Structured Funds: A balancing act between financial sustainability and development impact

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STRUCTURED FUNDS

A balancing act between financial sustainability and development impact

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Abstract

It is estimated that up to 4.5 trillion US dollars in global investment are needed every year to achieve the Sustainable Development Goals (SDGs). Innovative financing approaches that aim to increase the involvement of private actors in development finance are therefore increasing in importance. One of these approaches is structured funds. They include different risk categories, in order to meet the needs of different investors. Official donors assume the highest risk category, thus reducing the risk for private investors. So far, only little is known about the development impact of this financing approach, which needs to balance its objectives of financial sustainability and development impact. Against this backdrop, this evaluation examines the alignment of this financing approach with the objectives of German development cooperation, its potential for mobilising private capital, its financial sustainability, and its effects on financial intermediaries (FIs) and the extent to which sub-borrowers are reached. For this purpose a theory-based approach was selected that integrates qualitative and quantitative methods of analysis. Based on its findings, the evaluation makes recommendations concerning financial sustainability, political management, donor coordination, mobilising private capital and managing development impact.

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EXECUTIVE SUMMARY

It is estimated that up to 4.5 trillion US dollars in global investment are needed every year to achieve the Sustainable Development Goals (SDGs) in developing countries (UNCDF, 2018). Even a substantial increase in official funding deployed and recognised as Official Development Assistance (ODA) by the members of the Development Assistance Committee of the Organisation for Economic Cooperation and Development (OECD-DAC) would not even come close to meeting this financial requirement. For example, an increase in ODA by the OECD-DAC donor countries to 0.7% of their gross national income (GNI) in line with the so-called '0.7% target' would mobilise an additional 175 billion US dollars, and thus only cover part of the financing gap (Move Humanity, 2018).

Against this backdrop, the involvement of private actors in development cooperation is becoming increasingly important. Involving private actors offers opportunities not only for closing the financing gap, but also for sustainable economic development in developing countries. Nine out of ten jobs in developing countries are provided by the private sector (World Bank, 2013), and small and medium-sized enterprises (SMEs) make up the largest share of all enterprises in the formal sector in developing countries. On average, SMEs account for more than 30 per cent of private sector employment and for about 4 to 16 per cent of total employment (EUIFI, no date). At the same time, many small and medium-sized enterprises in developing countries still lack access to finance. The demand for financing among micro, small and medium-sized enterprises (MSMEs) is estimated at 8.9 trillion US dollars – the current credit supply, on the other hand, at only 3.7 trillion US dollars (IFC, 2017). This means that some 40 per cent of microenterprises and 44 per cent of SMEs in developing countries are credit constrained.

In the Addis Ababa Action Agenda 2015, donor countries argued for greater use of innovative financing mechanisms to involve the private sector in development finance (UN, 2015). ODA should be used strategically to mobilise additional private financial resources for sustainable development, and to support investment that drives social, environmental and economic progress in partner countries. The financing mechanisms thus also target commercial private investors that have not yet invested in these areas and expect market-standard risk-return profiles (WEF and OECD, 2015).

Structured funds, which are the focus of this evaluation, are one such financing approach.

Box 1 Structure and decision-making in the funds

In development cooperation, structured funds are a financing approach that aims to mobilise additional private capital to finance SDGs in developing countries. These funds usually combine budgetary resources of the German Federal Government, and capital market funds of the KfW Development Bank and/or other financial institutions, with investments from private investors. The official donors in the fund assume a large part of the investment risk, thus reducing the risk for private investors.

The funds' capital (i.e. the liabilities side) is usually split between three tranches and notes[1]. The so-called waterfall structure distributes the risks and returns of a fund to the investors in a fixed order (tranches and notes in order of decreasing risk: junior, mezzanine, senior and notes). The riskier tranches then serve as a risk buffer for investors in less risky tranches. Official donors typically invest in the risky junior tranche, thus assuming a major part of the investment risk. The junior tranche is also called the first loss tranche, as it is the first to bear any losses incurred.

The roles and responsibilities for decision-making in the funds are clearly distributed between the individual investors and the funds' official bodies. The official bodies safeguard the strategy of a fund, including its development objectives. The Board of Directors is responsible for all overarching fund matters,

[1] Similar to an asset class that investors can invest in

while the Investment Committee decides on the fund's investments, based on proposals from the fund manager.

The structured funds financing approach aims to support three main development objectives: 1) to promote the establishment of stable and inclusive financial systems by providing local financial institutions, the so-called financial intermediaries (FIs), in the partner countries with funding and technical assistance (TA); 2) to reduce under-capitalisation in the partner countries, especially of MSMEs, as supported FIs issue a higher number of loans, thereby creating access to financing; 3) to shape and expand the portfolio of FIs in favour of sub-borrowers with particularly high financing needs.

The number of structured funds involving German development cooperation has risen sharply since 2005. Most of the structured funds evaluated here were established between 2009 and 2012. Furthermore, Germany's Federal Ministry for Economic Cooperation and Development (BMZ) plans to ramp up its investment in structured funds with a focus on SMEs as part of the Emergency COVID-19 Support Programme, in order to bridge liquidity shortages and preserve jobs in partner countries. However, little is known about the impact of structured funds on development objectives. The financing approach faces a trade-off between its aim of financial sustainability and market conformity, and the aforementioned development objectives. This evaluation examines these conflicting priorities from various perspectives.

Objectives of the evaluation

In light of this question, the German Institute for Development Evaluation (DEval) conducted an evaluation of the structured funds financing approach. This evaluation examines structured funds on several levels: the level of development objectives, the level of the financing approach and its structure, the level of the FIs and the level of the sub-borrowers. It also focuses in particular on the circumstances under which structured funds are additional to existing financing approaches in development cooperation (additionality criterion).

It pursues the following aims:

- Relate structured funds to the objectives of German development cooperation
- Analyse the implementation of development principles (division of labour, donor harmonisation, strengthening of regional actors)
- Analyse the financial sustainability and efficiency of the funds
- Analyse the contribution made towards mobilising additional capital
- Analyse the characteristics of FIs and sub-borrowers that are reached and the impact of the funds.

Methods

The evaluation was based on a theory of change (ToC) developed specifically for structured funds. The ToC models the causal relationships and change processes that are assumed to occur when structured funds are used, based on social science theories. Applying the reconstructed ToC, the evaluation team identified the focal areas of the evaluation and formulated the evaluation questions. These can be clustered under the following three sets of questions:

Set of questions	No.	Evaluation question
Alignment with German development-policy objectives and development principles	1	To what extent do the objectives of structured funds match the strategic objectives of the BMZ? To what extent are structured funds a suitable financing approach for achieving these objectives?
	2	To what extent do structured funds promote a division of labour, donor harmonisation and the strengthening of local actors?
Mobilisation of additional capital/financial sustainability	3	To what extent are structured funds effective and efficient in leveraging private capital and the capital of (development) financial institutions?
	4	To what extent do structured funds create sustainable financing structures?
Effects on FIs and MSMEs/employment	5	To what extent do grants spent on TA help achieve the structured funds' objectives?
	6	To what extent do structured funds affect the portfolio of FIs and their success in reaching new target groups?
	7	To what extent do structured funds affect MSME development, employment, income security and self-employment?

In answering the evaluation questions, the OECD-DAC evaluation criteria[2] were considered and the additionality of the financing approach was also assessed at various levels (see Table 4 and Sections 4.3, 5.4 and 6.3).

To answer the evaluation questions, sources and methods were triangulated. The data sources include semi-structured interviews, fund and BMZ documents, secondary data on financed financial intermediaries (FIs) and specialist literature. In total, 122 interviews were conducted with representatives of the BMZ, the KfW Development Bank, investors, the fund bodies, the fund managers, the FIs, the sub-borrowers and experts. Part of the data was collected using a survey among FIs as well as case studies in Tunisia, Cambodia, Nigeria and Serbia. The country cases were selected using a two-step indicator-based procedure.

Following a mixed-method approach, the evaluation applies and integrates qualitative and quantitative methods of analysis. For all evaluation questions, a qualitative content analysis of the 122 interview protocols and approximately 500 fund and BMZ documents was used. Elements of process tracing were applied to assess the quality of this evidence. In addition, a Qualitative Comparative Analysis (QCA) examined the factors that encourage or hinder private investment in the funds to answer evaluation question 3. The answers to evaluation questions 5, 6 and 7 are based on a causal analysis and are limited to the funds operating in the

[2] The evaluation criteria were discussed and agreed on with the reference group prior to the reform of the DAC criteria in 2019 (which now also include the criterion of coherence).

field of MSME financing. For this purpose, a contribution analysis based on the ToC was carried out. To test the underlying assumptions and risks of the contribution analysis, the evaluation combined the qualitative analysis of semi-structured interviews with the quantitative analysis of secondary data on the FIs. In addition, a logistic regression analysed what factors influence the selection of countries and FIs to be financed. Finally, the evaluation analysed the effects of fund financing on the portfolio development and lending terms of the financed FIs using a quasi-experimental design (differences-in-differences approach).

Findings

The findings of the evaluation provide answers to three overarching questions:

1. When is a structured fund appropriate for achieving development objectives? (appropriateness)
2. To what extent can the approach mobilise private capital? (mobilisation)
3. How do the funds affect FIs and to what extent do they reach sub-borrowers? (impact)

Appropriateness of the approach for achieving development objectives

To understand how best to use structured funds in German development cooperation, DEval analysed under which circumstances this financing approach is appropriate for achieving development objectives, and in which cases other approaches may be preferable. Both the financial and the development perspectives were considered, which can conflict with each other.

Financial sustainability

The financial sustainability of the financing approach was assessed in the evaluation using a rating scale. This scale measures the financial sustainability of a fund through its ability to cover costs, its use of the official capital on a revolving basis and the efficiency of the risk-return structure (see Section 4.1 for a detailed description of the rating scale). When a fund is able to cover its costs and uses the official capital on a revolving basis, the evaluation team considers it to have achieved financial sustainability. Where an efficient risk-return structure is also in place, the evaluation team considers the financial sustainability requirement to have even been surpassed.

The majority of the evaluated funds break even within a few years of their establishment, and use the official capital on a revolving basis. Most of the funds are therefore considered financially sustainable. To be able to cover all costs, a fund requires a sufficiently large size and opportunities for diversification. Financing volumes far below 100 million US dollars or overly severe restrictions on diversification usually have an adverse effect on the business development and therefore the financial sustainability of a fund.

The use of country windows in the junior tranche of some funds, which provide for investments in certain countries, leads to partial efficiency losses. The way the country windows have been designed on the liabilities side of the funds so far has meant that the income and losses for the investments in the junior tranche are distributed by country of investment rather than across funds. This not only causes additional costs, thus reducing the efficiency of the funds, but also increases the complexity of the structure. This is why the financial sustainability requirement can be considered to have been surpassed in only a few cases. On the asset side, the country windows also restrict the funds' diversification options.

In most cases, official capital in the examined funds is deposited in the junior tranche of the funds with unlimited duration. With few exceptions, for this capital there exists neither an exit strategy that defines the timing and nature of the exit, nor fixed mechanisms for regularly reviewing the continued need to use official capital in the fund. Thus in many cases it is not sufficiently clear what long-term options for exiting the funds are available to the official donors.

The structure of the funds enables them to issue small-scale loans as well as local currency loans and to cooperate with private FIs: Most of the funds issue mainly small loans of less than 10 million US dollars. They also issue individual larger loans that address, among other things, the needs of large local FIs or project financing in the area of renewable energy. In addition, nearly all funds offer local currency financing to a certain extent. However, most financing continues to be in hard currency (US dollars, euros). Whether grants are issued in local or hard currency depends on the risks that the funds can bear and the needs of the financed FIs. For example, larger, more formalised FIs often have no need for local currency financing.

Development orientation

The development orientation of the structured funds is highly consistent with the objectives of the 16 BMZ strategies for which a thematic or geographical link to the structured funds was identified[3]. The funds aim to create access to finance for sub-borrowers who have thus far had insufficient access to it, and to support the stability of the partner-country financial systems. They are thus designed to help implement the BMZ sector strategy for financial systems development in particular. However, there is relatively little interaction between the objectives and activities of the structured funds, and the bilateral portfolio/country division, with respect to private sector and financial systems development. So far the BMZ has thus made barely any proactive use of potential synergies between funds on the one hand, and the bilateral portfolio or country division on the other. Implementation of the BMZ 2030 reform process and the intended prioritisation of reform-minded partner countries and core areas (also within the framework of regional projects) mean that the BMZ will need to discuss the future orientation of new funds in line with these priorities. The coronavirus pandemic might also necessitate a change of direction in order to provide greater support to countries and sectors that are particularly hard hit.

At the same time, the structure and regional setup of the funds allow them to meet financing needs in partner countries that are not covered by other approaches of bilateral Financial Cooperation (FC). As well as the possibility of offering small loan sizes and local currency financing, this also includes the financing of private FIs. In this way the funds make a development contribution to building stable and inclusive financial systems and to creating financing opportunities for groups with previously limited access to sources of finance. They can thereby demonstrate a high degree of additionality to other financing approaches. Moreover, their structure enables them to ensure continuity in times of crisis, such as the current coronavirus pandemic, by meeting financing needs in markets that are considered risky.

