review.

2.1 Interventions

This EGM uses the categorisations and definitions of blended finance instruments developed by the Blended Finance Taskforce (Blended Finance Taskforce, 2018). The Taskforce consists of leaders from finance (e.g. BlackRock), business, development (e.g. IFC) and policy (e.g. OECD). Table 1 shows the instruments (here called interventions) and their definition.

Table 1 Intervention types – definitions

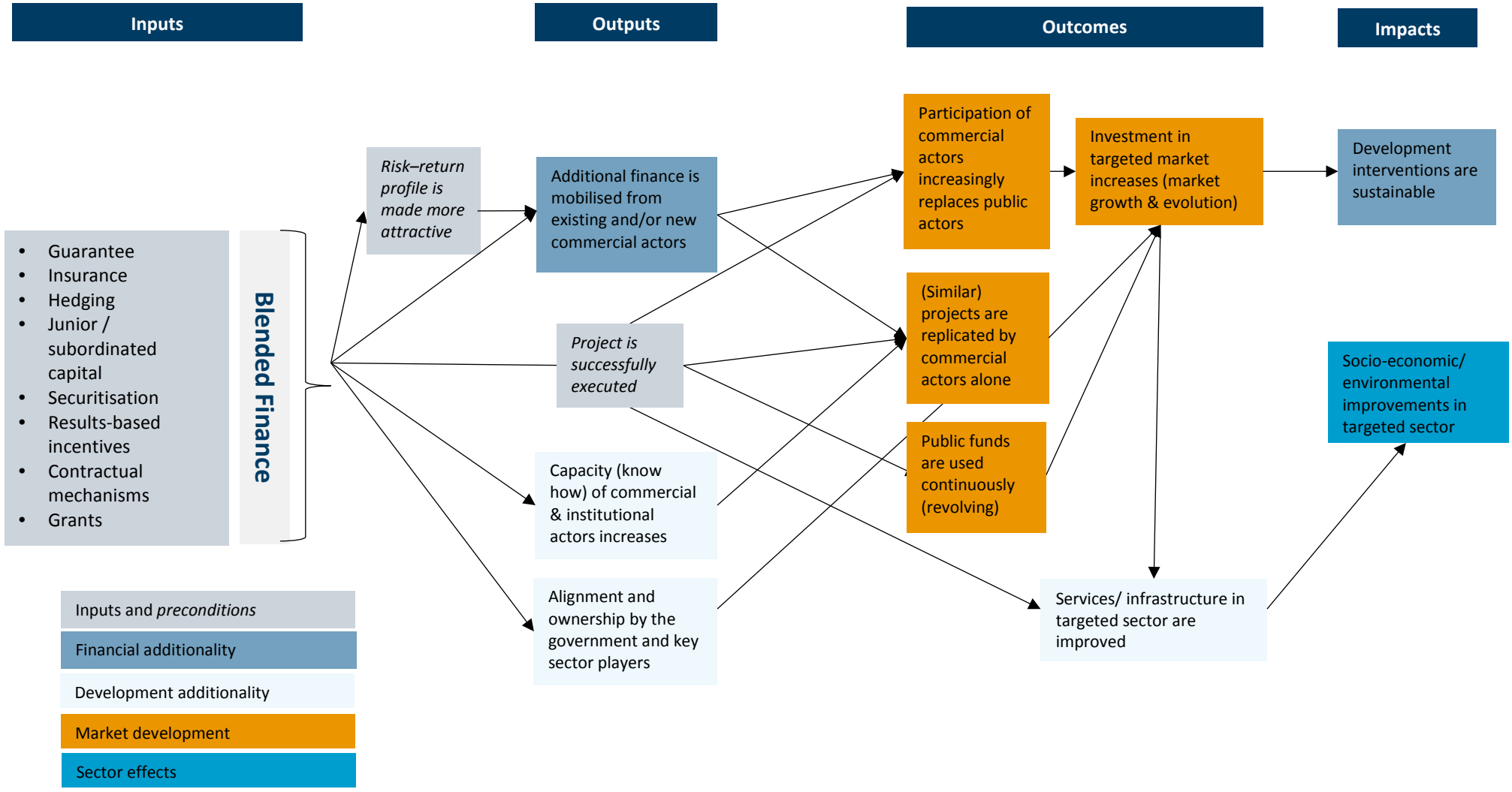
Intervention	Definition
Guarantee	"Provides protection to one party if the other party fails to perform. […] Guarantees are a form of credit enhancement, strengthening the creditworthiness of the investment because of the promise from the guarantor to complete performance in the event of default. […] There are many types of guarantees including first loss, partial risk or credit guarantees and trade finance guarantees."
Insurance	"Insurance provides protection by promising to compensate for a specified loss or damage in return for payment of a specified premium. There are many types of insurance; one of the most common is political risk insurance to protect against adverse government actions or war, civil strife, and terrorism."
Hedging	"Hedging reduces the risk of adverse current price movements in an asset and its associated earning stream. Currency hedging reduces or eliminates exposure to the movement of foreign currencies – addressing one of the key risks for investing in emerging markets."
Junior/ subordinated capital	"Subordinated (debt) or junior (equity) protects senior investors by taking first losses on the value of the security i.e. if something goes wrong, the most junior / subordinated tranche will be paid out last. First-loss capital takes a position that will suffer the first economic loss if the assets below it lose value or are foreclosed on (this can also be provided through a grant or guarantee)."
Securitisation	"Securitisation refers to the process of transforming a pool of illiquid assets into tradable financial instruments (securities)."
Results-based incentives (e.g. pay-for-performance schemes)	"Instruments that provide incentives and disincentives to achieve desired outcomes or results (tie at least a portion of payments to achievement), including social impact bonds and performance-based contracts. This type of financing is aimed at rewarding innovation and successful implementation of a project."
Contractual mechanisms (e.g. feed-in-tariffs or off-take agreements)	"There are various contractual and project finance arrangements to support the development of bankable infrastructure projects including public and private off-taker agreements, subsidies such as feed-in-tariffs, and tax credits. These mechanisms involve an agreement between producers and buyers of a resource to purchase or sell portions of future production."
Grants (especially for technical assistance)	"Capital which is paid in without any expected repayment or compensation over a fixed period of time. It could include money for technical assistance or project preparation to bring a project to bankability. Grants can be critically important for pipeline development, especially in less mature sector and riskier geographies, creating significant (if often hard to measure) crowding in of private capital".

Source: Blended Finance Taskforce (2018)

2.2 Theory of change and effects

In order to determine the relevant effects, a generic theory of change (TOC) for blended finance interventions was developed based on a literature review (see Figure 1). The effects fall under four different categories, which are depicted in Figure 1 in different colours: financial additionality, development additionality, market development and sector effects.

Figure 1 Theory of Change for blended finance interventions



Source: own figure.

ToC description

Based on the ToC (described in more detail below), 14 sub-effects were derived, which fall under the four categories of effects. The term "effect" is used here to include both outcomes and outputs, as some of the outputs (e.g. mobilisation of additional funds) are central aspects of blended finance. For more detailed explanations and sources for each of these sub-effects, see Annex 4. The four categories and the 14 sub-effects grouped under them are as follows:

- Financial additionality (including the mobilisation of additional finance)
- Development additionality (including service/infrastructure created, alignment & ownership, additional capacity for commercial and institutional actors)
- Market development (including revolving use of funds, project replication, market growth, increased participation of commercial actors)
- Sector effects (including in energy, financial services, infrastructure, health, education, other sectors).

Financial additionality

Blended finance instruments aim to improve the risk–return profile for commercial investors in order to crowd-in commercial finance. The improved risk–return profile can attract new commercial actors or mobilise additional finance from existing investors. For example, assuming part of the risk (through a guarantee/subordinated-debt) causes the risk of an operation to decline while returns remain the same, which makes such an investment more attractive.

Market development

The completion of the supported project is assumed to demonstrate the viability of such a project and spur the replication of similar projects. This demonstration effect might increase the volume and number of investors in other similar projects that are supported by the public sector. In some blended finance setups (e.g. structured funds), the public resources are not returned to the public donor but remain in the structure to be used on a continuous basis, i.e. their value is not diminished unless there are losses. The funds are said to be used in a revolving manner. In the long run, it is assumed that the public sector will phase out its activity and commercial actors will initiate similar projects without public support. At this point, the market should have grown and evolved into a fully functioning market that attracts commercial investors, leading to a sustainable outcome of the blended finance intervention.

Development additionality

In many cases, finance provided by blended finance instruments is complemented by technical assistance measures, which are intended to develop the capacity of institutional actors (e.g. governments, chambers of commerce) or of commercial actors (e.g. financial institutions). Capacity development may also occur without specific technical assistance measures, for example if financial institutions need to develop their social and environmental standards to comply with the requirements of the international investors that supply the funding.

Alignment and ownership by the government and key sector players are also key to ensuring sustainable outcomes beyond the lifetime of the blended finance interventions, such as the success of future replications. At the same time, the completion of the project should lead to improvements in services and/or infrastructure, resulting in positive impacts (socio-economic or environmental) in the targeted sectors.

Sector effects

Blended finance can theoretically be used in any sector. To reduce the number of sectors to a manageable level, sector outcomes were aggregated by five sectors, which were chosen based on their frequency according to the Convergence database[11] : energy, financial services, infrastructure, health and education. Findings from other sectors were aggregated under "other sectors".

3. METHODS

3.1 Data sources and search protocol

Generally, evidence gap maps (EGMs) take stock of and visualise the rigorous evidence available for a topic or sector (Campbell Collaboration, 2020). Depending on the definition of "rigorous", the EGM might only have included studies that have been published in a peer-reviewed journal, that have a quantitative component and that include a counterfactual. However, it was anticipated that the number of studies on blended finance meeting these criteria would be very low and that more value could be derived from broadening the inclusion criteria to grey literature and qualitative studies, while making sure that the strength and quality of the evidence is evident in the EGM.

Both peer-reviewed and grey literature were therefore searched for articles published between 2004 and 2020 in English, German, Spanish and French. A search strategy was applied to two peer-review databases: Web of Science and Scopus (see below). "Grey" literature was searched by going directly to the websites of relevant organisations, informed by expert input (see Annex 2).

The search protocol followed systematic review guidelines (e.g. CEE, 2018) by creating a search string for peer-review databases and key search terms for grey literature websites (e.g. "blended finance", see Annex 3). Several trials in Web of Science determined which options produced the highest number of results with an adequate level of relevance. The search protocol was defined using several sets of keywords, combining individual terms (and wildcard symbols (*) where appropriate) separated by Boolean "OR" operators and sets combined using "AND". Three different clusters of terms were defined and combined in the Web of Science database (see Annex 2). Finally, the results were filtered by "Social Sciences" publications, which yielded a total of 714 peer-reviewed papers.

3.2 Screening process

A stepwise process was used for the screening, by applying the primary inclusion and exclusion criteria to: a) the article title, b) the abstract and c) the full text of each of the articles. Exclusion was conservative during phase a) and b), which means that papers were excluded if there was any doubt regarding their compliance with the inclusion or exclusion criteria. Reviewer bias was tested at the start of the selection process of step b) with a kappa analysis (CEE, 2018). Two reviewers reviewed a common, random 10% sample of the abstracts. Level of agreement between the number of articles rejected or accepted by the reviewers was calculated using the kappa statistic, in which values can range from +1 (perfect agreement) to −1 (strong disagreement).

3.3 Eligibility criteria

Criteria for studies/evaluations to be included or excluded in the EGM were defined based on the subject (population), intervention, comparisons, effects (outputs and outcomes), study designs, and the language and publication dates (see Table 2).

[11] https://www.convergence.finance/blended-finance#market-size.

Table 2 Eligibility criteria

Inclusion criteria	Exclusion criteria
Subject (population) Individual people, groups, institutions, systems, communities and economic sectors in low- to middle-income countries as defined by the World Bank in 2018[12]	**Irrelevant subject** Evidence from a World Bank high-income country
Intervention Interventions that "make strategic use of development finance for the mobilisation of additional finance towards sustainable development in developing countries"	**Irrelevant intervention** – Any purely public or commercially financed intervention (e.g. commercially financed solar power plant) – Any intervention where development finance is not used to mobilise finance (e.g. commercially financed infrastructure that is later upgraded through public funds) – Any intervention that does not have a direct link to sustainable development
Comparisons – Similar projects/programmes without blended finance – Modelled financial projections (for financial indicators only) – Regions or communities within the same country without intervention	**Irrelevant comparisons** None
Effects Evidence that analyses financial additionality, development additionality, market growth (depending on the targeted market), effects in the targeted sector	**Irrelevant effects** Project completion
Study design – Systematic reviews[13] – Studies using rigorous quantitative methods (experimental and quasi-experimental designs, i.e. propensity-score matching, differences-in-differences, instrumental variables, randomised controlled trials, correlation analyses using panel data and counterfactual analysis) – Programme evaluations (using mixed methods or qualitative data with indicators) that follow OECD DAC evaluation criteria and explicitly address additionality of the blended finance factor	**Study design** – Process-based evaluation reports (i.e., evaluation reports based on milestone indicators, stakeholder-based evidence, self-assessments) – Studies without explicit counterfactual assessment
Other – Studies published after 31.12.2003 – Articles in English, Spanish, German and French	**Other** – Articles published before 2004 – Articles in a language other than English, Spanish, German and French

Source: own table.

12 https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups

13 Some papers that discussed several studies did not meet the methodological requirement of a systematic review. However, the individual studies were screened and, if they met the inclusion criteria, coded individually according to the methodology used (e.g. quasi-experimental study). If a paper was coded as systematic review, individual papers within the systematic review were not coded to avoid double-counting.

3.4 Data coding

Screened articles were uploaded into an academic reference management software (Endnote) and any duplicates were removed. Each article was given an identifier number and all bibliographic information were recorded in a spreadsheet. The contents of the articles were coded for each individual piece of evidence, as one single paper may contain evidence for several interventions/effects. Information extracted from each piece of evidence is shown in Table 3. The coding process was performed by two consultants who, prior to beginning the analysis, engaged in several tests analyses in order to guarantee common criteria. A kappa score of 0.8441, with a percentage of agreement of 97.56%, was achieved, indicating "almost perfect agreement".

Table 3 Coding information collected from included studies

Element	Description
World Bank region	Coded 1–8 by category: East-Asia & Pacific, Europe & Central Asia, Latin America & Caribbean, Middle East & North Africa, South Asia, Sub-Saharan Africa, North America, Multiple countries
Country	Listed as given
Population	Coded 1–5 by category: village/town/district, individuals, communities/groups, institutions, economic sector
Sector	Coded 1–8 by category: water, infrastructure, forestry/agriculture/fishing, health, economy, education, economy, environment
Intervention	Coded 1–8 by category: guarantee, insurance, hedging, junior/subordinated capital, securitisation, results-based incentives, contractual mechanisms, grants
Effect	Coded 1–4 by category: financial additionality, development additionality, market development, sector effects
Sub-effect	Coded 1–14 by category: additional finance, service/infrastructure created, alignment & ownership, additional capacity for commercial and institutional actors, revolving use of funds, project replication, market growth, increased participation of commerce, sector effects in energy, sector effects in financial services, sector effects in infrastructure, sector effects in health, sector effects in education, sector effects in other sectors
Study type	Coded 1–5 by category: experimental, quasi-experimental, correlational, systematic review and programme evaluation

Source: own table.

3.5 Limitations

One limitation of this analysis was the difficulty in conducting effective searches of the grey literature. First, to ensure a useful selection of papers the search concentrated on the term "blended finance" rather than individual instruments and, second, there is not a good translation for blended finance in different languages. As there is no central database for grey literature, there might have been a bias towards the organisations and the instruments the authors were familiar with. Similarly, due to the authors' knowledge, evidence limited to only four languages (English, Spanish, French and German) was gathered, potentially creating a bias towards studies from Western countries and Latin America.

For the potential usage of the EGM, it is important to keep in mind that the EGM only shows whether there is available evidence; it does not show the direction or the magnitude of any effects. A concentration in evidence for a particular instrument, for example, only shows that the instrument has been investigated through a number of studies, but not that the effectiveness of the instrument is backed up by evidence.

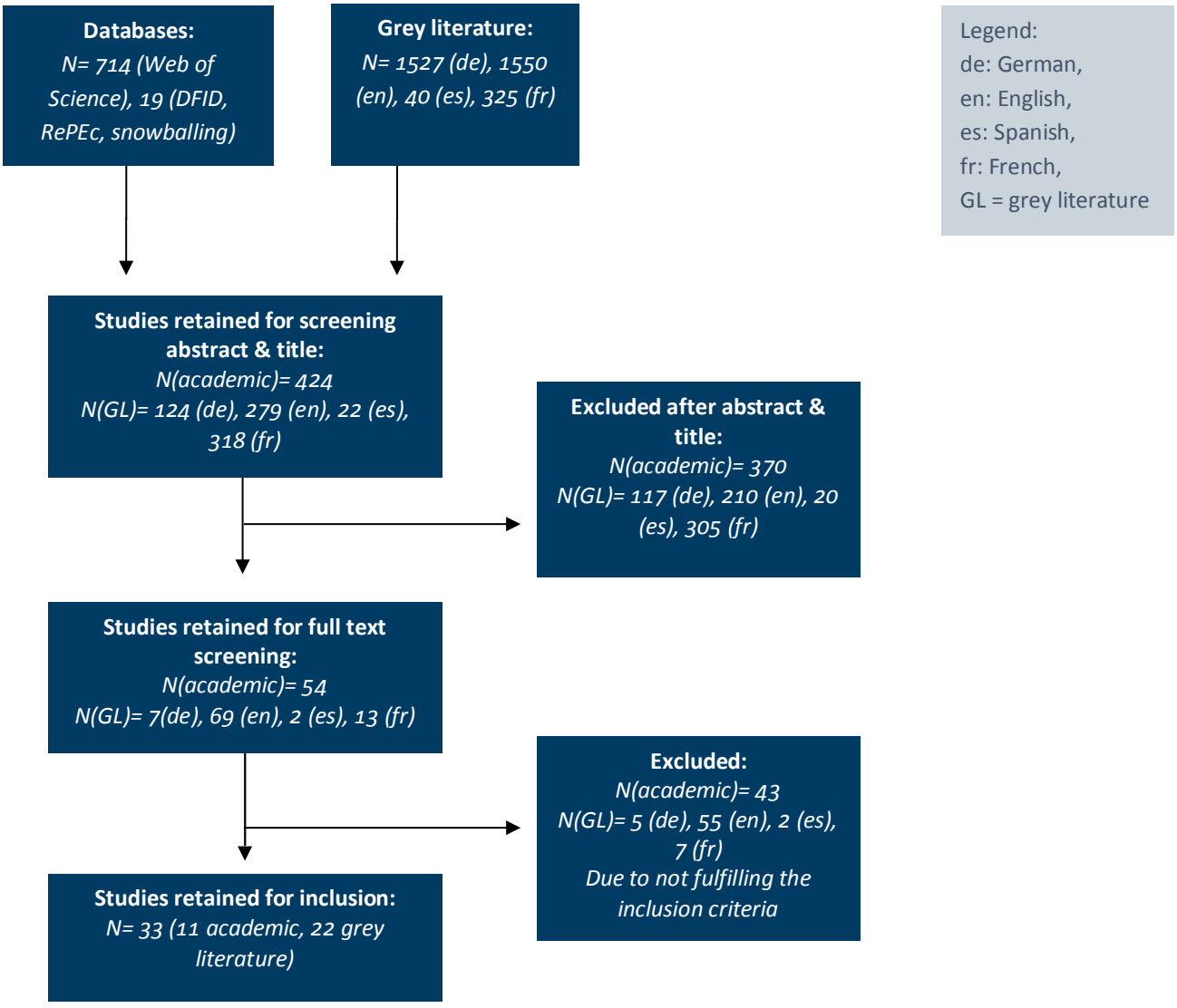
4. RESULTS

4.1 Systematic search results

The search found a total of 714 peer-reviewed papers in Web of Science (see Figure 2 for a visual overview of the search process). Another two papers were found in the DFID database and 12 in IDEAS-RePEc. Two papers were excluded because they were non-systematic literature reviews, but the papers they reviewed were obtained and, after being screened, five of them were added to the pool of peer-reviewed papers. After removing duplicates and screening according to exclusion criteria, 11 papers were included. Three papers contained several studies within them.