Setting the strategic direction of a fund when it is created is crucial for its development orientation, as the BMZ's options for exercising political management become limited thereafter. Once a fund has been set up, strategic adjustments usually require complex coordination processes and a change in the issue document to ensure the agreement of all investors. There are three main points at which the BMZ is able to exercise political management: when the fund is being set up, when the Ministry decides on additional funding and when the Ministry comments on the reports. However, a lack of capacities at BMZ and the way the responsibilities for the funds are organised within the Ministry are preventing better management of the development impact.

In operational decision-making for the funds an important role is played by the members of the official bodies, in particular a fund's Board of Directors and the Investment Committee. These bodies ensure compliance with a fund's strategy, including its development objectives, for instance by deciding on which FIs to select for support. The responsibilities of each of the bodies are clearly defined and demarcated. However, a few individuals are members of both the Board of Directors of a fund and the Board of Directors of an FI financed by the fund, which can lead to a conflict of interests in the selection of FIs to be supported. Although each of the funds has a defined process for managing such conflicts, the regulations governing exclusion from voting in risky cases are not uniform.

Overall, the structured funds are thus a financially sustainable and largely efficient financing approach that pursues as development objectives the stability of the local financial markets and FIs as well as broad access to finance. The pursuit of one development objective – reaching the targeted sub-borrowers – has not been monitored to a sufficient degree thus far.

[3] See list of strategies in Annex 9.5.

Mobilisation

In the period up to 2018, the evaluated structured funds mobilised more the 700 million US dollars in additional private capital. The BMZ financed the funds with approximately the same amount of budgetary resources. In principle, structured funds are therefore a suitable financing approach for mobilising private capital to achieve the funds' objectives. The waterfall structure of the funds enables them to involve investors with different risk-return profiles. Furthermore, when making investment decisions, more and more private investors are taking social and ecological aspects into consideration in addition to their expected returns. Such investors find the development objectives of the funds appealing.

However, the funds are not yet fully exploiting their potential for mobilising private capital. In some cases, the funds reach a 'natural' limit to their capacity for mobilising private investment once the risk buffer is exhausted. In these cases it is not possible to increase the share of private investment without increasing the financing volume, i.e. the capital provided by the official donors and (Development) Finance Institutions ((D)FIs). Furthermore, in a few funds there is no need to mobilise private capital since the required financing volume is provided entirely by official donors and (D)FIs.

In some cases, the lack of an acquisition strategy to attract private investors and the complex structure make it difficult to mobilise private capital. A large number of different types of private investors with different investment motives, investment strategies and risk profiles invest in the funds. It is not evident that the mobilisation of private investors follows a clear strategy. Moreover the structure of the funds, which usually comprises various tranches and notes, increases the complexity of the financing approach and makes it less attractive for institutional investors. This is why there is a trend towards a less complex structure with only two tranches (junior and senior tranches) or towards only different note categories, to better serve the investment needs of private investors.

Most of the private capital mobilised by the structured funds can be considered additional because private investors would not make comparable investments without the funds. The structured funds enable private investors to invest in regions where purely private microfinance funds have been mostly absent so far. However, financial sustainability and development objectives also need to be weighed against each other in the mobilisation of private capital. The mobilisation of private capital is lower in sectors and regions where the investment risk is higher and the financing needs of MSMEs are often not covered. For example, the funds mobilise less private capital in sub-Saharan Africa, a region of particular developmental relevance, where the investment climate is often difficult. On the other hand, funds investing in regions and sectors with lower risk were able to mobilise more private resources, thus ensuring the financial sustainability of the funds.

Impact

The analysis of the effects on the FIs and sub-borrowers of the four evaluated MSME funds demonstrates the trade-off between development impact and financial sustainability. The funds select financial intermediaries that address the targeted sub-borrowers through an existing business segment (in this case MSME financing). Among those, most selected FIs have a high degree of financial stability. Similarly, the funds invest in countries that are predominantly considered risky, but mostly belong to the middle income category. This selection of FIs and countries reduces the likelihood of losses, thus safeguarding the financial sustainability of the funds. At the same time, however, it limits the funds' additionality because these countries/FIs tend to also have other financing options. To a small extent, portfolio diversification also allows the funds to invest in riskier, least developed countries (LDCs) and riskier (for example smaller or younger) FIs.

Regarding development objectives, the funds provide the financed FIs with reliable access to financing and promote the stability of the partner-country financial system. The funds reach the targeted sub-borrowers because an existing business segment for this target group is a criterion for selection of the FIs to be financed. The fund financing enables the financed FIs to increase their investment volume and expand their portfolios in absolute terms, so that more sub-borrowers can be reached. Beyond that, however, the FIs do not make it any easier for the envisaged target groups to access financing. Usually, for example, the FIs neither modify their lending terms for the envisaged target groups (with the exception of local currency financing), nor do they increase the share of target-group-related business segments, e.g. for microenterprises, female sub-borrowers or sub-borrowers without collateral, relative to their portfolio as a whole.[4]

In accordance with the strategy of the funds, the FIs' lending terms are market-based in order to avoid any distortion of the market. Thus, they do not differ from the lending terms of FIs not financed by the funds. As a result, the funds reach very few sub-borrowers who previously had no access to official financial products.

The TA provided by the funds is highly effective. The findings indicate that the interventions are highly demand-oriented and useful. Although other investors also offer TA, around 40 per cent of the interventions address the sector level, which other providers cover either to a lesser extent or not at all. DEval therefore assumes that the interventions are additional despite their low average financial volume. In the some cases the total lack or only minimal use made of all financing channels, particularly the contributions by the funds, limits the sustainability of the TA.

Overall, the analysis of the structured funds' effects on FIs and sub-borrowers shows that in the balancing act between financial sustainability and development impact, the funds pursue development objectives to the extent that they are able, given the imperative of financial sustainability.

Conclusions

The structured funds financing approach aims to achieve three main development objectives:

1. to promote the development of stable and inclusive financial systems by financing FIs
2. to improve access to finance, especially for MSMEs, by enabling the supported FIs to grant a larger number of loans
3. to shape and expand the portfolio of FIs in favour of sub-borrowers with particularly high financing needs.

To achieve these goals, structured funds should mobilise capital from private investors.

Impact (achievement of development goals)

The present evaluation on structured funds shows that the financing approach contributes to the stability and financial sustainability of FIs in the field of MSME financing by providing long-term funding, partly in local currency. They facilitate access to capital for sub-borrowers by increasing the volume of lending and providing TA. However, improvements in lending terms or easier access for groups that previously had no access to financing were rare.

The achievement of the funds' development objectives is influenced significantly by the selection of FIs to be supported. While the funds finance FIs that reach the targeted sub-borrowers, they prioritise those that are low risk. In the trade-off between financial sustainability and development impact, the funds thus focus on financial sustainability when it comes to reaching the target groups. This focus also influences the achievement of development objectives: Promoting predominantly financially stable FIs helps to build a stable financial system and improve access to financing. However, the third objective of increasing the FIs' orientation towards particularly vulnerable groups is made more difficult by the funds' focus on financial sustainability, as this would require the issue of riskier loans.

[4] This is not to be expected for microfinance institutions, since they are already focused almost exclusively on the microfinance business segment, for which there is barely any scope for expansion. Commercial banks, however, do have scope to expand the business segments for the target groups.

Mobilisation

As of 2018, the examined structured funds had mobilised a total of more the 700 million US dollars in private capital in order to achieve the development objectives. The BMZ invested approximately the same figure in budgetary resources. The funds are thus a suitable financing approach for providing additional capital to achieve the above-mentioned objectives. However, less private capital is mobilised in regions and sectors where there is a higher investment risk, and where the financing needs of MSMEs are often not met.

Appropriateness of the approach for achieving development objectives

The stronger focus on financial sustainability distinguishes structured funds from other development finance approaches. Structured funds are a market-oriented financing approach that delivers loans on standard market terms. This has clear advantages for attracting private investors. On the other hand, as long as the premise of market conformity needs to be met this approach is unlikely to elicit a willingness to finance target groups that are more risky, even if they are highly relevant for achieving development objectives. For example, as described above, as part of the risk diversification strategy structured funds promote only a small number of riskier countries and FIs, and allow only limited control at the level of the sub-borrowers. The approach should therefore be seen as complementary to other approaches and instruments. To finance LDCs, and for interventions whose impact at target group level needs to be managed directly, other instruments can be considered. The traditional choice is grants. For financing that is to be provided on concessional terms that do not reflect market conditions, FC uses instruments such as development loans. In these loans, the official resources are used to reduce the costs for borrowers by offering more favourable terms, while in structured funds they are used as a risk buffer for private investment.

Outlook

The structured funds were established partly in response to the financial crisis in 2018, in an environment characterised by severe liquidity shortages and an urgent need for stable and inclusive financial systems. Between then and the beginning of the coronavirus pandemic in early 2020, liquidity was available on the markets and microfinance institutions were already formalised in some of the regions examined in this evaluation. However, there is still a high demand for funding, especially in markets that tend to be less formalised and structurally weak. In many African countries in particular, there is still a very large financing gap for MSMEs that cannot be covered by purely private sector investment in the short to medium term. In addition to financing MSMEs, younger funds also address sectors such as education, the environment and climate change, and FIs are starting to include new financial products for these sectors in their portfolios as a result of the fund financing. In these sectors the financing approach can help to create markets.

The coronavirus pandemic has already aggravated the existing liquidity bottlenecks. As early as March 2020 private investors withdrew 83 billion US dollars from developing and emerging countries. Even in previously liquid regions and markets, financing gaps arose within the first two months of the outbreak of the pandemic. This affects MSMEs in particular, as they often have fewer reserves than large companies.

Taking into account the recommendations listed below, structured funds are in principle suitable for meeting both financial and development needs. The recommendations indicate how the funds should be designed in order to make better use of their potential, particularly regarding development objectives.

Recommendations

Based on the findings and conclusions outlined above, the following recommendations of this DEval evaluation are addressed to the BMZ and the KfW Development Bank as its implementing organisation. DEval acknowledges that decisions at the fund companies require the agreement of all shareholders and cannot be made by the BMZ and KfW Development Bank alone. In these cases, however, the BMZ and/or KfW Development Bank should work towards implementing the respective recommendation.

The following recommendations do not always apply to each one of the ten funds examined. This is the case for instance where a particular fund is already being implemented as proposed, or because the recommendation does not apply to the specific case of one of the ten funds. Instead, the recommendations should be understood as guidelines for the general design of the financing approach, whether in the further development of existing funds or when setting up new funds.

Financial sustainability

Recommendation 1

The BMZ and the KfW Development Bank should ensure the additionality and efficient functioning of the funds and, once the funds have been established, their financial sustainability.

Implementation guidance for recommendation 1

Financial sustainability, additionality and efficient functioning can be ensured by setting up and managing a fund in such a way that it

- has a sufficiently high financing volume in the long term
- can invest in an appropriately large number of countries for diversification purposes
- does not have country windows on the liabilities side of the junior tranche for efficiency gains
- extends its loans in local currency according to the financial intermediaries' (FIs') needs and the risks involved
- extends part of its loans in small ticket sizes to the FIs.

Recommendation 2

The BMZ and the KfW Development Bank should define the long-term options for official donors to exit the funds as part of an exit strategy.

Implementation guidance for recommendation 2

The exit strategy should

- define the timing and nature of the exit of the official donors, or
- define processes to review the relevance of the official capital for the funds at regular intervals.

Management of developmental impact

Recommendation 3

The BMZ should ensure more effective management of the development impact of the funds.

Implementation guidance for recommendation 3

More effective management of the development impact should

- include long-term capacity building for structured funds within the BMZ to enable strategic management, especially when the funds are set up and through reporting, and
- use synergies in the field of financial market development. To this end
    - o the responsibilities for the funds should lie within the BMZ division with a sectoral or regional focus to account for the regional nature of the funds
    - o there should be increased exchange with the activities of the sector divisions and the bilateral financial market development programmes (especially for larger funds), for example when country programme strategies are designed.

Recommendation 4

The KfW Development Bank should work towards ensuring that in the event of conflicts of interest of mandate holders, who are represented both in the official bodies of funds and the boards of the financed FIs, abstention from relevant votes is stipulated in the regulations (in this case the Conflict of Interest Policy).

Implementation guidance for recommendation 4

In order to ensure a more effective pursuit of development objectives, the management of conflicts of interest should provide for

- notifying the Board of Directors of the conflict of interest
- abstention by persons who are represented both on the board of the fund and on the board of a financed FI, in cases where a vote could involve a conflict of interest, such as votes to fund that particular FI.

Mobilisation of private capital

Recommendation 5

The KfW Development Bank should work towards ensuring that the structured funds develop mechanisms which will enable them to make better use of their potential to mobilise private capital in the future.

Implementation guidance for recommendation 5

The mechanisms should include a regular review of the risk buffer and risk appetite of private investors by the Board of Directors. Depending on the circumstances, there are three options for adjustment:

- If the risk buffer is almost exhausted, the possibility of reducing the share of the risk buffer should be considered, taking into account the risk appetite of private investors.
- If there is sufficient financing by official donors and (D)FIs, a reduction of the mezzanine tranche should be considered.
- If private investors have a stronger risk appetite, the possibility of enabling private investment in riskier tranches should be considered.