In the grey literature, more than 3000 documents were found from English, French, German and Spanish sources. After screening and reviewing them, 22 of these documents were included in the EGM. In total, the coding process led to 87 individual pieces of evidence to be included in the EGM, contained in 33 different papers. One paper may therefore be represented several times in the EGM, for example if a study looks at the sector effects of results-based incentives in both health and education.

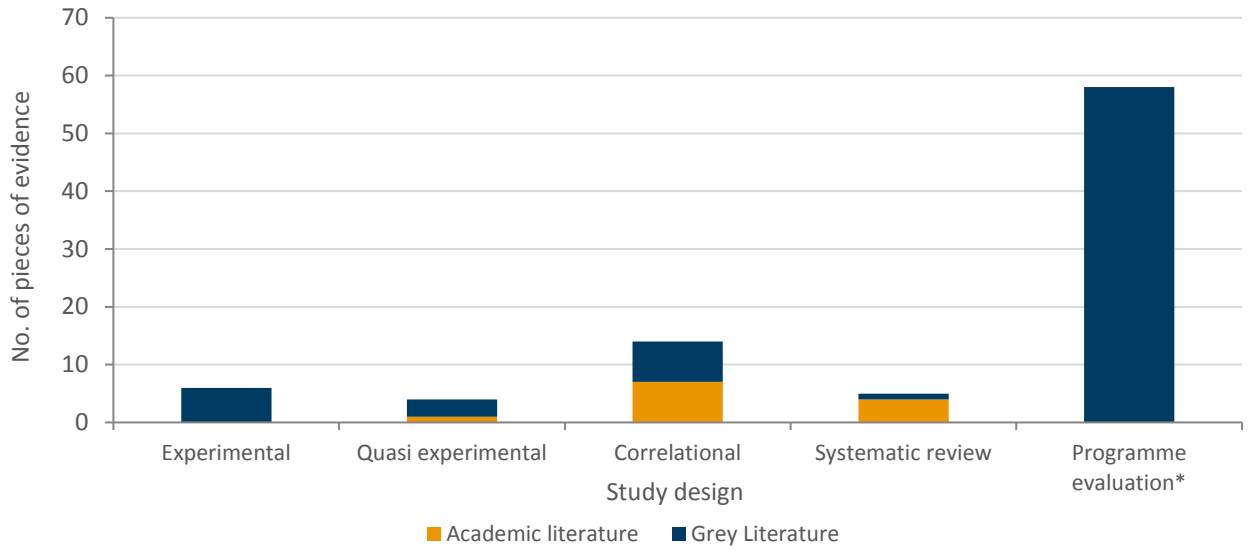
Figure 2 Search process



Source: own figure.

As shown in Figure 3, most of the collected evidence (86%) was found in the grey literature (i.e. it had not been peer-reviewed), whereas 14% came from academic sources. Overall, most of the evidence came from programme evaluation reports (67%) that contained qualitative and quantitative data, with quantitative data here consisting mainly of monitoring data on indicators. For example, a public donor that funds a blended finance intervention may require annual reporting on indicators such as the number of women-led MSMEs funded. The second most frequent type of study design was correlational analysis, with 16% of the total evidence, whereas counterfactual designs (experimental and quasi-experimental[14]) accounted for only 12%. While most of the grey literature evidence consisted of programme evaluations, a few studies in the grey literature also used experimental, quasi-experimental or correlational methods.

Figure 3 Distribution of the evidence by type of study design and source of publication



Source: own figure.
** Programme evaluations with very limited quantitative data analysis*

The EGM was created twice: once with a focus on the methodology used in the publications (Figure 4) and once with a focus on the sources of the publications, i.e. academic versus grey literature (Figure 5). Both EGMs map the evidence against the effects and intervention categories, and contain the same pieces of evidence.

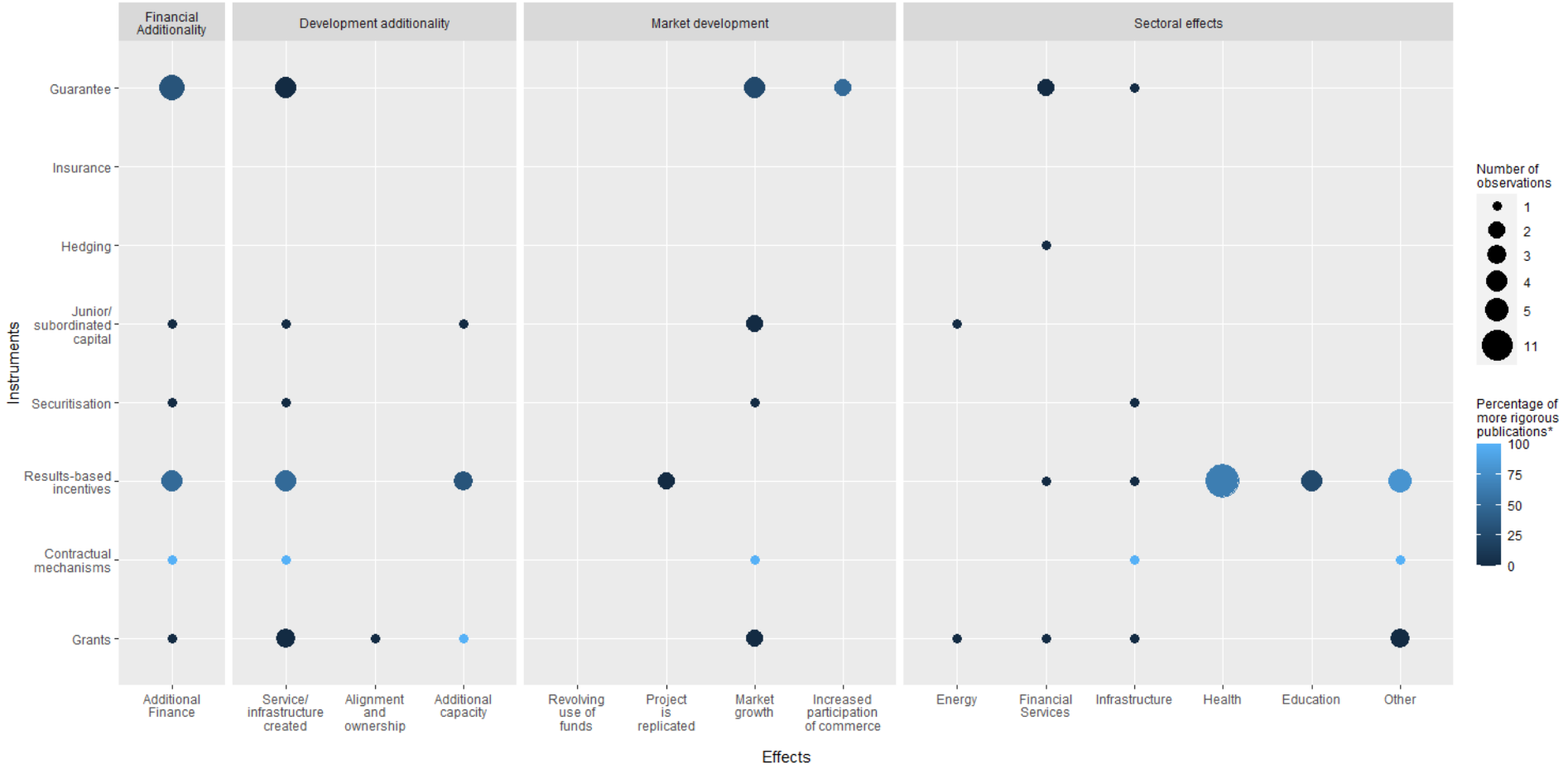
Each EGM has a total of 112 potential areas of evidence, as a result of combining all possible interventions and effects. Out of these 112, relevant evidence that met the inclusion criteria was found for only 39 areas. The highest concentration of evidence is observed for the instrument of results-based incentives, in particular with sector effects on health (14 pieces of evidence), other sectors (5) and education (4). These areas also have the highest number of publications using rigorous methods (Figure 4) and academic publications (Figure 5). Overall, large areas of the EGM are either empty or have just one piece of evidence, particularly regarding insurance and hedging instruments.

Annex 1 lists all papers included in the EGM. To enable a particular point on the EGM to be identified, information on the papers includes whether they were published as academic or grey literature, the intervention and sub-effect they studied and the type of methodology used.

[14] Experimental and quasi-experimental studies aim to make a counterfactual assessment, i.e. to show what would have happened without the intervention, by comparing groups that did not benefit from the interventions with those that did. Groups are assigned to the intervention/control group either randomly (experimental method) or non-randomly (quasi-experimental).

4.2 The evidence gap map

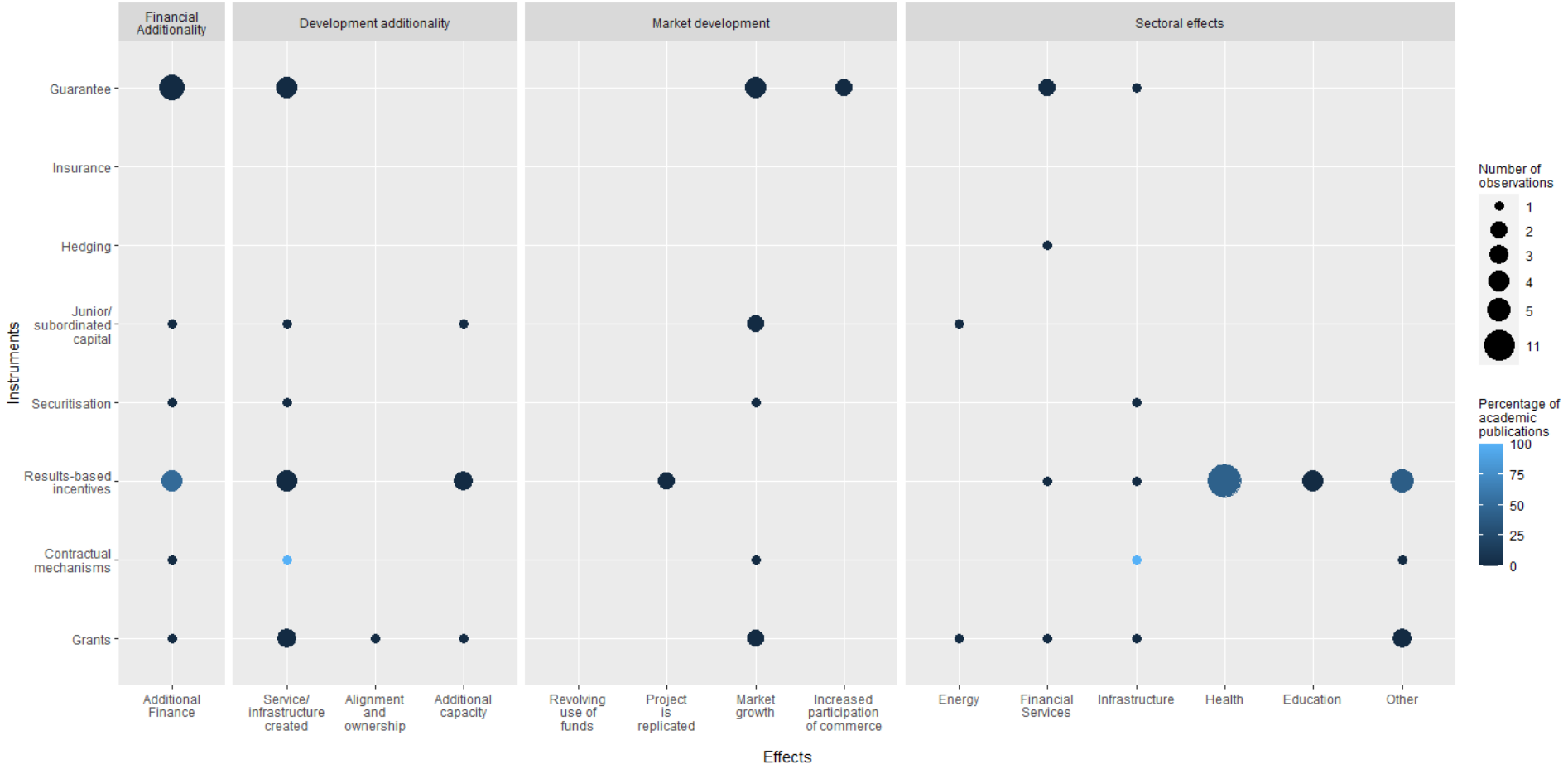
Figure 4 Evidence gap map on blended finance, by type of methodology



Source: own figure

**More rigorous publications use experimental, quasi-experimental or correlational methods, or consist of systematic reviews.*

Figure 5 Evidence gap map on blended finance, by type of publication

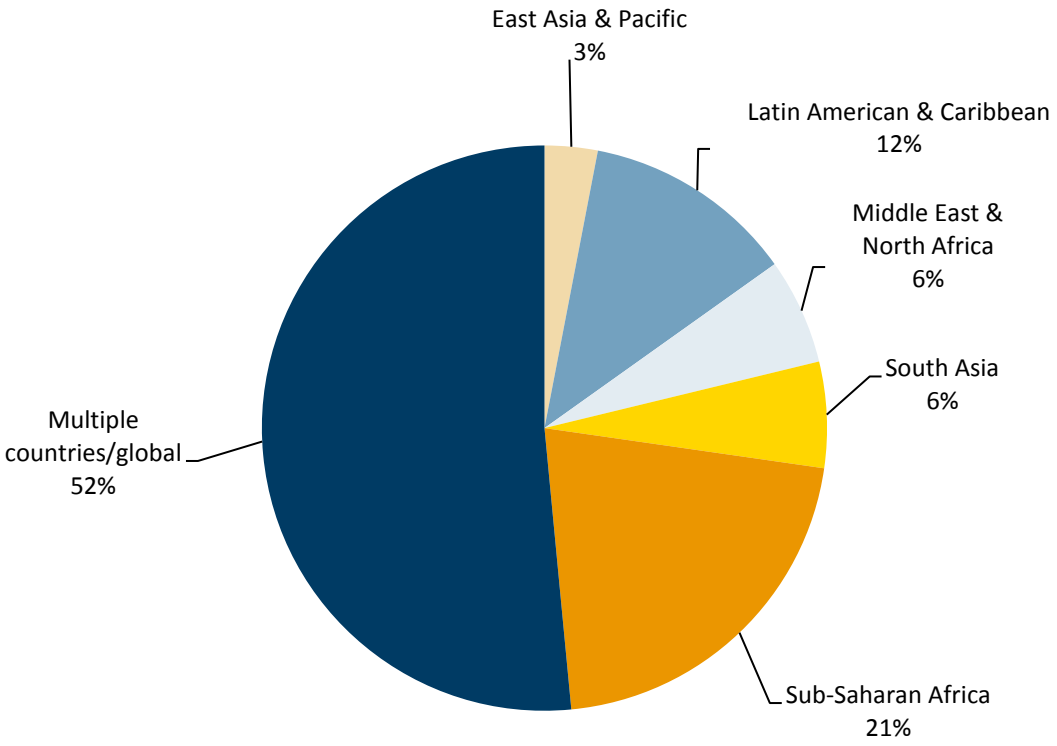


Source: own figure

4.3 Analysis by region and year of publication

Around half of the selected papers draw on evidence from multiple countries or make global assessments. Among those focusing on a particular region, Sub-Saharan Africa is most prevalent, with an additional fifth of the evidence. The remaining literature is evenly spread between other regions of the developing and emerging world, including Latin America (12%), South Asia (6%) and Middle East and North Africa (6%). Only 3% of the total evidence was gathered in East Asia and the Pacific.

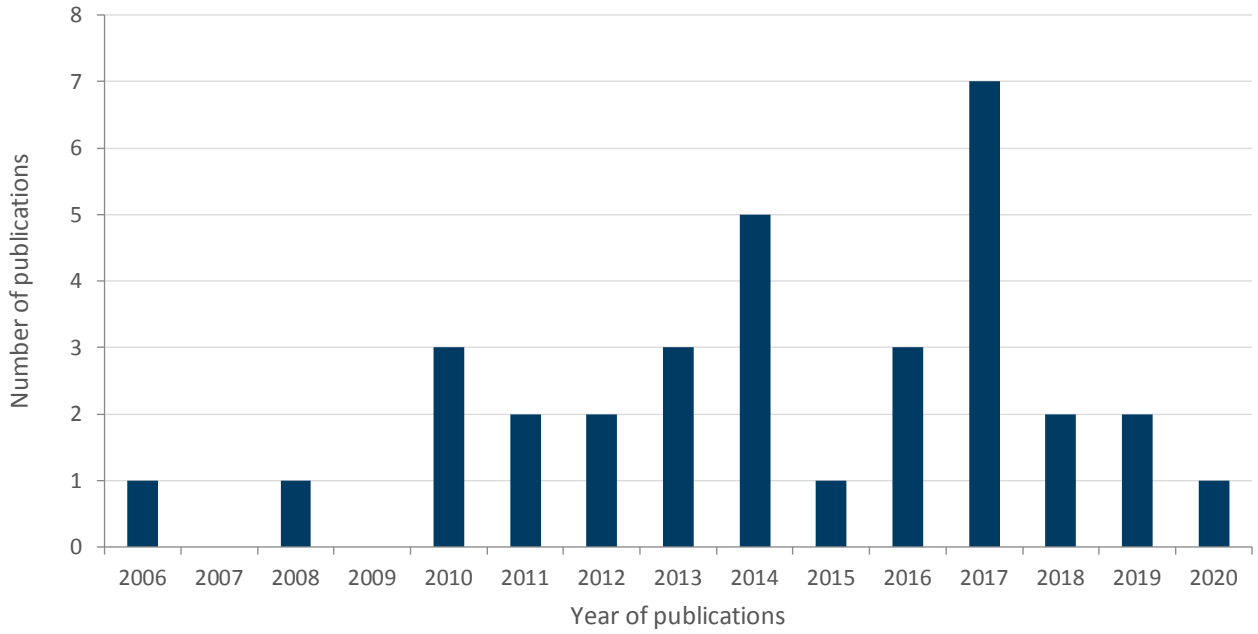
Figure 6 Distribution of the literature (number of papers) by region



Source: own figure.

The gathered literature is mostly evenly distributed across years, although papers published before 2010 are very rare (only one paper published in 2006 and 2008). The highest number of papers was observed in 2017 (7 papers).

Figure 7 Distribution of the literature by year of publication

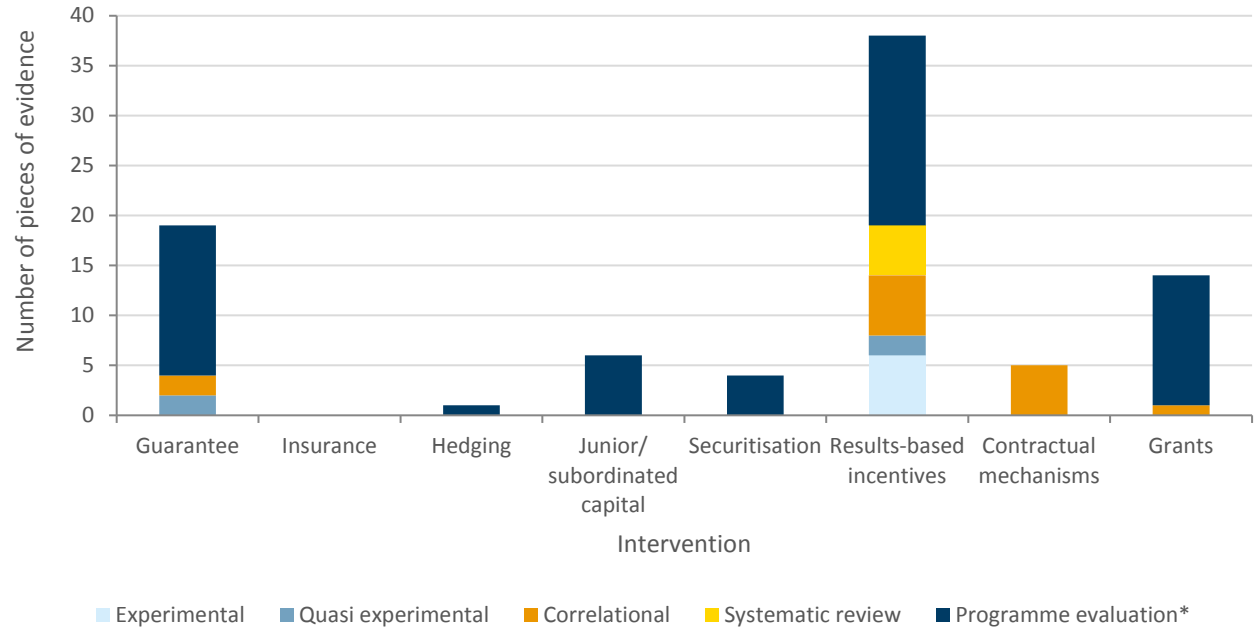


Source: own figure.