Recommendation 6

The KfW Development Bank should work towards developing and regularly updating a clear acquisition strategy for each fund for private, particularly institutional, investors.

Implementation guidance for recommendation 6

To facilitate the mobilisation of private capital, an acquisition strategy should be developed based on the following two points:

- identify selected target investor types
- identify the requirements of these selected investor types.

The fund managers should be responsible for designing the respective acquisition strategies.

Effects on target groups

Recommendation 7

The BMZ and KfW Development Bank should work towards using and monitoring the selection of FIs more effectively as the key point of leverage for ensuring development impact of the funds.

Implementation guidance for recommendation 7

When defining the eligibility or selection criteria for the institutions to be financed, an assessment should be made of the extent to which the risk profile allows for

- earmarking a minimum percentage of the portfolio for investment in riskier, possibly younger FIs with a high potential for reaching the target group
- sectors with high development potential to be addressed, especially where the funds help establish a market (e.g. by financing FIs that issue financial products for the education, environment and climate change sectors).

Recommendation 8

The BMZ and the KfW Development Bank should work towards making lending to FIs conditional on the expansion of thematic areas that are key to development – in line with the BMZ 2030 strategy.

Implementation guidance for recommendation 8

To strengthen development impact at sub-borrower level,

- financing should be made conditional upon the expansion of business segments, financial products or sectors relevant to the target group
- appropriate indicators should be included in the reporting to measure and ensure that target groups are reached
- the question should be addressed of whether further issues that are key to development policy, such as climate change, can be integrated into existing funds.

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ABBREVIATIONS AND ACRONYMS

BMZ	German Federal Ministry for Economic Cooperation and Development
CRS	Common Reporting Standard
DEval	German Institute for Development Evaluation
(D)FI	(Development) finance institution
DiD	Difference-in-Differences
EGM	Evidence Gap Map
EIB	European Investment Bank
ESG standards	Environmental, social and corporate governance standards
FI	Financial intermediary
FC	Financial Cooperation
FCR	Financial cooperation with regions
GNI	Gross national income
IFC	International Finance Corporation
IFI	International financial institution
ILO	International Labour Organization
KfW	Kreditanstalt für Wiederaufbau
LDCs	Least developed countries
MENA	Middle East and North Africa
MFI	Microfinance institution
MSCI	Morgan Stanley Capital International
MSMEs	Micro, small and medium-sized enterprises
NGO	Non-governmental organisation
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
OECD-DAC	Development Assistance Committee of the OECD
OeEB	Austrian Development Bank
OFID	OPEC Fund for International Development
OOFs	Other Official Flows
OPEC	Organization of the Petroleum Exporting Countries
PAR	Portfolio at Risk
QCA	Qualitative comparative analysis
SDGs	Sustainable Development Goals
SFs	Structured funds
SICAV-SIF	Société d’investissement à capital variable – specialised investment funds
SMEs	Small and medium-sized enterprises
TA	Technical Assistance
TAF	Technical Assistance Facility
ToC	Theory of Change

GLOSSARY

Term	Definition/explanation
Asset class	A grouping of financial products of the same type with similar characteristics, for instance with respect to their liquidity, risk or expected return. In the context of this evaluation, the term thus refers to the various tranches of a (structured) fund.
Assets/liabilities side of a fund	The liabilities side of a fund refers to its total capital (divided into debt capital and equity) on the side of the fund's investors. The assets side is formed by all the assets in which the fund has invested.
Blended finance	Strategic use of official capital to mobilise additional private capital to finance sustainable development
Country rating	Indicator that rates a country's ability to repay. The ratings published by Moody's range from the top rating AAA to the bottom rating C. Ratings between AAA and Baa3 are considered investment grade. For ratings between Ba1 and C investment is considered speculative or non-investment grade.
Country windows	Refers to the provision that BMZ resources can only be invested in certain predefined countries.
Credit line	Refers to a permanent credit amount that can be used at any time up to a certain limit and within a certain period.
Debt fund	Debt funds issue primarily senior debt, in some cases subordinated debt or guarantees. Their liabilities side is often structured.
Development additionality	A positive development impact that can be attributed to the activity of the fund and would not occur without the financing.
(Development) Finance Institutions – (D)FIs	Specialised financial institutions that provide a number of different forms of financing for investment in the public and private sectors in developing countries. In many projects they also provide Technical Assistance. (D)FIs raise funds on the capital market that are guaranteed by the callable capital of their proprietors (usually a government or several governments). Through the liability of the member countries (D)FIs receive loans at low market interest rates that they are able to pass on to projects in partner countries with a small mark-up. This report uses the term '(D)FIs' because some of the development banks examined are not development finance institutions by definition, but do closely resemble them due to their role and function.
Equity funds	Unlike debt funds, equity funds provide primarily equity (especially to smaller enterprises).
Financial additionality	An investment made by the private sector, prompted by the strategic use of official capital, which would not otherwise have taken place.

Financial intermediary	Financial institution in the partner country that is refinanced by a fund and thus provides financial services for sub-borrowers.
Financing volume	The total capital available to a fund.
First loss tranche	Riskiest tranche, which is the first to bear the losses arising within the scope of its predefined volume. It is financed primarily by official donors and philanthropists (see also junior tranche).
Grant	Funding awarded for a certain period with no expectation of repayment or recompense. In structured funds, TA is usually financed through grants provided by official donors.
Grant funds	A financial product comprising grants. These include trust funds, facilities and multi-donor trust funds.
Hard currency	Currency that can be easily compared with and exchanged for other currencies. It is considered to be particularly stable in terms of its value. This evaluation uses the term to refer to the US dollar and the euro.
Hedged transaction	Financial transaction in local currency designed to hedge an outstanding local currency loan against exchange rate risks. Hedging is possible with various derivative financial instruments (swaps, futures and options).
Investment fund	Financial product comprising investments. Investment funds include equity funds, debt funds and special funds.
Issue document	The issue document is a kind of articles of association that is drawn up when a fund is established and defines the following points: guiding principles, structuring of the fund and risk buffer, investment guidelines, rules for dealing with conflicts of interest and administration of the fund.
Junior tranche (C shares)	Riskiest tranche, which is the first to bear the losses arising within the scope of its predefined volume. It is financed primarily by official donors (ODA) and philanthropists. Synonym for first loss tranche (see above).
Leverage	The ratio of capital used to actually mobilised additional capital. The KfW Development Bank uses the term to refer to the ratio of German Federal Government resources to all other resources invested in the fund.
Local currency financing	Fund financing provided in the local currency of the partner country. The fund usually assumes the exchange rate risk.
Mezzanine tranche	Second tranche that covers the losses arising within the scope of its predefined volume, once the capital in the first loss tranche (see above) is completely used up. It is mainly financed by development banks ((D)FIs).
Net asset value	Value of all a fund's assets minus its liabilities. The net asset value reflects a fund's fundamental value.
Portfolio at Risk 30/90 (PAR30/90)	Percentage of loans whose repayments are more than 30/90 days in arrears, measured in relation to the gross loan portfolio.
Private investors	In structured funds these are commercial and religious banks, financial institutions, pension funds and asset managers, churches,

	insurance companies, sustainability banks, NGOs, foundations and universities.
Revolving use of capital	The revolving use of capital principle means that once paid into the fund, the official capital is maintained and can be used for continuous lending without requiring any further inflows from official donors.
Risk buffer	Risk buffers indicate the minimum percentage of the total volume of the fund that must be made up by the lower tranches which are subordinated to the tranche for private capital.
(Senior) notes	The most secure asset class of a fund, which takes precedence over the other tranches. Notes are the first to be repaid and the last to be included in the distribution of losses.
Senior tranche	Third tranche that covers the losses arising within the scope of its predefined volume, once the capital from the first loss tranche and the mezzanine tranche (see above) is completely used up. In structured funds the senior tranche is the most secure asset class after the notes, and should also appeal to private investors.
Structured funds	A blended finance approach that aims among other things to use official capital to mobilise additional financial resources. The waterfall structure of structured funds splits them into the three risk tranches junior, mezzanine and senior, plus notes.
Subordinated debt	In case of default, subordinated debt is not repaid until all senior debt has been paid out
Tier of microfinance institutions (MFIs)	The tier system classifies MFIs into different groups depending on their institutional maturity. Tier 1 institutions are mature, financially stable and large MFIs that are highly transparent; tier 2 institutions are small or medium-sized, slightly less mature MFIs; tier 3 institutions are start-up MFIs or small NGOs that are not yet financially sustainable.
Total assets	Sum total of all assets shown on the assets side (see above) of a balance sheet. Used in this evaluation as an approximate value for the size of the FIs and enterprises.
Total Expense Ratio *(TER)*	The total expense ratio is a measure of the total costs incurred for administration and operation of a fund.
Total investment volume	Sum total of all outstanding investments of a fund.
Waterfall structure	Structure that divides a fund into (usually) three tranches with different risk profiles. The tranches have differing degrees of seniority, which means that in case of gains (or losses) the tranches are served in a certain order.
Yield/return	The promised return (or targeted dividend) on a security is based on its risk. The higher the risk, the higher the return. The return describes the ratio of capital employed to the yield from the security acquired in the respective tranche.

1. INTRODUCTION

In international development finance, the use of private capital for sustainable investment is becoming increasingly important. The amount of global investment required to achieve the Sustainable Development Goals (SDGs) in developing countries is estimated at up to 4.5 trillion US dollars per annum (UNCDF, 2018). Even a substantial increase in official funding deployed and recognised as Official Development Assistance (ODA) by the members of the Development Assistance Committee of the Organisation for Economic Cooperation and Development (OECD-DAC) would not even come close to meeting this financial requirement. For example, an increase in ODA flows by the OECD-DAC donor countries in line with the target of 0.7% of their gross national income (GNI) would mobilise an additional 175 billion US dollars, which could help to close the financing gap (Move Humanity, 2018). In actual fact, however, according to OECD data the organisation's member countries have not made any such increase: ODA spending has stagnated, private lending declined between 2010 and 2017, and foreign direct investment fell by around 30 per cent between 2016 and 2017 (Basile and Dutra, 2019).[5] At the same time, most global investment is not being used for sustainable investments, even though new instruments such as green bonds, funds, facilities and other sustainable investments are available. Only a small proportion of the capital being moved on global capital markets, which is estimated at around 350 trillion US dollars (Convergence, 2019a), is invested in explicitly sustainable investments or even in developing countries (Wolff, 2019; CRS data).

Involving private sector actors offers opportunities not only to close the aforementioned financing gap, but also for sustainable economic development in developing countries. Banks and institutional investors manage large amounts of capital that could be used for development finance (Colla, 2016). In OECD countries alone, institutional investors such as pension funds, insurance companies and investment funds manage assets worth at last 90 trillion US dollars (OECD, 2015). In 2017 the assets managed in Germany amounted to three trillion euros (BVI, 2018). Furthermore, the private sector has the potential to positively influence economic development by creating inclusive markets and value chains, expertise and innovation, and thus helping to create jobs and reduce poverty. According to a study published by International Finance Corporation (IFC), for instance, nine out of ten jobs in developing countries are provided by the private sector (World Bank, 2013). Small and medium-sized enterprises (SMEs) in particular account for the largest share of enterprises in the formal sector in developing countries. On average, they are responsible for more than 30 per cent of employment in the private sector, i.e. for around 4 to 16 per cent of employment as a whole (EUIFI, no date).

At the same time, SMEs in developing countries often still lack access to finance. The demand for finance among micro, small and medium-sized enterprises (MSMEs) is estimated at 8.9 trillion US dollars, while the current credit supply is thought to be just 3.7 trillion US dollars (IFC, 2017). This means that some 40 per cent of microenterprises and 44 per cent of SMEs in developing countries are credit constrained. In South Asia and sub-Saharan Africa, a particularly large number of MSMEs lack access to sources of finance.

The corona pandemic is exacerbating the existing liquidity bottlenecks. The measures to contain the virus have already led to a massive reduction of economic activity and to a slump in revenues for enterprises worldwide. Particularly hard hit are MSMEs, which often have fewer reserves than large enterprises. When MSMEs are unable to repay their loans as a result, this also affects the stability of the financial institutions. Furthermore, in times of crisis private investors tend rather to invest in sectors and regions that are considered particularly safe. In March 2020, private investors withdrew 83 billion US dollars from developing and emerging countries (Institute of International Finance, 2020).

Innovative financing approaches for mobilising private resources and for cooperation with the private sector are increasingly being tested and used in development finance. In the Addis Ababa Action Agenda 2015, donor countries argued for greater use of innovative financing mechanisms in development finance (UN, 2015). ODA should be used strategically to mobilise additional private financial resources for sustainable development, and to support investment that drives social, environmental and economic progress in partner countries. The financing mechanisms thus also target commercial private investors that have not yet invested

[5] Only remittances by labour migrants have increased.

in these areas and expect market-standard risk-return profiles. The use of concessional development finance to mobilise private capital is termed 'blended finance'. It is estimated that the blended finance market doubled to 50 billion US dollars between 2013 and 2018 (Blended Finance Taskforce, 2018), and that blended financed instruments are being used by more and more multilateral and bilateral donors (UNCDF, 2018). In sub-Saharan Africa, for instance, 216 blended finance transactions worth a total of 4.5 billion UD dollars were recorded by 2020 that were channelled into the region either partially or entirely. Compared to other regions the average size of these transactions is low, however (Convergence, 2020). At the same time, reducing poverty and protecting the climate and the environment require supra-regional and cross-donor financing approaches to improve access to financial services, such as SME finance and microfinance. The principles of the Paris Declaration, such as donor harmonisation and mutual accountability, can also be effectively implemented in such multi-donor and multi-country interventions (D590)[6].