4.4 Analysis by intervention

As shown in Figure 8, results-based incentives is by far the most studied instrument, with 44% of all pieces of evidence. This is followed by guarantees (22%) and grants (16%). Insurance is the only instrument for which no study was found. Generally, most of the evidence for the instruments comes from programme evaluations with limited quantitative data, with the exception of contractual mechanisms, for which all pieces of evidence were obtained through correlational designs.

Figure 8 Distribution of the evidence by intervention and type of study design



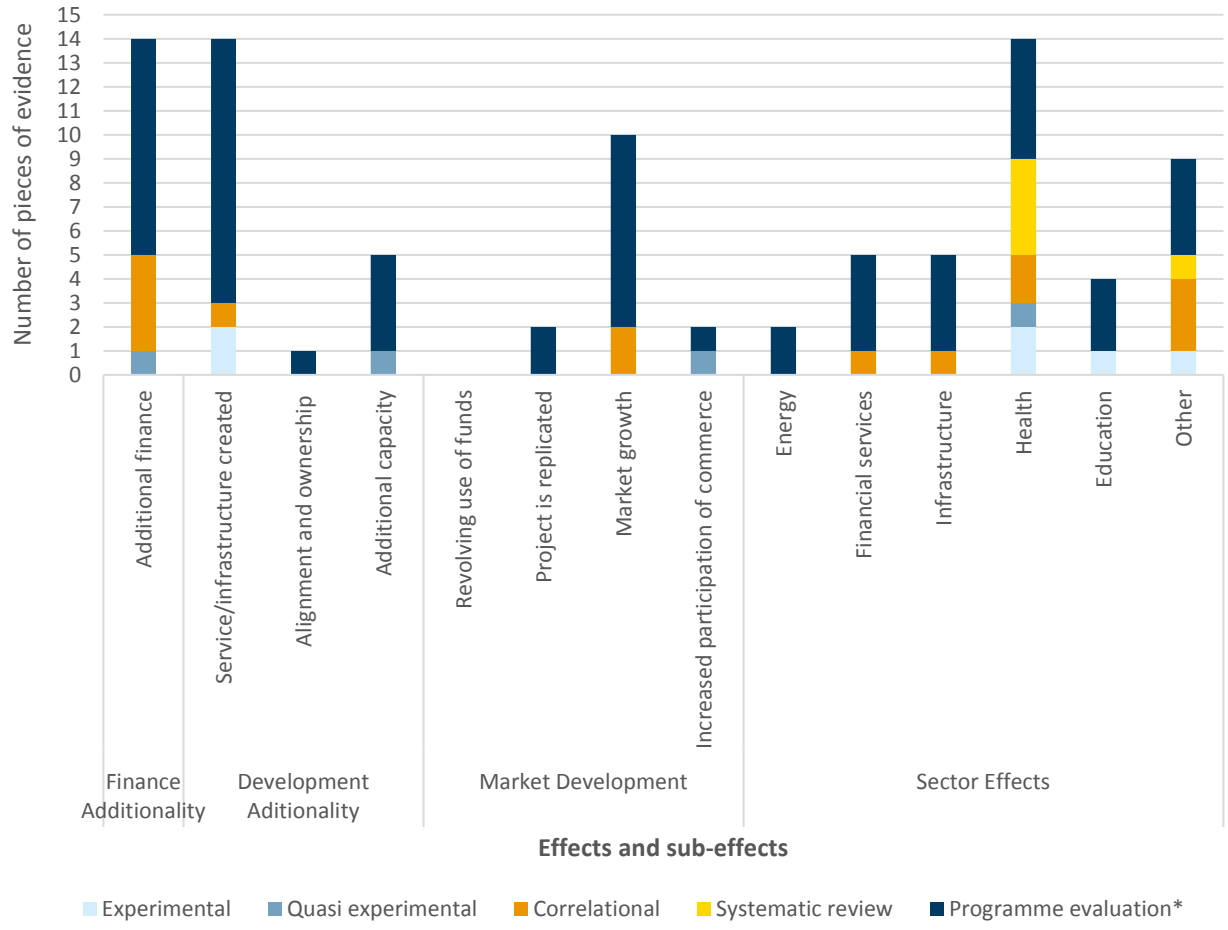
Source: own figure.
** Programme evaluations with very limited quantitative data analysis*

4.5 Analysis by effects and sub-effects

As shown in Figure 9, the evidence is unevenly distributed across the 14 sub-effects derived from the ToC, which include both outputs and outcomes. Most frequently, studies of blended finance look at the sector effects of the interventions (45%), particularly on the health sector. A large number of studies also examine the impact of the intervention on the creation of services/infrastructure (16%), the mobilisation of additional finance (16%) and on market growth (11%). The search revealed no evidence on the revolving use of funds.

Most effects were studied using programme evaluations, which relied mostly on qualitative data and the reporting of indicators. For sector effects on health and other sectors, however, around two thirds of the publications used more rigorous methods.

Figure 9 Distribution of the evidence by effects and type of study design



Source: own figure.
** Programme evaluations with very limited quantitative data analysis*

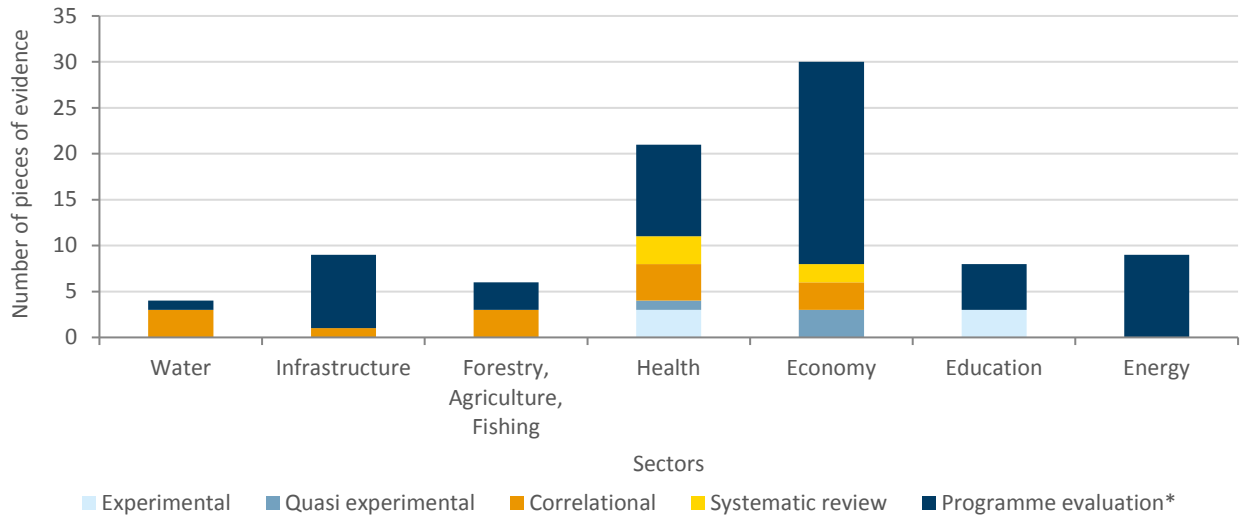
4.6 Analysis by sector

The evidence covers seven different sectors (see Figure 10). These vary slightly from the sectors that are captured by the sector effects in the EGM framework (energy, financial services, infrastructure, health, education and others) because the latter were chosen before the analysis based on the frequency in the Convergence database. The analysis by sector, on the other hand, includes all the sectors covered by at least one piece of evidence included in the EGM.

The sectors with the largest amount of evidence are the economy, with 30 individual pieces of evidence (34% of the total), followed by health (21). The water sector and the forestry, agriculture and fishing sectors were the least represented (4 and 6, respectively). The type of study design is also unequally distributed across

sectors: while approximately half of the evidence in health was collected through (quasi-)experimental or correlational analysis or systematic reviews, most of the evidence for all other sectors was obtained through programme evaluation studies and/or correlational designs.

Figure 10 Distribution of the evidence by sector and type of study design



Source: own figure
** Programme evaluations with very limited quantitative data analysis*

5. DISCUSSION

This paper takes stock of the evidence across interventions and effects, analysing where concentrations and gaps are and assessing the quality and rigour of this evidence, thereby contributing to "Blended Finance 2.0". As a first step, the framework for the EGM was developed, based on a literature review. The framework includes six interventions and 14 effects, categorised as financial additionality, development additionality, market development and sector effects. A rigorous search of academic and grey literature was then conducted and over 3000 papers were screened. The coding process identified 33 different papers that met the inclusion criteria, containing 87 individual pieces of evidence. Most of the evidence investigated results-based financing as well as effects in financial additionality, services/infrastructure and in health. Very few of the pieces of evidence included used rigorous methodological designs and most were published in the grey literature. In this section, these results will be discussed, focusing on a) the state and quality of the evidence overall as well as possible reasons, and b) a comparison between the distribution of the evidence and the distribution of transactions in blended finance.

The state of the evidence and challenges

The relevance and potential of blended finance as an approach to address sustainable development and to close the SDGs financing gap contrasts with the scarcity of evidence on blended finance, in particular regarding rigorous evidence. The coding process identified only 87 individual pieces of evidence that met the inclusion criteria. This is a relatively low result given the broad conceptualisation of potential effects and interventions as well as the lenient inclusion criteria, which included programme evaluations under certain conditions. The dearth of evidence also contrasts with the market size of blended finance, which has grown steadily from USD 16 billion in 2007 to USD 136 billion in 2018 (Convergence, 2020). This apparent increase in the relevance of blended finance has not been accompanied by an increase in evidence: the number of publications per year has hovered between 1 and 6 since 2010, with no significant increasing trend. In addition to a limited number of publications in general, the lack of rigorous methods is another striking

feature of the EGM: of the 87 pieces of evidence, only 29 were systematic reviews or used quantitative methods, and only 10 of these used an experimental or quasi-experimental design.

There are a number of different factors explaining the lack of evidence (in particular of rigorous evidence) in blended finance. Blended finance is a relatively new approach, with investments in 2007 only around 10% of those in 2018 (Convergence, 2020). Many recently initiated projects have therefore not yet reached the required level of maturity for an ex-post evaluation. In addition, common standards, metrics and tools for evaluating the interventions are still being developed. At the moment, different implementing organisations use very different terminologies and definitions for instruments and effects, which make it difficult to aggregate information and to generate a common evidence base. This is partly a result of the different types of actors involved in blended finance interventions, who often have very different objectives and definitions of impact.

In addition, many features of blended finance make it inherently difficult to rigorously assess its impacts. First, as most instruments are set up as funds or facilities, the causal chains from inputs to impacts tend to be complex and long. For example, a structured fund (here, under the instrument of junior/subordinated capital) pools money from different sources to invest in financial institutions in emerging markets, which then lend locally, e.g. to MSMEs. The intermediary structure means that the impact of the fund on the beneficiary is only indirect and difficult to attribute. Facilities that pool money also tend to invest in a large number of different countries and even sectors, which means that evidence has to be gathered either in-depth for a smaller number of cases, which may then not generalise to other contexts, or superficially, e.g. by tracking progress on indicators across all investments.

Second, an inclusion criterion for the EGM was the analysis of additionality of the intervention. Additionality is very difficult to assess, yet particularly important for blended finance. By definition, blended finance interventions mobilise additional finance, which implies not only that private investments are made, but also that they would not have occurred without the concessional capital. Using a blended finance mechanism is therefore justified by the additionality of the mobilised capital. Evaluations or studies of blended finance need to develop a methodology to address additionality to adequately assess whether the public component of the investment was necessary to crowd-in private capital.

Third, to assess impact and whether it can be attributed to an intervention, a counterfactual is needed. A counterfactual is used to assess what would have happened without the intervention, for example by comparing the financial performance of investees with comparable financial intermediaries who were not financed by the intervention. Ideally, the comparability is ensured by randomly selecting investees to avoid non-random bias. However, managers of blended finance interventions have to consider commercial viability, among other factors, when selecting financial intermediaries and can therefore not be expected to randomly choose from a pool of all available institutions. In many countries where financial markets are not yet developed, there are also very limited investment opportunities and there may therefore not be a sufficiently large comparison group. In addition, data for comparison groups is often difficult to obtain, for example because evaluators may lack the necessary connections.

Fourth, the nature of the banking sector creates difficulties for the collection of data and the design of the evaluation or study. Commercial actors, who administer many of the blended finance interventions, may be either unwilling or unable to share data due to concerns over competitiveness or due to strict privacy regulations. Even data on inputs, such as the amount and sources of capital invested, may therefore be unavailable to evaluators.

These methodological difficulties also help to explain why some intervention types have been studied much more frequently than others. As described above, results-based finance (RBF) has received by far the most attention from researchers, while little work has focused on other instruments, such as insurance and hedging. RBF provides incentives and disincentives to achieve desired outcomes or results. The nature of RBF therefore requires successful outcomes or results to be defined in a measurable, verifiable way prior to the start of the intervention, and it requires the implementing partners to maintain detailed and systematic records on results achievements. As a result, evaluators and researchers can use a wealth of numerical data

for the analysis of outcomes and impact. In contrast, other interventions, such as hedging or insurance, may not use any metrics, or use only a few, which might explain why very few studies address these instruments.

Comparison between available evidence and investments in blended finance

The sector distribution of blended finance investments also does not correspond to the evidence found. According to Convergence, concessional capital (here: junior/subordinated capital) is used in 43% of blended finance interventions, followed by technical assistance funds (25%), guarantees/risk insurance (22%), grants (9%) and results-based financing (1%). The distribution of investments therefore runs almost contrary to the distribution of the available evidence: results-based finance is studied by far the most, but is used in only 1% of interventions, while concessional finance is used most frequently, yet is backed up by very little evidence.

In terms of sectors, blended finance is most often used to finance energy or financial services (25% and 24%, respectively) or several sectors at once (19%) (Convergence, 2020). The evidence, however, is focused mostly on effects in health and other sectors, which include agriculture, but not energy or financial services. It is likely that this can be explained by the dominance of results-based finance in the literature, an instrument frequently used to advance health and education objectives. The EGM shows that a large part of the evidence is clustered at the intersection between results-based incentives on the y axis and health on the x axis. Evidence on the other instruments focuses most on financial additionality, services/infrastructure created and market growth (10 pieces of evidence each). In terms of regional distribution, the evidence is more closely aligned with actual investments: most transactions as well as studies with a regional focus take place in Sub-Saharan Africa.

6. CONCLUSION

The evidence on blended finance instruments is still scarce: an extensive literature search only identified 33 papers that met the inclusion criteria, and most of them were programme evaluation reports that were not peer-reviewed and did not perform rigorous quantitative assessments.

Further research is needed to understand the additionality and added value of blended finance interventions in sustainable development, thereby enhancing its impact and justifying the use of public resources.

In addition, private investors that invest in blended finance are increasingly asking for a better assessment of the impact of their investments, and additional evidence could therefore also facilitate the mobilisation of private funding. Future research should not limit itself to programme evaluation reports, however.

While some features of blended finance instruments complicate the use of rigorous methods, the existence of studies using (quasi-)experimental methods in the EGM shows that it is possible.

The EGM indicates the areas where evidence is lacking, highlighting the need for future research, especially if the lack of evidence coincides with a strong prevalence of actual investments. In terms of instruments, this applies in particular to insurance, hedging and junior/subordinated capital, while in terms of effects, it applies in particular to sector effects in energy and financial services.

7. REFERENCES

Basile I., J. Dutra, (2019), "Blended Finance Funds and Facilities: 2018 Survey Results". OECD Development Co-operation Working Papers, No 59, OECD Publishing, Paris.

Blended Finance Taskforce (2018), "Better finance, better world", Consultation Paper.

Campbell Collaboration (2020), "Evidence and gap maps (EGMs)", Retrieved from *https://campbellcollaboration.org/evidence-gap-maps.html*

CEE (Collaboration for Environmental Evidence) (2018), Guidelines and standards for evidence synthesis in environmental management, Version 5.0. Pullin A.S., G.K. Frampton, B. Livoreil and G. Petrokofsky (eds.) www.environmentalevidence.org/information-for-authors. [10.04.2020]

Convergence (2020), "Blended Finance", *https://www.convergence.finance/blended-finance*

IFC (2017), "DFI Working Group on Blended Concessional Finance for Private Sector Projects", International Finance Corporation.

KfW (2019) Development Research, Entwicklungspolitik Kompakt, „Blending: Eine sinnvolle Ergänzung des Entwicklungsfinanzierungs-Instrumentariums.

Move Humanity (2018), *Closing the SDG Budget Gap*, Move Humanity.

OECD (2018), *Making Blended Finance Work for the SDGs*, OECD Publishing, Paris, https://doi.org/10.1787/9789264288768-en

ReDesigning Development Initiative. (2015). Blended Finance Vol. 1: A Primer for Development Finance and Philanthropic Funders. An overview of the strategic use of development finance and philanthropic funds to mobilize private capital for development. In World Economic Forum.

UN (2015), "Addis Ababa Action Agenda of the Third International Conference on Financing for Development", United Nations.

UNCDF (2018), *Blended Finance in the Least Developed Countries*, United Nations Capital Development Fund.

WEF and OECD (2015), *Blended Finance, Vol. 1: A primer for development finance and philanthropic funders. An overview of the strategic use of development finance and philanthropic funds to mobilize private capital for development*, World Economic Forum, OECD, Genf.

8. ANNEXES

8.1 Publication included in the EGM

Peer reviewed (academic) papers

References	Intervention	Sub-Effect	Methodology
Atun, R., S. Silva, M. Ncube and A. Vassall (2016), "Innovative financing for HIV response in sub-Saharan Africa", *Journal of Global Health*, Vol. 6/1, International Society of Global Health.	Results-based incentives	Sector effects in health	Systematic review
Atun, R., S. Silva and F.M. Knaul (2017), "Innovative financing instruments for global health 2002–15: A systematic analysis", *Lancet Global Health*, Vol. 5, The Lancet.	Results-based incentives	Sector effects in health	Systematic review
Azman, S.M.M.b.S. and E.R.A.E. Ali (2016), "Potential role of Social Impact Bond and Socially Responsible Investment sukuk as financial tools that can help address issues of poverty and socio-economic insecurity", *Intellectual Discourse*, Special Issue, IIUM Press.	Results-based incentives	Other sector effects	Systematic review
Binagwaho, A., J. Condo, C. Wagner et al. (2014), "Impact of implementing performance-based financing on childhood malnutrition in Rwanda", *BMC Public Health*, BioMed Central.	Results-based incentives	Sector effects in health	Quasi experimental
Fan, V.Y., D. Denizhan, R. Silverman and A. Glassman (2013), "Performance-based financing at the Global Fund to Fight AIDS, Tuberculosis and Malaria: An analysis of grant ratings and funding", *Lancet Global Health*, Vol 1, The Lancet.	Results-based incentives	Additional finance	Correlational
Lu, C., C.M. Michaud, K. Khan and C.J.L. Murray (2006), "Absorptive capacity and disbursements by the Global Fund to Fight AIDS, Tuberculosis and Malaria: Analysis of grant implementation", *Lancet*, Vol. 368, The Lancet.	Results-based incentives	Additional finance	Correlational
Mussah, V.G., L. Mapleh, S. Ade et al. (2017), "Performance-based financing contributes to the resilience of health services affected by the Liberian Ebola outbreak", *Public Health Action*, Vol. 7, The International Union Against Tuberculosis and Lung Disease.	Results-based incentives	Sector effects in health	Correlational
Ojha, S. and I.M. Pandey (2017), "Management and financing of e-Government projects in India: Does financing strategy add value?" *IIMB Management Review*, Vol. 29, Elsevier.	Contractual mechanisms	Service/infrastructure created	Correlational