Structured funds are such a financing approach. In the case of German investment, they usually combine budgetary resources of the German Federal Government with capital market funds of the KfW Development Bank and/or other financial institutions, and with investments of private donors. The funds offer different risk classes that align with the policy objectives of official donors and the investment objectives of private investors simultaneously. Official donors assume the highest level of risk in order to enable private investors to invest in regions and sectors with which they have previously been rather unfamiliar (D590). In this way, the funds aim for example to improve access to financing for SMEs across regions.

Approximately since the adoption of the Addis Ababa Action Agenda, structured funds have become a stronger focus of interest in the (development) policy debate. Little is known about their development impact, however. The number of structured funds involving German development cooperation has risen sharply since 2005. Most of the structured funds looked at in this evaluation were established between 2009 and 2012. These funds have received around 700 million euros in budgetary resources of the German Federal Government, plus some 400 million euros of the Kreditanstalt für Wiederaufbau's (KfW's) own funds. Furthermore, Germany's Federal Ministry for Economic Cooperation and Development (BMZ) plans to ramp up its investment in structured funds with a focus on SMEs as part of the Emergency COVID-19 Support Programme, in order to bridge liquidity shortages and preserve jobs in partner countries. Structured funds are also present in parliamentary debate. They were discussed for instance in 2017 and 2018 in two minor interpellations of the Alliance 90/The Greens parliamentary group – 'Global investment for sustainable development' and 'How the Development Investment Fund works'. In January 2019 the Free Democratic Party (FDP) parliamentary group submitted the minor interpellation 'Status of the development investment act'. By contrast, in the academic debate this financing approach is barely studied at all, and but for a few exceptions there are no impact evaluations of structured funds.[7] This is also shown by the evidence gap map (EGM) prepared as part of this evaluation (see Section 2.1). Even the development finance institutions (DFIs) have so far done little research into the investment and potential of these funds. Furthermore, the opportunities, risks and unintended effects of structured funds remain largely unexplored. However, reports published by non-governmental organisations (NGOs) and the media do point to unintended effects such as tendencies towards over-indebtedness among borrowers from a small number of financial intermediaries (FIs) supported by the funds. Generally speaking, the development impact of instruments for private-sector engagement is regarded with scepticism. This scepticism is usually brought about by the application of different standards, for instance in reporting, and a lack of transparency.

[6] To guarantee the confidentiality of the unpublished documents passed on to DEval, these are cited in the text using a 'D' plus a serial number, and are not included in the references.

[7] One exception is for instance the evaluation of the Currency Exchange Fund (TCX) (Carnegie Consults, 2017). There are also ex-post evaluations of the KfW Development Bank for instance on the European Fund for Southeast Europe (KfW, 2008, 2014) and the Microfinance Enhancement Facility (KfW, 2016). KfW Development Bank is currently preparing a number of other ex-post evaluations on structured funds.

Against this background the German Institute for Development Evaluation (DEval) conducted an evaluation of the impact of structured funds. This evaluation examines the impact of structured funds on several levels: the level of development objectives, the level of the financing approach and its structure, the level of the FIs and the level of the sub-borrowers. It pursues the following aims:

- Relate structured funds to the objectives of German development cooperation
- Analyse the operationalisation of development principles (division of labour, donor harmonisation, strengthening of regional actors)
- Analyse the financial sustainability and efficiency of the funds
- Analyse the contribution made towards mobilising additional capital
- Analyse how the funds affect FIs as their direct target group, and to what extent sub-borrowers are reached as their indirect target group.

The financing approach needs to strike a balance between its aim of financial sustainability and market conformity, and the aforementioned development objectives. This evaluation examines these conflicting priorities from various perspectives.

The evaluation is structured as follows: Chapter 2 describes the object of the evaluation and the portfolio of evaluated funds. The underlying design of the evaluation and the integration of methods are explained in Chapter 3. Chapter 4 answers the overarching question of when the fund structure is appropriate – in terms of the financial sustainability and the development orientation of the funds. The Chapter relates structured funds to the objectives of German development cooperation. It also examines the implementation of development principles in the funds, and the funds' financial sustainability. Chapter 5 answers the question of how successfully structured funds can mobilise private capital, while Chapter 6 looks at how the funds affect the target groups. The target groups of the funds are the (local) FIs (the direct target group) that lend to the sub-borrowers (the indirect target group). Finally, Chapter 7 presents the conclusions and recommendations that result from the findings of the evaluation.

2. PORTFOLIO

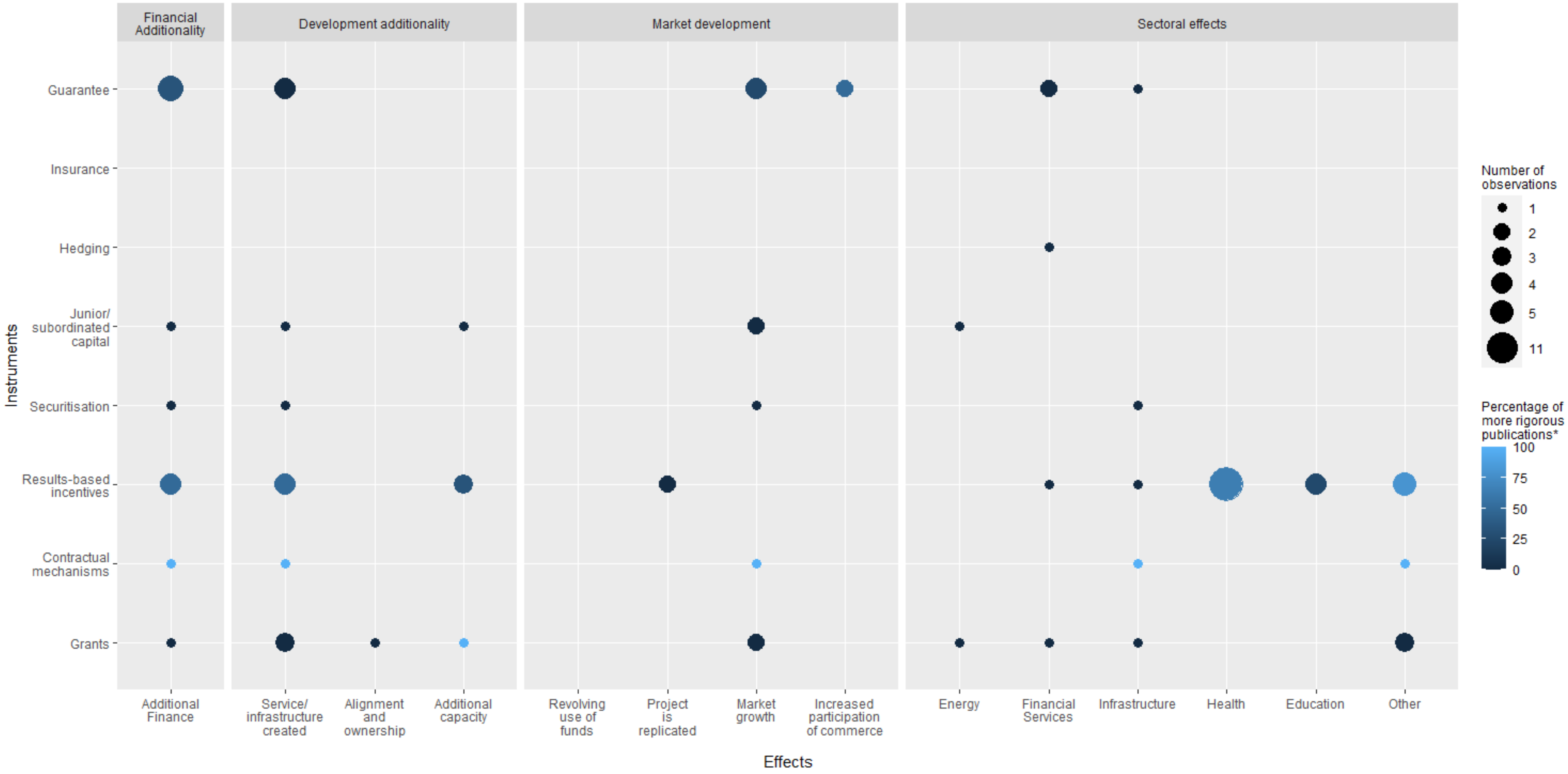
2.1 Object of the evaluation

Structured funds belong to the 'blended finance' family of financing approaches. The OECD defines *blended finance* as 'the strategic use of development finance for the mobilisation of additional finance towards sustainable development in developing countries' (OECD, 2018a). Here, development finance encompasses not only ODA[8] and other official flows (OOFs) such as (D)FIs' own finance, but also philanthropic finance. Multilateral development banks and (D)FIs use the term *blended finance* more specifically, by focusing on the use of concessional finance (DFI Working Group, 2018). According to this definition, finance provided solely from (D)FIs' own capital is therefore not included under the term *blended-finance*. It is the blending of concessional donors' capital with private capital that makes structured funds a blended finance approach. Other *blended finance* approaches include guarantees, syndicated loans, direct investment in companies, credit lines and other forms of collective investment (OECD, 2018a).

The systematic collection of evidence using an EGM demonstrates that evidence on structured funds is significantly under-represented. EGMs provide a visual and systematic overview of available studies, evaluations and systematic reviews in a sector or sub-sector, and show which areas already display a high density of rigorous evidence and in which areas further research is a pressing need. The distribution of evidence on *blended finance* is shown in a matrix, by finance instrument and effect (see Figure 1). The effects are clustered by financial additionality, development additionality, market development and sector effects. Overall the EGM shows a very low number of studies and evaluations on blended finance, only very few of which were of experimental or quasi-experimental design. The vast majority were conducted as programme evaluations. These evaluations primarily examined the financing approach of results-based incentives, whereas to date there is barely evidence on the supply of subordinated equity or debt capital – an approach that also includes structured funds. Since according to the database of Convergence (2019b) this approach was pursued in more than 60 per cent of blended finance transactions between 2016 and 2018, it is therefore significantly under-represented in the evidence.

8 The DAC countries use ODA funding to implement development projects in countries of the Global South.

Figure 1 EGM of blended finance– Distribution of evidence by instrument and effect



* More rigorous publications comprise systematic reviews or use quantitative methods (experimental, quasi-experimental or correlation designs).

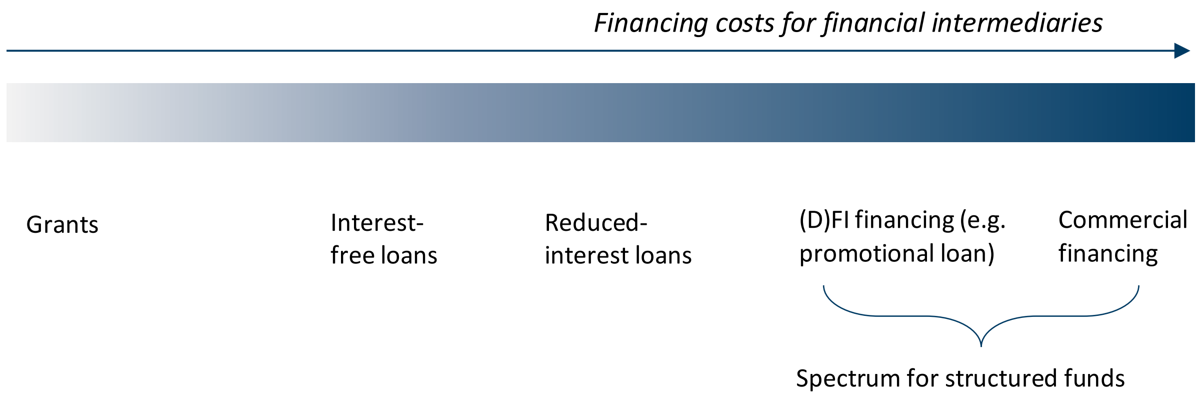
Source: own depiction.

Along the spectrum of financing approaches, structured funds can fill the gap between (D)FI loans (including promotional loans by the KfW Development Bank) and commercial finance (see Figure 2). At one end of the spectrum of financing approaches are grants that are non-repayable, and therefore do not generate any costs for the borrowers. Such financing approaches are only deployed in poor, less developed countries, however. At the other end of the spectrum are commercial loans (provided for instance by commercial banks), which must be repaid with interest. These interest payments can be very high, particularly in countries where the financial market is poorly developed.

Between these two extremes there are already several financing approaches that reduce the hurdle of high interest payments for developing countries. In Financial Cooperation (FC), low-interest loans are employed in which the KfW Development Bank for instance combines budgetary resources of the German Federal Government with capital of its own in so-called development loans. The costs of these development loans for the borrowers are thus significantly lower than the costs of commercial loans. Loans provided by (D)FIs (such as KfW promotional loans) are somewhat less expensive for the borrowers. These loans are fully refinanced on the financial market by the (D)FI, and must therefore be cost-effective. However, their costs too are lower than those of commercial loans, as good ratings and scope for diversification mean that (D)FIs generate lower costs than most other financial institutions. Moreover, (D)FIs focus less on profit.

For the FI the costs of a loan from a structured fund fall between those for (D)FI loans and commercial finance. According to the OECD Blended Finance Principles, funds extend loans on market terms in order not to distort the market. The sharing of potential losses by the official donors and opportunities to diversify enable funds to procure liquidity at lower cost. At the same time, private investors expect a certain profit. Structured funds therefore fall between (D)FI loans and commercial finance along the spectrum of financing options.

Figure 2 The position of structured funds along the spectrum of financing approaches



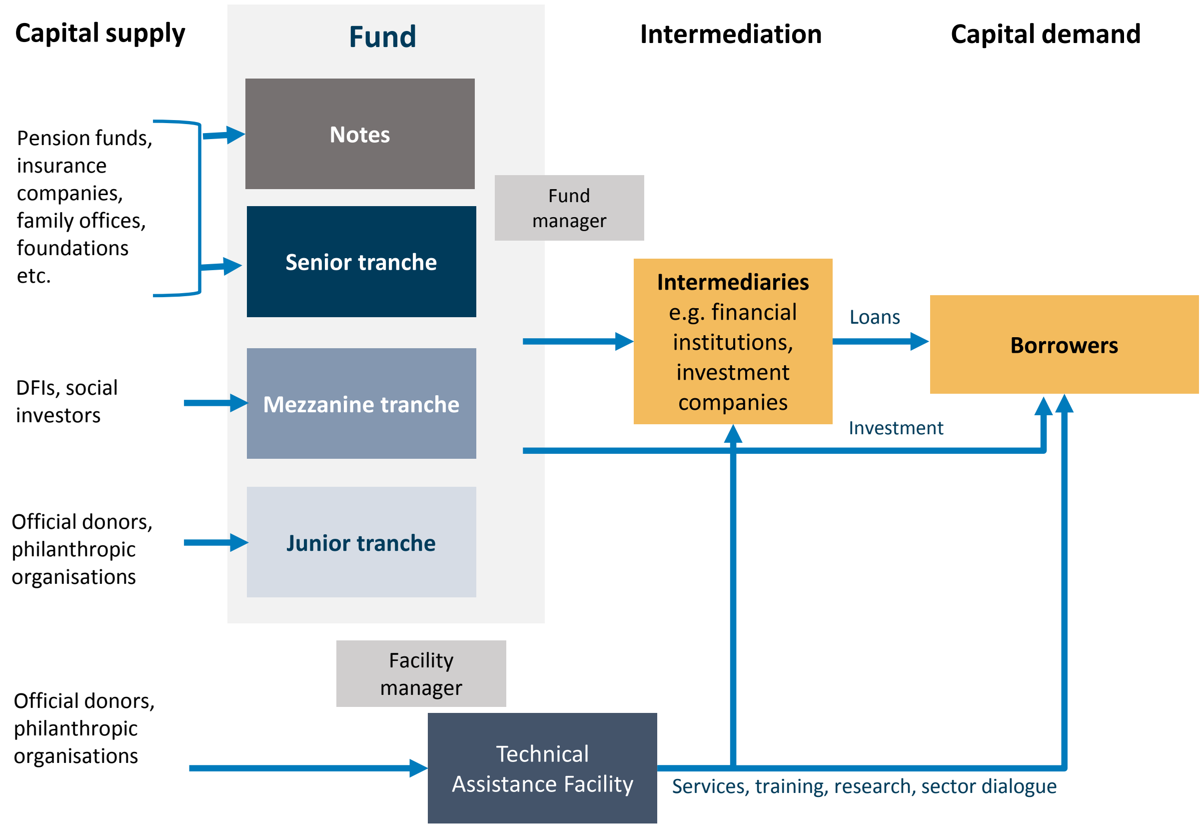
Source: authors' own visualisation.

Defining structured funds

In consultation with the reference group of this evaluation, structured funds were defined for the purposes of this evaluation as FC funds that are structured on the liabilities side into various risk tranches in accordance with Luxembourg law (société d'investissement à capital variable – specialised investment funds, SICAV-SIFs). The structured funds approach to financing involves the financing instrument of the fiduciary holding. Through their fiduciary holdings, the funds primarily provide debt capital (loans and mezzanine financing). Equity funds, which (as the name suggests) primarily provide equity, are usually not structured (KfW, 2017). One exception here is the SANAD Equity Fund. The opposite of a structured fund in the broad sense would be a flat fund, in which repayment and return are usually distributed equally among all investors. Typically, flat funds invest in equity (e.g. as seed capital), and are usually smaller than structured funds (around 150 million dollars). Structured funds are considered more suitable for commercial investors because the return, liquidity, size and rating they offer are better than those of many flat funds (OECD, 2018a).

Structured funds aim to mobilise additional resources by assuming part of the risk. One main feature of structured funds is that losses up to a certain amount are covered by official donors (first loss tranche) (Eurodad, 2013; Mustapha et al., 2014; Pereira, 2017). The official capital reduces the risk that the private investors need to take, de facto 'subsidising' it. Structured funds possess a so-called waterfall structure that (usually) splits the fund into three tranches with different risk profiles (see Figure 3). These tranches have differing degrees of seniority, which means that in case of losses or insolvency investors are served in a certain order. The first junior tranche is usually provided by ODA donors, while the mezzanine tranche is financed largely by (D)FIs. Private investors are expected to invest in the senior tranche or notes. These tranches have the shortest durations (between two and 15 years) and the lowest risk, and are therefore also attractive for private, risk-averse investors. Losses are not incurred in the senior tranche until the junior and mezzanine tranches are exhausted (Colla, 2016).

Figure 3 Typical structure of a structured fund



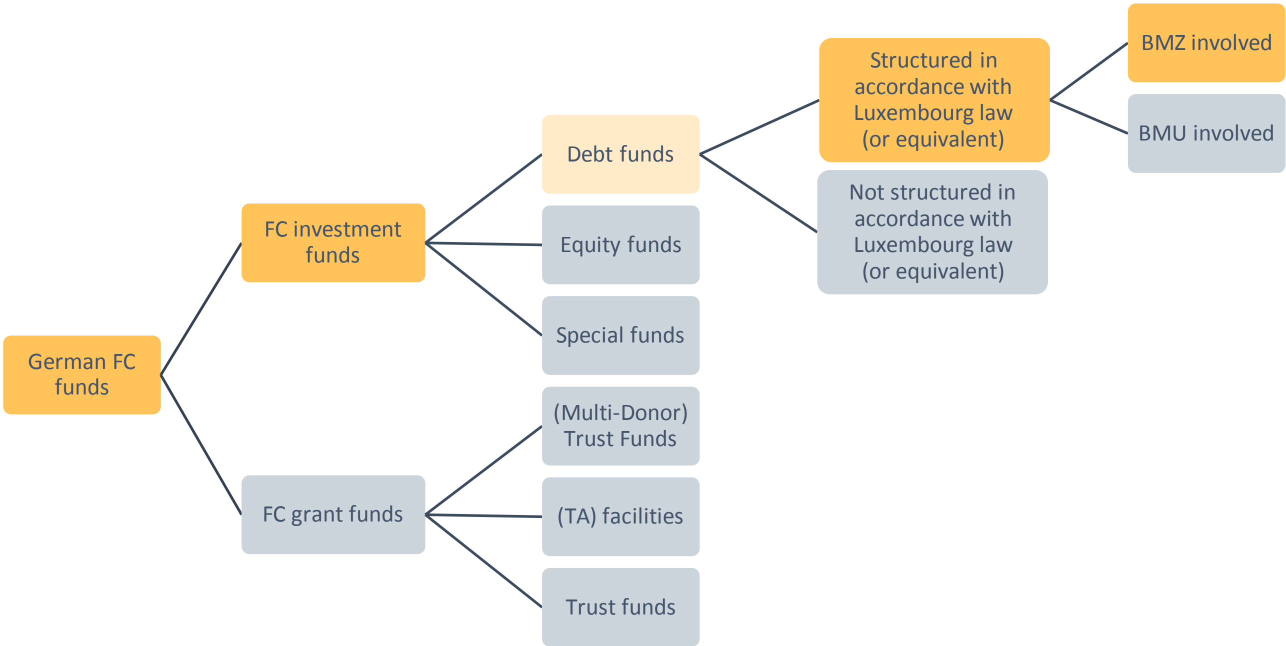
Source: authors' own visualisation, after DANIDA (2016).

Most structured funds are also accompanied by grants for Technical Assistance (TA). Among other things, TA is used to mitigate capacity-related risks or boost environmental, social and governance (ESG) standards (DANIDA, 2016). The grants are also used to support the capacity development of the funds' FIs in order to improve project development and implementation quality. In some cases these grants are also used to advise and support the end clients, such as farmers or agribusinesses, in settings where the agricultural finance sector is being established from scratch.

The selection of funds

The population of funds comprises all FC investment funds that finance debt products (see Table 8 in Annex 9.1). Of these 18 debt funds, this evaluation examines ten typical funds. Of the 18 debt funds of German FC, 13 are domiciled in Luxembourg and are therefore structured on the liabilities side in accordance with Luxembourg law. Two of the debt funds are domiciled in Mauritius. One is domiciled in the USA, one in Ghana and one in Morocco. For this evaluation we selected only funds domiciled in Luxembourg, which therefore have a comparable structuring of their liabilities side under Luxembourg law. Furthermore, the BMZ is involved in all the funds examined. Figure 4 shows the selection criteria and Table 1 provides an overview of the ten funds evaluated.

Figure 4 The selection of funds



Source: authors' own visualisation.

As well as the five debt funds domiciled outside Luxembourg, this evaluation also does not include the Rural Impulse Fund, the Fairtrade Access Fund or the Global Climate Partnership Fund, as these differ from the other funds in key ways. The Global Climate Partnership Fund (GCPF) is supported only by Germany's Ministry of the Environment, Nature Conservation and Nuclear Safety (BMU). There is no involvement on the BMZ's part. With the Rural Impulse Fund investors invest only in A-class shares of equal rank. Only the fund manager carries a higher risk, as it holds B-class shares. The KfW Development Bank (using its own resources) and other (D)FIs invest in the A-class shares. The Fairtrade Access Fund, a social investment fund that finances and advises small farmers, does have a comparable structure. However, since it is still in the start-up phase it is not suitable for inclusion in this evaluation.

2.2 The portfolio

Financial data

The ten structured funds evaluated are worth a combined total of more than three billion euros, some 700 million euros of which are accounted for by German Federal Government resources and some 400 million by the KfW's own resources. The sizes of the funds vary widely from fund to fund, however. The EFSE is the largest and the oldest structured fund. Its first capital contribution was made in 2005. Similarly, the German Federal Government's investment varies between 15 and 226.4 million euros. The average fund promotes 40 intermediaries or projects. On average the junior tranche accounts for 35 per cent of the fund volume, while the senior and mezzanine tranches represent some 30 per cent of the capital provided. Fifteen per cent is accounted for by notes, in which mainly private investors invest. [9]

[9] These figures do not total 100 per cent, as they represent average percentages for each tranche.

Table 1 Structured funds with German investment

Name of fund	Logo	Net asset value of BMZ investment in million euros	Year of first capital contribution
EFSE (European Fund for Southeast Europe)	EFSE EUROPEAN FUND FOR SOUTHEAST EUROPE	226.4	2005
SANAD (The SANAD Fund for MSME)	sanad سند fund for msme	125.3*	2011
MEF (Microfinance Enhancement Facility)	MEF Microfinance Enhancement Facility	101.00	2009
AATIF (Africa Agriculture and Trade Investment Fund)	aatif Africa Agriculture and Trade Investment Fund	43.00	2011
MIFA (Microfinance Initiative for Asia Debt Fund)		37.43	2012
GGF (Green for Growth Fund Southeast Europe)	GREEN FOR GROWTH FUND INVESTING IN ENERGY EFFICIENCY AND RENEWABLE ENERGY	57.60	2009
REFFA (Regional Education Finance Fund for Africa)	REFFA Fund	22.90	2012
EBF (Eco-Business Fund)	eco.business Fund	46.80	2014
REGMIFA (Regional MSME Investment Fund for Sub-Saharan Africa)	regmifA Regional MSME Investment Fund for Sub-Saharan Africa	15.00	2010
MIDF (Municipal Infrastructure Development Fund)**		15.00	2012
TOTAL		694.42	

Source: authors' own table based on the quarterly reports of all ten structured funds for Q4/2018.
** Total shares in SANAD Equity and SANAD Debt Fund*
***Fund since wound up*
See Table 19 in Annex 9.10 for relevant websites.

BMZ budgetary resources used in structured funds are financed mainly through the budget item for financial cooperation with regions (FCR).[10] This item has existed since 2010. Its purpose is to strengthen regional approaches and regional actors for which there are no partners under international law in the field of FC. It enables the mobilisation of market and third-party capital through innovative financing approaches (Bohnet, 2017), and is used to finance (inter alia) the structured funds. In 2018 the federal budget allocation for FCR was 119.8 million euros, some 35 per cent higher than the figure for 2012 (around 40 million euros).