References	Intervention	Sub-Effect	Methodology
Rode, J., A. Pinzon, M.C.C. Stabile et al. (2019), "Why 'blended finance' could help transitions to sustainable landscapes: Lessons from the Unlocking Forest Finance project", *Ecosystem Services*, Vol. 37, Elsevier.	Results-based incentives	Other sector effects	Correlational
Snyder, C.M., W. Begor and E.R. Berndt (2011), "Economic perspectives on the advance market commitment for pneumococcal vaccines", *Health Affairs*, Vol 30/8, Project HOPE.	Results-based incentives	Sector effects in health	Systematic review
Sun, Z., X. Li and Y. Xie (2014), "A comparison of innovative financing and general fiscal investment strategies for second-class highways: Perspectives for building a sustainable financing strategy", *Transport Policy*, Vol. 35, Elsevier.	Contractual mechanisms	Sector effects in Infrastructure	Correlational

Grey Literature

References	Instrument	Sub-Effect	Methodology
Arráiz, I., M. Meléndez Arjona and R. Stucchi (2012), "Partial Credit Guarantees and Firm Performance: Evidence from the Colombian National Guarantee Fund", No. 0212, Inter-American Development Bank, Office of Evaluation and Oversight (OVE).	Guarantees	Additional finance, Increased participation of commerce	Quasi-experimental
Bernal, P., S. Martinez and P. Celhay (2018), "Is Results-Based Aid More Effective than Conventional Aid? Evidence from the Health Sector in El Salvador", IDB Working Paper Series, 859, Inter-American Development Bank (IADB).	Results-based incentives	Service/infrastructure created, Sector effects in health	Experimental
Beucher, O., A. Lafontaine, A. Mitchell and G. Quesne, G. (2014), "Contribution de l'AFD au Fonds de partenariat pour les écosystèmes critiques (CEPF)", Division Évaluation et capitalisation. Série Notes de synthèse, Ex post 59, Agence française de développement (AFD).	Grants	Other sector effects	Programme evaluation
Brown, M. and T. Gietzen (2015), "European Palestinian Credit Guarantee Fund", KfW Development Bank Evaluation Update No. 3, KfW Entwicklungsbank.	Guarantees	Additional finance	Correlational
Carnegie Consult B.V. (2016), "Evaluation of Sida's use of guarantees for market development and poverty reduction", Sida Evaluation: 2016:1, Sida	Guarantees	Additional finance, Sector effects in financial services	Programme evaluation
Dalberg (2013), "Independent evaluation of the development effects of SIFEM's investment interventions", Economic Development Cooperation Quality and Resources (WEQA), State Secretariat for Economic Affairs (SECO).	Guarantees, Securitisation, Grants	Additional finance; Service/infrastructure created; Market growth; Sector effects in Infrastructure	Programme evaluation
Delarue, J. (2010), "Appui à l'hévéaculture familiale", Division Évaluation et capitalisation, Série Notes de synthèse, Ex post 08, Agence française de développement (AFD).	Guarantees	Market growth	Correlational
Dupont, V. (2010), "Financement des services d'eau en milieu urbain au Niger", Focales 04, Agence française de développement (AFD).	Contractual mechanisms	Market growth; Other sector effects; Additional finance	Correlational

References	Instrument	Sub-Effect	Methodology
ELIM Serviços Lda (2014), *Mid-term Performance Evaluation of the USAID-funded Loan Portfolio Guarantees (LPG) through the Development Credit Authority (DCA) Activity*, United States Agency for International Development (USAID).	Guarantees	Additional finance	Programme evaluation
Gertler, P., P. Giovagnoli and S. Martinez (2014), " Rewarding Provider Performance to Enable a Healthy Start to Life : Evidence from Argentina's Plan Nacer.", Policy Research Working Paper, No. 6884, World Bank.	Results-based incentives	Sector effects in health	Experimental
Grandjux, J. (2013), "Rehabilitation des marchés centraux, Division Évaluation et capitalisation, Série Notes de synthèse, Ex post 50, Agence française de développement (AFD) .	Grants	Other sector effects; Market growth	Programme evaluation
Gustafsson-Wright, E., I. Boggild-Jones, D. Segell and J. Durland (2017), "Impact Bonds in developing countries: Early learnings from the field", Center for Universal Education, Brookings Institution.	Results-based incentives	Additional finance; Service/infrastructure created; Additional capacity; Project replication; Sector effects in health; Sector effects in education; Other sector effects	Programme evaluation, Quasi experimental , Experimental
Independent Evaluation Group (2008), *The World Bank Group Guarantee Instruments 1990-2007*, The World Bank	Guarantees	Additional, Service/infrastructure created, Market growth, Increased participation of commerce, Sector effects in financial services	Programme evaluation
Independent Evaluation Group (2020), *The International Finance Corporation's Blended Finance Operations: Findings from a cluster of project performance assessment reports*, The World Bank.	Grants, Junior/subordinated capital, guarantees	Service/infrastructure created	Programme evaluation
Ipsos MORI, SQ Consult and EY (2017), *GCPF Mid-Term Evaluation Report,* UK Department for Business, Energy and Industrial Strategy (BEIS), German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB).	Junior/subordinated capital	Additional finance; Market growth; Additional capacity; Sector effects in Energy	Programme evaluation

References	Instrument	Sub-Effect	Methodology
Jett, A.N. (2018), *Risk Mitigation and Sovereign Guarantees for Public–Private Partnerships in Developing Economies*, Asian Development Bank (ADB).	Guarantee	Service/infrastructure created	Programme evaluation
KfW (2012), "Ex-post Evaluierung: Kurzbericht Lokalwaehrungsfonds TCX", KfW Entwicklungsbank.	Hedging	Sector effects in financial services	Programme evaluation
KfW (2017), "Ex-post Evaluierung – Indien", KfW Entwicklungsbank.	Results-based incentives	Additional Finance; Sector effects in infrastructure; Sector effects in financial services	Programme evaluation
Mathonnat, J. and A. Pélissier (2017), "How a Results-Based Financing approach can contribute to the health Sustainable Development Goals", Fondation pour les études et recherches sur le développement international (FERDI)	Results-based incentives	Sector effects in health	Systematic review
Nodalis Conseil (2019), "Résumé d'évaluation: Contribution au plan de redressement du secteur de l'électricité au Sénégal", Agence française de développement (AFD).	Grants	Service/infrastructure created; Alignment and ownership; Additional capacity; Sector effects in energy	Programme evaluation
Poursat, C. (2010), "Microfinance dans les États fragiles, Division Évaluation et capitalisation", Série Notes de synthèse, Ex post 29, Agence française de développement (AFD) .	Grants	Sector effects in financial services	Correlational
Subramanian, N., N. Gamo and I. Garganta (2011), "Philippines: The Mutual Fund Company of the Philippines", Independent Evaluation Department, Asian Development Bank (ADB).	Junior/subordinated capital	Market growth	Programme evaluation

8.2 Data sources

- ie3 impact evaluations: https://www.3ieimpact.org/evidence-hub/impact-evaluation-repository
- IDEAS-Repec: https://ideas.repec.org/
- World Bank- Open Knowledge Repository: https://openknowledge.worldbank.org/
- GEF: https://www.thegef.org/topics/blended-finance
- DFID research output: https://www.gov.uk/dfid-research-outputs
- USAID Evaluations: https://dec.usaid.gov/dec/content/evaluations.aspx
- World Economic Forum: https://www.weforum.org/
- OECD: http://www.oecd.org/
- UN Department of Economic and Social Affairs: https://www.un.org/esa/ffd/index.html (financing for development, ffd)
- Green Finance Platform: https://www.greenfinanceplatform.org/
- Blended Finance Taskforce: https://www.blendedfinance.earth/
- (Non-European) Development Finance Institutions:
    - International Finance Corporation (IFC): https://www.ifc.org/
    - Independent Evaluation Group (IEG) of the World Bank Group: http://ieg.worldbankgroup.org/
    - European Bank for Reconstruction and Development (EBRD): https://www.ebrd.com/home
    - European Investment Bank: https://www.eib.org/en/index.htm
    - Overseas Private Investment Corporation (OPIC): https://www.opic.gov
    - Government Employees Pension Fund (GEPF): https://www.gepf.gov.za/
    - European Development Finance Institutions: https://www.edfi.eu/
- Individual pages of EDFI members:
    - Belgium: http://www.bio-invest.be
    - Belgium: http://www.bmi-sbi.be
    - UK: http://www.cdcgroup.com
    - Spain: http://www.cofides.es
    - Germany: see also in below list
    - Finnland: http://www.finnfund.fi
    - Netherlands: http://www.fmo.nl
    - Denmark: http://www.ifu.dk
    - Norway: http://www.norfund.no
    - Austria: http://www.oe-eb.at
    - France: http://www.proparco.fr
    - Switzerland: http://www.sifem.ch
    - Italy: http://www.simest.it
    - Portugal: http://www.sofid.pt
    - Sweden: http://www.swedfund.se
- European Commission: https://ec.europa.eu/europeaid/policies/financing-development/eip_en
- Impact investment managers:
    - Blue Orchard Impact Investment Managers: https://www.blueorchard.com/
    - Finance in Motion: https://www.finance-in-motion.com/
    - Symbiotics: https://symbioticsgroup.com/
    - ResponsAbility: https://www.responsability.com/en
    - Innpact: https://www.innpact.com/
- Green for Growth Fund: https://www.ggf.lu/
- Islamic Development Bank: https://www.isdb.org/publications
- Eurasian Development Bank: https://eabr.org/en/analytics/
- Council of Europa Development Bank: https://coebank.org/en/

- Inter-American Development Bank: https://www.iadb.org/en
- African Development Bank: https://www.afdb.org/en/all-documents
- Asian Development Bank: https://www.adb.org/publications
- Global platform for blended finance: https://www.convergence.finance/resource
- Structured funds:
  - AATIF: https://www.aatif.lu/home.html
  - REGMIFA: https://regmifa.com/
  - Eco-business fund: https://www.ecobusiness.fund/en/
  - EFSE: https://www.efse.lu/
  - SANAD: https://sanad.lu/
  - MEF: http://www.mef-fund.com/
  - GGF: https://www.ggf.lu/
  - REFFA: *https://www.reffa.org/reffa*