Allocations for FCR must be distinguished from the funding of multilateral and supranational organisations and from bilateral FC. For a fund to qualify it must be demonstrated that control of the fund is neither the sole responsibility of one multilateral actor, nor does any single actor wield disproportionate influence relative to the financial contribution. To achieve this the BMZ stipulates that the use of capital is usually confined to a particular region. The German Federal Government should also be actively involved in planning and developing the fund, or ensure that Germany actively wields appropriate influence within the fund's official bodies.

Earmarked investments in first loss tranches of development-oriented structured funds are ODA-eligible. This point was added to the ODA regulations in 2012. Investments in mezzanine or senior tranches of structured funds will not be ODA-eligible until further notice.[11] For earmarked contributions to regionally operating or multilateral organisations it is not the country in which these 'intermediary organisations' are domiciled that is crucial. What is crucial is that the final beneficiaries are located in ODA-eligible countries (D590).[12]

In the long term it is envisaged that funds will be set up such that they remain sustainable without further injections of donor capital. Funds that issue loans usually do not have to return their official capital. Instead, they reuse loan amounts that are repaid to them (revolving source of capital) (BMZ, 2017a). While most structured funds use debt instruments, some occasionally use equity instruments alongside debt instruments. One example is the SANAD Fund, which operates in the Middle East and North Africa (MENA) and has already set up a second equity sub-fund. The FIs supported by the structured funds include for instance banks, microfinance institutions(MFIs) and leasing companies. Some structured funds also provide direct finance to companies and projects.

Sectoral focus of the funds

The sectoral focus of the funds is broad. The funds are most often involved in MSME financing. Half the evaluated funds are involved in SMSE financing. Budgetary resources of around 500 million euros are deployed in this sector through the structured funds (see Figure 5). Of the other five funds, one operates in the agricultural sector, one in renewable energy, one in education, one in nature conservation and one in infrastructure. The second-highest share of budgetary resources is accounted for by renewable energy (57.6 million euros), and the lowest shares by education (22.9 million euros) and infrastructure (15 million euros). This distribution contrasts with the distribution of blended finance transactions as a whole, which display a stronger focus on energy projects. Of the more than 500 transactions of the Convergence network, the largest share (44 per cent) occurred in the energy sector, followed by financial services including microfinance (28 per cent) and agriculture (21 per cent) (Convergence, 2019a). Although the share of transactions in the financial sector has remained more or less constant since 2010, the share of transactions in microfinance

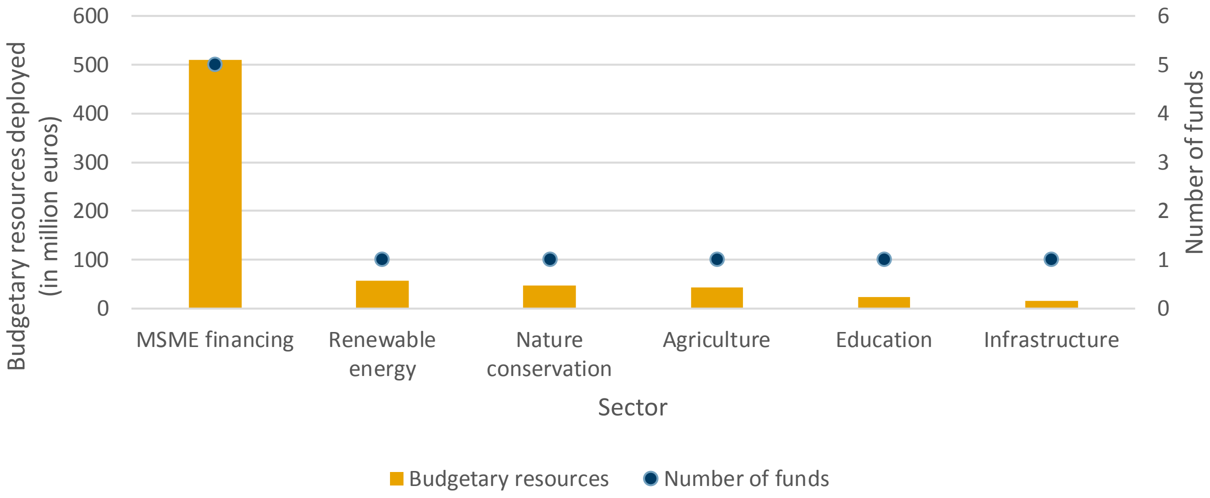
[10] Structured funds are sometimes also financed using different resources, such as allocations under the BMZ Special Initiative ONE WORLD – No Hunger in the case of the TA of the AATIF, or bilateral funds in the case of the EFSE.

[11] Depending on the outcome of the ODA regulation on private sector instruments, which remains outstanding, in the future it may potentially be possible to design investments in mezzanine tranches such that they are reportable as ODA.

[12] Until 2012 FC investments in structured funds were usually considered multilateral contributions. This requires the organisation to be registered on the list of ODA-eligible multilateral organisations (Annex II). Once the process of registration with the OECD is complete (and subject to the periodic review of all Annex II organisations), all non-earmarked contributions to these organisations are also ODA-eligible. Due to the time-consuming procedure it is no longer common practice to follow this path.

within the sector has declined, while increasing shares are being recorded for financial sector deepening and MSME finance.

Figure 5 Budgetary resources deployed by sector in million euros



Source: authors' own figure based on the quarterly reports of all ten structured funds for Q4/2018.

Structured funds aim to reach the indirect target groups – MSMEs and private households with limited access to financial services – primarily by refinancing FIs. The structured funds aim to reach their indirect target groups in different ways, depending on the sectoral focus.[13] Financing MSMEs is designed primarily to protect or create jobs, generate income and improve lives, in order to help reduce poverty. FIs also address food and nutrition security, education, nature conservation and the preservation of biodiversity, as well as energy efficiency and renewable energy, which help reduce greenhouse gas emissions. The capital mobilised by structured funds is largely delivered to companies and private individuals through FIs. This capital can sometimes be used for a wide variety of activities and sectors. Microfinance, for instance, is used to fund machinery and materials, premises or transport facilities for microentreprises, as well as environmentally-sound investment in living space. In some funds, though, capital is disbursed directly to companies or individuals who operate in a particular sector (such as agriculture) or who use the capital to finance specific activities (such as nature conservation).

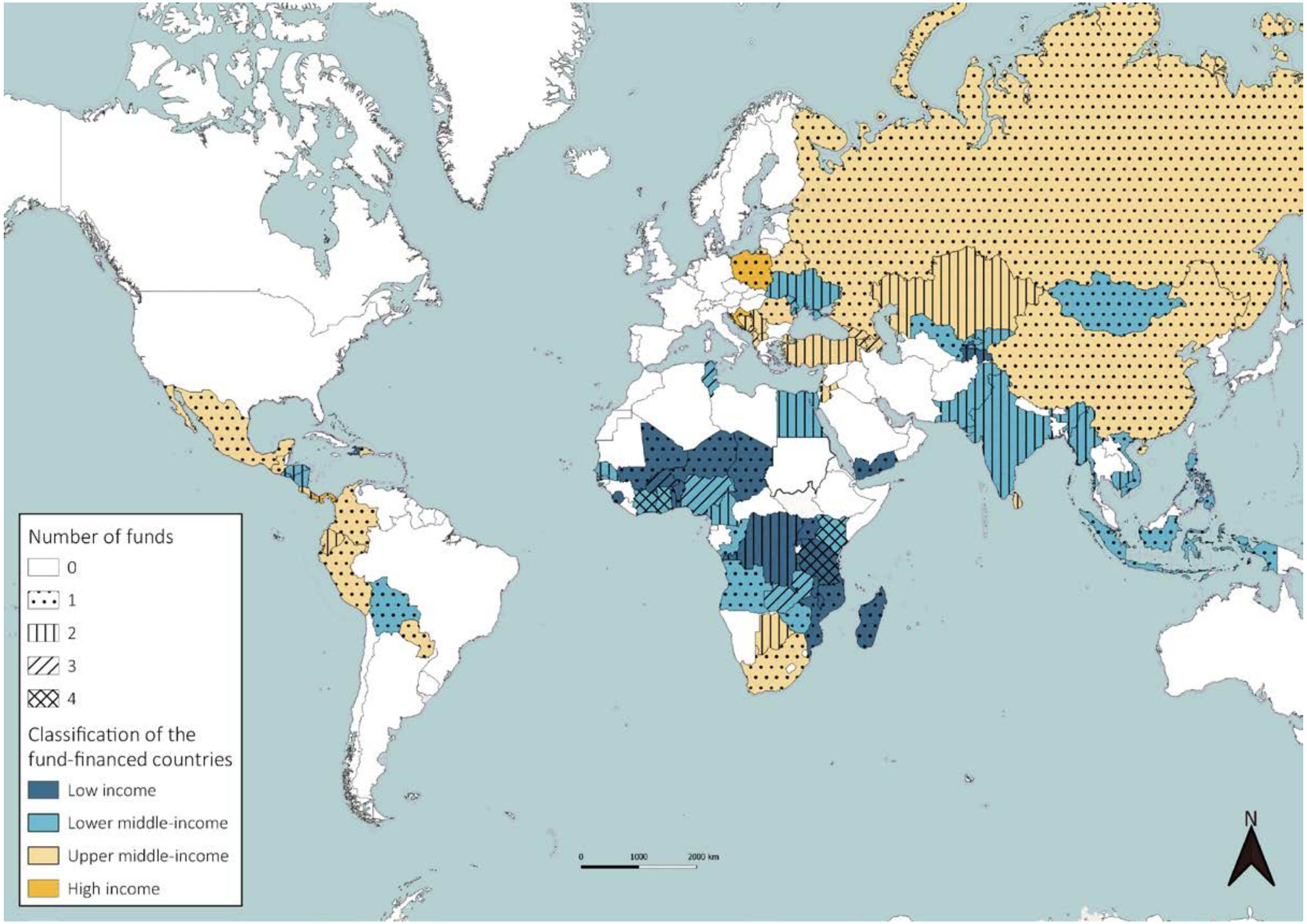
Country focus of the funds

The evaluated funds operate in 78 countries. In sub-Saharan Africa, the Balkans and the Caucasus in particular, several funds are active in the same country. The world map (Figure 6) shows the geographical concentration of the funds. On average, a fund operates in 16 countries. The fund with the greatest regional diversification is the MEF, which operates in 44 countries, while the SANAD, which was pursuing activities in six countries when the evaluation was performed, displays the lowest diversification. Nine of the ten funds have one or more regional focuses. For instance, the EFSE invests in Southeast Europe and the SANAD in the MENA region. The GGF invests in countries in both these regions. Three funds focus on countries in sub-Saharan Africa (AATIF, REGMIFA and REFFA). Two others are active in Asia (MIFA) and Latin America (Eco-Business). Only the MEF operates globally without any regional restrictions.

[13] See table showing the objectives of the various funds in Annex 9.3.

78 per cent of structured funds are present in countries classified by the World Bank as lower middle or upper middle-income countries. The funds maintain 18 per cent of their collective presence in low income countries, 42 per cent in lower middle-income countries, 36 per cent in upper middle-income countries and 4 per cent in high income countries. Four of the ten funds operate in Tanzania, Côte d'Ivoire, Ghana and Kenya.

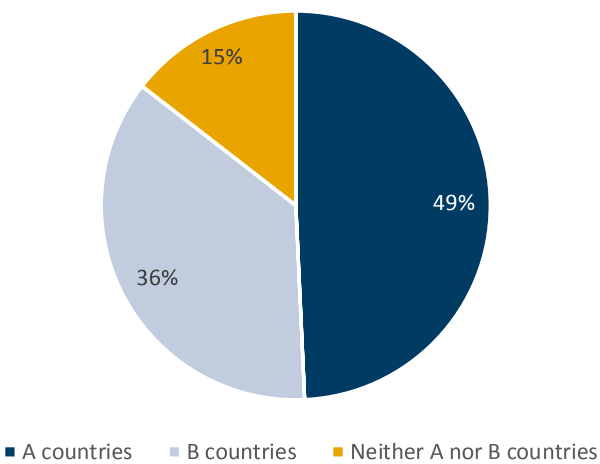
Figure 6 Geographical concentration of the structured funds



Source: authors' own visualisation, based on information from the funds' websites and the World Bank classification system; WMS: OpenStreetMap, data from Natural Earth.

The structured funds included in the evaluation focus their activities mainly on BMZ partner countries. Of the BMZ partner countries, the so-called 'A-countries' are priority partner countries with which a bilateral country programme has been agreed. With the 'B countries' Germany pursues focused regional or thematic cooperation (see Annex 9.7 and Figure 33 for the distribution of BMZ partner countries by fund). All funds operate predominantly in A and B countries (see Figure 7).[14] SANAD is the only fund that operates exclusively in A and B countries**.** EFSE and GGF have the highest share (35 and 23 per cent) of countries outside the A and B country categories in their portfolios. Only eleven of the 49 A countries and ten of the 35 B countries are not served by structured funds. However, it should be noted that this categorisation into A and B countries is subject to continuous review and adjustment by the BMZ, and that this information reflects the status quo in 2019. The situation may have been different when the funds were actually set up.

Figure 7 Distribution of countries served by structured funds by BMZ partner country category (A and B countries, in %)



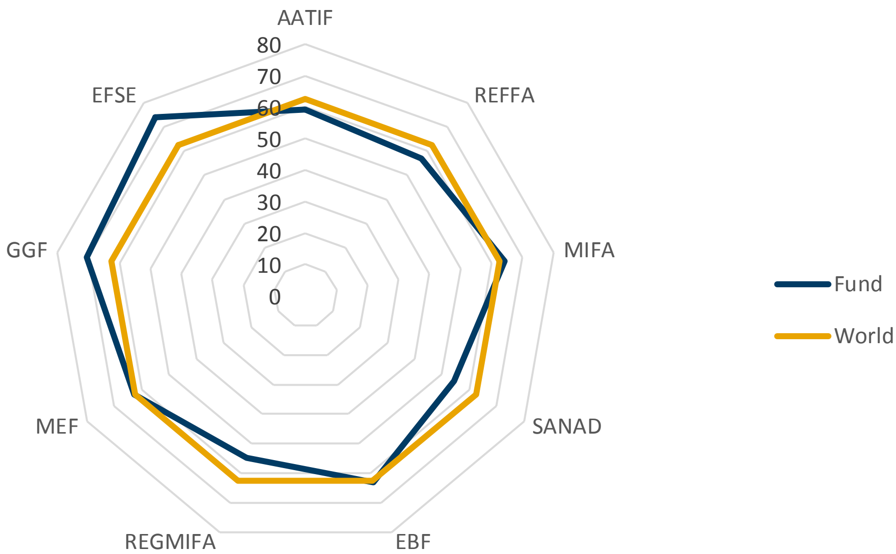
Source: authors' own visualisation, based on information from the funds' websites.

The countries where the structured funds operate display a similar business environment to countries where they do not operate. The World Bank measures business friendliness and corporate regulation at country level through its Ease of Doing Business Index[15]. On average, countries in which at least one fund operates achieve a score of 62 out of 100. In this respect they do not differ from other countries (see Figure 8). However, there are major differences between the funds due to their regional focus. The EFSE, for instance, operates in countries with the best environment for businesses (average score of 74 out of a possible 100 points). The countries where SANAD and REGMIFA operate, on the other hand, only achieve a score of 54 out of 100.

[14] Annex 9.8 shows the distribution of A and B countries per fund.

[15] The Ease of Doing Business Index rates: the time it takes to start a new business, obtaining a construction permit, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency. To find out more about the index visit https://www.doingbusiness.org.

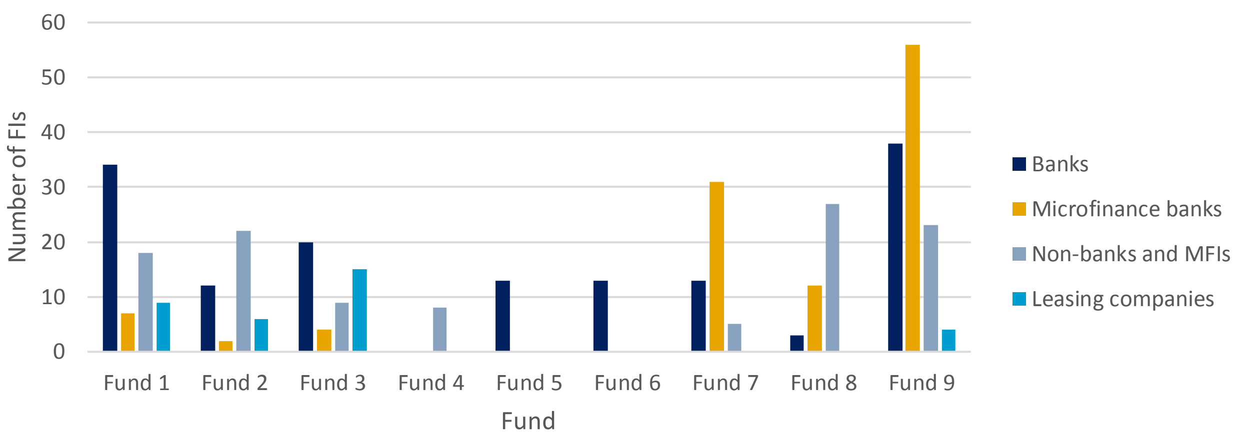
Figure 8 Average ease of doing business score for the funds' target countries



Source: authors' own visualisation based on the World Bank's Ease of Doing Business Index, 2019.

The structured funds primarily refinance banks, microfinance banks and non-financial institutions. Most partner institutions are banks (36 per cent), microfinance banks (28 per cent) and non-banks/MFIs (28 per cent). Leasing companies are also refinanced to a minor extent (8 per cent) (see Figure 9). Many of the refinanced MFIs offer only loans, while others are also entitled to accept savings deposits (I092, I064, I071)[16]. Most funds refinance a mix of different types of FI. Three structured funds finance mainly or exclusively (commercial) banks, and two structured funds invest primarily in microfinance banks.

Figure 9 Types of FI financed by the funds



Source: authors' own visualisation based on the quarterly reports of nine structured for Q4/2018; the wound-up fund is not shown here.

[16] To guarantee the confidentiality of the interviews conducted by DEval, these are cited in the text using an 'I' plus a serial number, and are not included in the references.

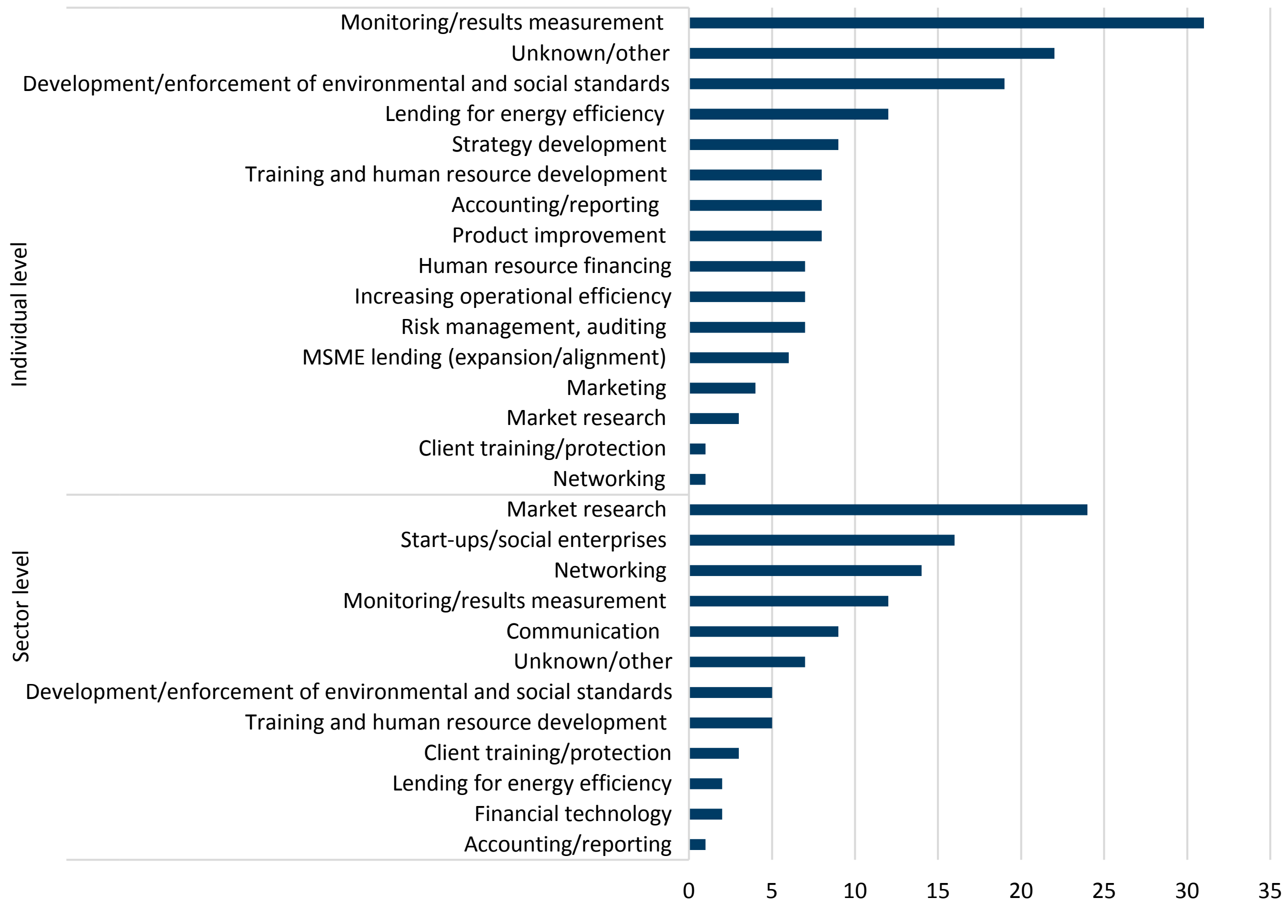
Alongside financing by FIs, three funds invest directly in various projects and companies. In the agricultural, renewable energy and nature conservation sectors the funds also invest directly in the actors that operate there. This sets some positive examples in sectors where the local financial market is not yet investing (I029, I047, I048). Various agribusinesses, outgrower schemes and hydropower and wind energy projects have been financed in this way to the tune of between 12 and 32 million US dollars.

TA Facility

With the exception of the MEF, all the structured funds included in the evaluation also possess a Technical Assistance Facility (TAF). These are financially independent of the actual funds and are donor-financed or fund-financed. In other words, no private capital flows into the facility. Unlike with the fund, the financial resources of the TAF cannot be used on a revolving basis, which means that these resources are gradually reduced with each activity. TA interventions are implemented at both the individual and the sectoral level.

Individual TA interventions often address the FIs' management processes or reaching of target groups, while sector interventions often comprise market studies. As shown in Figure10, some 58 per cent of these interventions are conducted at the individual level, primarily with FIs, and 42 per cent at sector or country level. At the individual level around 28 per cent of projects relate to FI management, which chiefly involves further developing processes (such as risk management) or technologies (such as lowering transaction costs). Around 50 per cent of these (individual) projects directly or indirectly involve enabling FIs to reach target groups, for instance by supporting them in developing their capacities to assess the creditworthiness of microenterprises, conduct financial literacy courses or improve their client protection standards. At the sectoral level, market research is conducted especially frequently in order to identify potential in a particular sector (such as educational loans). Some projects also directly target sub-borrowers. One example is a radio programme on basic financial literacy (I064).

Figure 10 Number of individual and sector-wide projects in different areas[17]



Source: authors' own visualisation, based on information from the fund managers.

The average volume of the TAF per fund is 2.3 million US dollars, with which 249 accompanying interventions were implemented between 2016 and 2018. The average cost per financed intervention is 74,407 US dollars. For each investment by a structured fund, an average of around 3.5 TA projects are conducted. Compared to the size of the structured funds, however, the resources available to the TAFs paint a different picture. For each US dollar invested by structured funds, several cents in the single-digit range are spent on accompanying interventions.

[17] The very large number of projects in the field of monitoring/results measurement is due almost entirely to a single fund that implements many projects in this field.

3. METHODS

3.1 Evaluation design

In this evaluation, to identify and examine underlying assumptions the evaluation team used a theory-based approach (Astbury and Leeuw, 2010; Chen, 2015; Funnell und Rogers, 2011) and a Theory of Change (ToC) tailored to structured funds (Pawson und Tilley, 1997). The evaluation was based on a ToC developed for structured funds. A theory-based approach enables evaluators to apply different methods and data collection tools (qualitative and quantitative procedures) with precision (Stern et al., 2012; White, 2009; White und Phillips, 2012).

This evaluation uses the theory-based approach of 'realist evaluation', which explains how the outcomes are generated by looking at underlying processes. Since structured funds are geared to entire regions, contextual factors play a major role. Pawson and Tilley (Pawson and Tilley, 1997), who developed this approach, argue that evaluations must show decision-makers what effects arise in which circumstances and for whom, rather than just whether effects can be observed in general. Realist evaluations identify the underlying processes that explain how outcomes were generated, and how this was affected by the context. These processes are also based on a ToC supplemented by mechanisms and contextual factors, and were incorporated into the evaluation design because they facilitate subsequent data collection.

This evaluation was based on the reconstructed ToC. Since the official documents of the funds do not include any explicit theory of change, the ToC was reconstructed in dialogue with the evaluation's stakeholders, the reference group**.** The ToC models the causal relationships and change processes that are assumed to occur when structured funds are used, based on social science theories. The evaluation team used the ToC to identify causal pathways and assumptions, and on that basis defined focal areas for the evaluation. The reconstructed ToC for structured funds is presented below (see Figure 11).

Theory of Change

The input provided by structured funds to FIs comprises capital and TA. It is assumed that the capital and TA make it easier to calculate the risk. This would lead to financial products being offered on terms geared to target-group needs, and/or to (new) target groups gaining greater access to credit, savings, leasing or insurance products. The adjustment of lending terms referred to here need not necessarily involve lower interest. It might also involve more flexible or longer maturities, better accessibility or more appropriate repayment arrangements. It is also assumed that the TA and capital provided for the FIs will lead to new financial products being offered for MSMEs and/or to existing products which are tailored to the specific needs of the structured funds' target groups being offered, advertised and sold on a larger scale. At the same time, certain TA interventions would enable entrepreneurs to meet the requirements for access to financial products.