German websites for grey literature search

- Bundesministerium fuer wirtschaftliche Zusammenarbeit und Entwicklung (BMZ): http://www.bmz.de/de/index.html
- Deutsches Institut fuer Entwicklungspolitik: https://www.die-gdi.de/
- Kreditanstalt fuer Wiederaufbau (KfW): https://www.kfw.de/
- KfW DEG: https://www.deginvest.de/
- Deutsche Bank: https://www.cib.db.com
- Hub for sustainable finance Germany: https://www.h4sf.de/
- Oesterreichische Forschungsstiftung fuer Internationale Entwicklung: https://www.oefse.at/
- Schweizer EDA Entwicklung und Zusammenarbeit: https://www.eda.admin.ch/deza/de/home.html

Spanish websites for grey literature search

- AECID: http://www.aecid.es/ES
- Asociación Latinoamericana de Instituciones Financieras para el Desarrollo: http://www.alide.org.pe/publicaciones-2/publicaciones-alide/
- Banco Centroamericano de Integración Económica: https://www.bcie.org/
- Banco de Desarrollo de América Latina: https://www.caf.com/
- Banco Interamericano de Desarrollo: https://publications.iadb.org/en?field=type_view&locale-attribute=es
- Caribbean Development Bank (English): https://www.caribank.org/our-work/evaluation
- CEPAL: https://www.cepal.org/es/publications/list
- COFIDES: https://www.cofides.es/
- Corporación Andina de Fomento: https://www.caf.com/
- Fondo Internacional de Desarrollo Agrícola: https://www.ifad.org/es/web/knowledge/publications

French websites for grey literature search

- Fondation pour les études et recherche sur le dévelopment internationale: https://ferdi.fr/publications
- Agence Française de Dévelopment: https://www.afd.fr/fr/ressources-accueil
- Comité Français pour la solidarité internationale: *https://www.cfsi.asso.fr/ressources-et-presse*

8.3 Search protocol

A first block was used to define the theme of the search:

TS= ("blended financ*" OR "blended fund*" OR “blended instrument*” OR “blended mechanism*” OR “blending instrument*” OR “blending mechanism*” OR” DFI blending” OR “innovative financ*”)

A second block of search terms was used to refine the search aiming at the instrument type:

TS=("Guarantee" OR "default" OR "insolvency" OR "credit enhancement" OR "risk management" OR "first loss guarantee" OR "partial risk guarantee" OR "credit guarantee" OR "trade finance guarantee" OR "access to capital" OR "counterparty risk" OR "off-take risk" OR "demand risk" OR "Insurance" OR "insurance premium" OR "political risk" OR "construction risk" OR "operation and output risks" OR "upstream resource related risks" OR "access to capital" OR "hedging" OR "currency risk" OR "commodity risk" OR "hard currency" OR "currency volatility" OR "exchange rate" OR "Junior capital" OR "subordinated capital" OR "subordinated debt" OR "senior debt" OR "junior debt" OR "first-loss piece" OR "first-loss tranche" OR "first-loss" OR "structured fund*" OR "flat-fund*" OR "Securitization" OR "pooling" OR "mortgage" OR "cash flow" OR "revenue stream" OR "illiquid asset*" OR "liquidity" OR "time horizon" OR "Results-based incentive*" OR "PforR" OR "pay for results" OR "impact fund*” OR “impact bond*" OR "Contractual mechanism*" OR "feed-in-tariffs" OR "off-take agreements" OR "tax credit*" OR "demand risk" OR "bankable revenue stream" OR "Grants" OR "pipeline" OR "lack of capacity" OR "know-how" OR "high transaction costs" OR "intermediares" OR "project preparation" OR "feasibility studies")

A third block was used to filter the results by methodology:

TS= (“empirical evidence” OR empiric* OR "impact evaluation" OR "systematic review" OR “statistical analysis” OR counterfactual OR experiment* OR "quasi-experimental" OR “discontinuity design” OR "discontinuity regression" OR “regression discontinuity” OR “fixed effect*” OR regression OR “difference* in difference*” OR “double differenc*” OR “instrumental variable*” OR "propensity score" OR “matching” OR “propensity weight*” OR “time-series” OR "panel data" OR "double robust" OR “random* control*” OR randomization OR "random* trial*" OR "control group" OR "pipeline approach" OR "pipeline method" OR "pipeline comparison" OR “impact assessment” OR “econometric analys*” OR “cross-sectional data” OR “difference-in-difference”)

8.4 Evidence base for Effects

ToC Element	Quote	Source
Risk–return profile improvement	"In other words, blended finance uses public or philanthropic money to improve the risk–return profile or commercial viability for a private investor, allowing it to invest in places and projects where it wouldn't otherwise go, by mitigating a raft of real or perceived barriers, including political risk, currency volatility, lack of liquidity, weak local financial markets, knowledge gaps about investment opportunities, and challenging investment climates, including poor regulatory and legal frameworks."	Blended Finance Taskforce (2018), p. 22
	"Most organizations engaging in blended finance share the objective of using financial mechanisms to shift the risk–return profile of projects in developing countries and thus attract and mobilize commercial capital."	OECD (2018), p. 49
	"…weil die Zinsen für Entwicklungsländer an den internationalen Finanzmärkten (aufgrund ihrer noch begrenzten Kreditwürdigkeit) meist besonders hoch sind: Mittels der Beimischung relativ weniger öffentlicher Zuschüsse können die Finanzierungskonditionen aber oftmals so vergünstigt werden, dass sie für das Vorhaben bzw. die Partner tragbar werden."	KfW (2019)
	"The blended concessional finance is used to fill crucial gaps in the financing plan and help reduce financial risk so that projects can move forward."	IFC (2017), p. 13
Additional Finance is mobilised	"In blended finance transactions, one form of financing unlocks another that otherwise would not have been available. As a result, blended finance implies direct causality between development finance and additional commercial finance in a given transaction."	OECD (2018), p. 56
	"Blended finance implies a shift from financing the private sector to mobilizing private finance"	OECD (2018), p. 54
	"Blended finance is the strategic use of public or philanthropic development capital for the mobilization of additional external private commercial finance for SDG-related investments."	Blended Finance Taskforce (2018), p. 10
New commercial actors	"[Blended Finance] brings in new investors and skills, while creating efficient markets"	ReDesigning Development Initiative (2015), p. 9 Fig. 3
Investment in targeted market	"Strictly speaking, an explicit focus on crowding-in commercial finance implies that a catalytic intention is inherent to blending, through stronger demonstration effects and accelerated market evolution."	OECD (2018), p. 57

ToC Element	Quote	Source
increases (market growth)	"The improved operation of the market can be a very important benefit to the country, an externality that can benefit many companies in the sector and country overall, but cannot always be captured by the first movers. This external benefit to the country becomes an important justification for the use of concessional finance."	IFC (2017), p. 14
Participation of commercial actors increasingly replaces public actors	"Effective catalysation would be consistent with a pattern of increasing mobilization of commercial finance and decreasing use of development finance efforts over time"	OECD (2018), p. 57
	"The blended concessional finance is used as a temporary bridge to allow pro- jects to start operations as they develop efficient operations and financial institutions gain comfort with the sector."	IFC (2017), p. 13
	"The cases illustrate how concessional finance can be used in ways that lead to commercially sustainable operations and time-bound use of concessional finance."	IFC (2017), p. 15
	"Many projects indicate that after the market is successfully developed with the project, subsequent projects in the sector will require less or no concessionality."	IFC (2017), p. 15
(Similar) projects are replicated by commercial actors alone	"Beyond the direct mobilization of commercial capital in a transaction, the ambition of blended finance is to be catalytic, i.e. to spur the replication of similar projects via demonstration and build functioning markets that can result in larger volumes of commercial capital for development."	OECD (2018), p. 48
	"Strictly speaking, an explicit focus on crowding-in commercial finance implies that a catalytic intention is inherent to blending, through stronger demonstration effects and accelerated market evolution."	OECD (2018), p. 57
	"The cases highlight many projects where high levels of development impact are expected, often with high levels of innovation and the potential for scale- up and replication."	IFC (2017), p. 14
	"Concessional finance crowds-in sustainable private investments if it is structured to provide the missing element in the overall financing that makes private projects commercially financeable and if it successfully creates a demonstration effect of commercial replicability"	IFC (2017), p. 6
	"However, depending on initial circumstances, commercial sustainability and independent commercial replication may only be achievable over time, possibly after several rounds of legitimate DFI interventions, that may or may not involve some and declining concessional element."	IFC (2017), p. 7
Project is successfully executed	"However, depending on initial circumstances, commercial sustainability and independent commercial replication may only be achievable over time, possibly after several rounds of legitimate DFI interventions, that may or may not involve some and declining concessional element."	IFC (2017), p. 7
	"Many projects indicate that after the market is successfully developed with the project, subsequent projects in the sector will require less or no concessionality."	IFC (2017), p. 15

ToC Element	Quote	Source
Capacity (know how) for commercial actors increases	"On the supply side, private investment in sustainable infrastructure is limited by a lack of local institutional capacity to drive project development and deal- flow"	Blended Finance Taskforce (2018), p. 17
	"Development mandate investors can work directly with a government to improve its capacity to work with and through the private sector"	OECD (2018), p. 82
	"MIFA targets Tier II and Tier III microfinance institutions (MFIs) to achieve deep outreach in its target markets. The main objectives are to create and en- hance institutional capacity for sustainable microfinance delivery in Asia and to strengthen links between domestic and international capital markets."	OECD (2018), p. 104
	"blended finance can be used to address sector-specific bottlenecks and in- crease the potential for greater private sector participation. Advisory services can be employed in many cases to help achieve this, for example by providing training for company employees and regulators. Many cases illustrate the strong capacity building and network creation that can occur over time as business operations are initiated."	IFC (2017), p. 16
	"Many cases illustrate that the first movers help advance the market via operational capacity building with suppliers, companies, buyers, and supporting infrastructure."	IFC (2017), p. 16
Revolving use of funds	"Of the blended finance vehicles surveyed, 39% were evergreen (or revolving), i.e. with no fixed end-date of operation."	Basile and Dutra (2019), p. 17
Ownership	"Local ownership is an important principle in development co-operation. Aligning development interventions with national interest and engaging with local actors in development finance transactions are essential to ensure the sustainability needed to build markets."	OECD(2018), p. 125