At the level of induced outputs the ToC trifurcates into 'international financial sector', 'financial sector in the partner country' and 'target group'. Impact on the international financial sector would unfold as a result of the new asset classes for investors. Structured funds would make it more attractive or possible for investors to invest in a large number of smaller projects in countries and sectors in the Global South. In the medium term, private sector investment would generate a signalling effect, and prompt further investment in the partner country, including outside of structured funds. The volume of international investment in the partner country would thus increase, and access to the international capital market would improve. Due to the increased pressure of competition and availability of capital, this would then tend to have a positive impact on local financial market development and economic growth.

The assumption that improved access to the capital market would under certain circumstances have a positive impact on local financial market development is based on empirical evidence. In their study, Kose, Prasad, Rogoff and Weil conclude that the positive impact of capital flows on financial market development is dependent on macroeconomic preconditions, for instance on a certain degree of financial market development and on institutional quality and governance capability of the government, as well as trade integration (Kose et al., 2009). The empirical evidence shows: The impact of capital flows on financial market development is brought about by

- the reduction of interest rates to a market-clearing level (Baldwin and Forslid, 2000; Calderón and Kubota, 2009)
- the increase in competition on the financial market (Caprio and Honohan, 1999; Levine, 1996)
- stronger pressure for financial market reform (Chinn and Ito, 2006; Claessens et al., 2001; Stiglitz, 2000; Stultz, 1999).

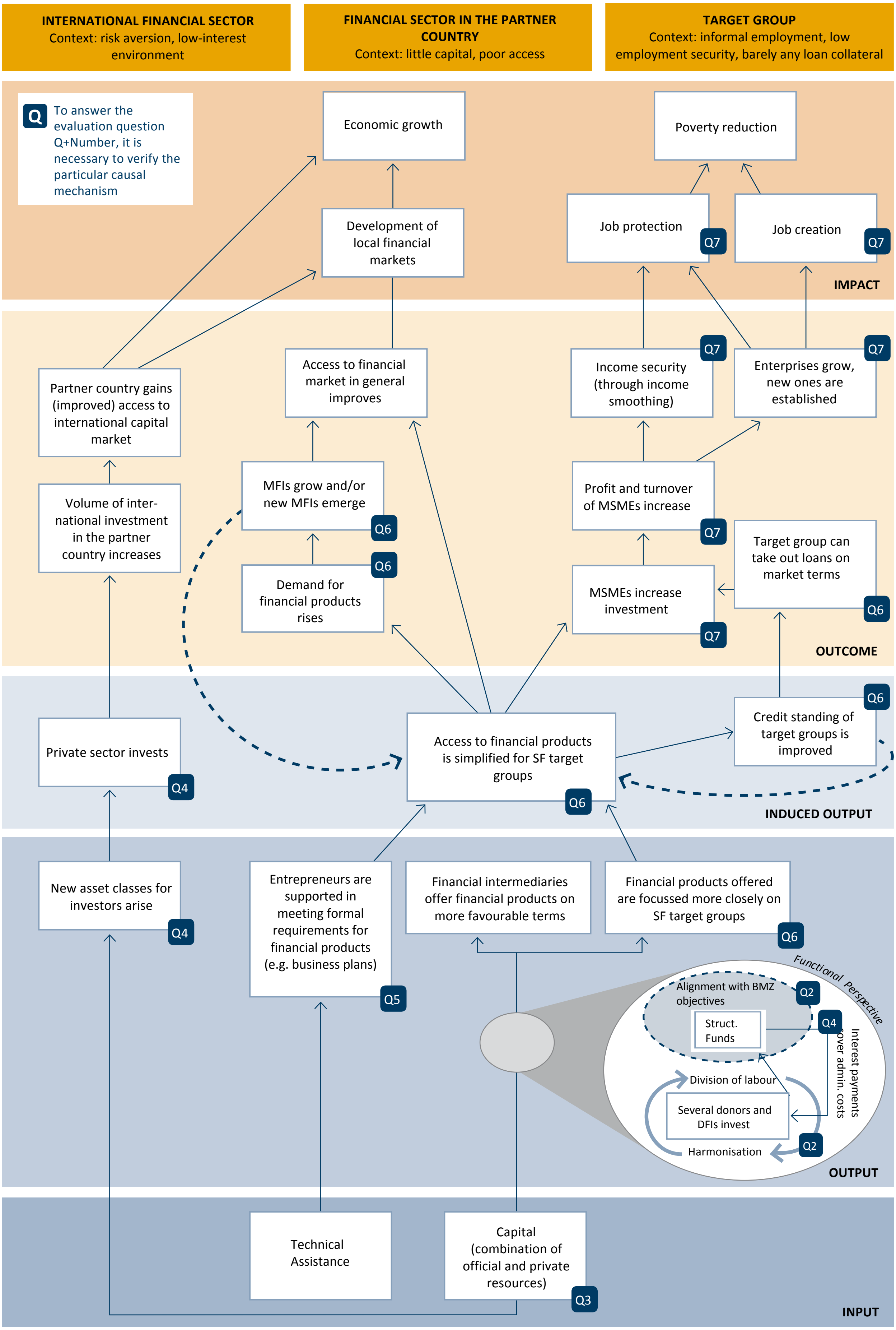
Moreover, the opening of the financial market has a positive effect on the size and activities of FIs (Calderón und Kubota, 2009). The opening of the financial market can, however, lead to risky behaviour by banks and thus trigger boom and bust cycles (Allen and Gale, 1999; Schneider and Tornell, 2004; Tornell and Westermann, 2005).

The impact on economic growth is also substantiated by relevant empirical findings. Both the development of FIs and financial market development in general are important determinants of economic growth (Levine, 2005) – at least up to a certain level of development, beyond which the growth rates of different countries converge (Aghion et al., 2005). It is also conceivable that cause and effect might actually be the other way round, i.e. economic growth might lead to stronger financial market development. Studies that include this point, however, conclude that despite the presence of this reciprocal effect, there is a causal link between financial sector development and economic growth (Neusser and Kugler, 1998; Rousseau, 1998; Xu, 2000).

With regard to sub-borrowers, it is assumed that the new or increasingly offered financial products that are aligned with the needs of target groups such as MSMEs, sustainably improve access to financing. These products would also be more successful in reaching target groups whose financial market access is limited. This assumption stems from theories of political economy, which suggest that well functioning financial markets enable a larger proportion of the population to access financial services, rather than focusing these services exclusively on established large clients (Haber et al., 2003; Morck et al., 2000; Rajan and Zingales, 2003). As a result, MSMEs would increase their investment, and thus in turn their profits and turnover. At the same time the track record they would accrue would establish their creditworthiness. This would simplify their access to follow-on products, and later on they would be able to borrow on market terms and invest. The income of employees would thus be secured, and existing MSMEs would grow and new ones would be launched. In turn, this would create new jobs, or at least protect existing ones – which corresponds to the assumed effect of structured funds. Taking the ToC a step further, it is assumed that the secured jobs and newly created jobs will reduce poverty.

Furthermore, it is assumed that the increased supply of products for MSMEs and the access of new target groups to financial products would lead to an increased demand for financial services. MFIs would then grow, further develop, or new MFIs would even emerge and other FIs would enter the sector. This in turn would contribute towards further development of the local financial market.

Figure 11 Theory of Change



Source: authors's own graphic

Based on the reconstructed ToC, the evaluation team identified the focal areas of the evaluation and formulated the evaluation questions. The evaluation analyses structured funds in terms of how well they align with German development cooperation, as well as their potential for harmonisation and leveraging private capital. It also examines the financial efficiency, sustainability and impact of the structured funds. Against this background the evaluation answers the following questions, which are clustered into three sets:

Table 2 Evaluation questions

Set of questions	No.	Analysis	Evaluation question
Alignment with German development-policy objectives and development principles	1	non-causal	To what extent do the objectives of structured funds match the strategic objectives of the BMZ? To what extent are structured funds a suitable financing approach for achieving these objectives?
	2		To what extent do structured funds promote a division of labour, donor harmonisation and the strengthening of local actors?
Mobilisation of additional capital/financial sustainability	3	non-causal	To what extent are structured funds effective and efficient in leveraging private capital and the capital of development banks?
	4		To what extent do structured funds create sustainable financing structures?
Effects on FIs and MSMEs/employment	5	causal	To what extent do grants spent on TA help achieve the structured funds' objectives?
	6		To what extent do structured funds affects the portfolio of FIs and their success in reaching new target groups?
	7		To what extent do structured funds affect MSME development, employment, income security and self-employment?

Source: authors' own visualisation.

Set of questions 1: Alignment with German development-policy objectives and development principles

This set of questions enquires how closely structured funds are aligned with German development-policy objectives. One prerequisite for the management of resources for FCR is that the FCR interventions complement German development cooperation in the countries of the region concerned. Furthermore, they must be separate from the financing of multilateral and supranational organisations, and from bilateral FC. The evaluation shows to what extent the objectives of structured funds are aligned with the relevant strategies of the BMZ, and how structured funds differ from other financing approaches.

FCR is designed specifically to promote supra-regional cooperation involving several donors. The agreement of common terms, standards for support and harmonised results measurement between several donors and official development banks is designed to boost harmonisation and the division of labour. The evaluation looks at how successfully this is achieved, and whether regional actors are strengthened, when structured funds are actually implemented. The findings are summarised in Section 4.2.

Set of questions 2: Mobilisation of additional capital/financial sustainability

The evaluation addresses the issue of how much additional capital can be leveraged by the official investment, and under what conditions structured funds succeed in attracting investors. Through structured funds, German development cooperation aims to deploy the resources of several official donors and development banks along with private capital for purposes that hitherto have been supported mostly only with donor funding. One key question is how much capital from development banks and how much private capital is leveraged by the official investment, and to what extent and under what conditions structured funds succeed in attracting private investors. The findings are summarised in Chapter 5.

The evaluation examines the efficiency of the funds in terms of their financial sustainability. Structured funds follow the principle of the revolving use of capital. This and the mobilisation of private capital are intended to create sustainable financing structures that amongst other things cover costs and generate profits for investors. Amongst other things the evaluation looks at the volume of capital invested, whether the capital is used on a revolving basis and whether losses arise, but also how the financial metrics relate to the size or for instance the business strategy of the funds. The findings are summarised in Section 4.1 .

Set of questions 3: Effects on financial intermediaries and sub-borrowers

The evaluation examines the effects of the capital and TA provided by the structured funds on the FIs, and how the FIs ensure effects on the sub-borrowers. This analysis relates only to structured funds involved in MSME financing. It focuses on the contribution made by structured funds to the quality of the portfolio of the FIs, and their success in reaching new target groups. The effects of structured funds on MSME development and employment are achieved indirectly through the finance provided by the FIs, and are influenced by the latter's lending processes and standards. This is why the evaluation looks closely at the selection of refinanced FIs. The findings are summarised in Chapter 6.

When answering the evaluation questions all five OECD-DAC criteria are rated and the additionality of the financing approach is considered on various levels (see Table 3).[18] The evaluation questions cover the OECD-DAC criteria as follows:

Relevance:

- Are the right objectives being pursued?
- Are the programmes aligned with the strategic objectives of the BMZ?
- Is the financing approach suitable for mobilising private capital and achieving development impact?

Effectiveness:

- Is the leverage of private capital effective?
- Are the development principles being effectively implemented?

Efficiency:

- Is the potential for mobilising capital being harnessed efficiently?
- Are budgetary resources being deployed efficiently with this form of financing?

Impact:

- What effects on FIs, local financial markets and sub-borrowers are being achieved?

Sustainability:

- Have sustainable financing structures been created?

Financial and development additionality were also added as a criterion. The concept of additionality is a central one for structured funds, as (according to the OECD definition) the instruments of blended finance a) mobilise additional capital, and b) use this capital for sustainable development that would not occur without this additional capital (Winckler et al., 2019). With this analysis the evaluation generates findings inter alia on whether structured funds were the right financing instrument to choose. The criterion 'coherence', which is designed to assess synergies and inconsistencies, was added to the OECD-DAC evaluation criteria in 2019. It was therefore not yet applied explicitly in this evaluation, because it did not yet exist when the evaluation

[18] The evaluation criteria were discussed and agreed on with the reference group prior to the reform of the DAC criteria in 2019 (which now also include the criterion of coherence).

was commenced. The table below shows the DAC evaluation criteria plus the criterion 'additionality' in relation to the evaluation questions.

Table 3 Evaluation questions and OECD-DAC criteria

Question	Relevance	Effectiveness	Efficiency	Impact	Sustainability	Additionality
1. To what extent do the objectives of structured funds match the strategic objectives of the BMZ? To what extent are structured funds a suitable financing approach for achieving these objectives?	x					x
2. To what extent do structured funds promote a division of labour, donor harmonisation and the strengthening of local actors?	x	x	x			x
3. To what extent are structured funds effective and efficient in leveraging private capital and the capital of development banks (financial additionality)?	x	x	x			x
4. To what extent do structured funds create sustainable financing structures?	x		x		x	x
5. To what extent do grants spent on TA help achieve the structured funds' objectives?	x			x	x	x
6. To what extent do structured funds affect the FIs' portfolios and their success in reaching new target groups?	x		x	x		x
7. To what extent do structured funds affect MSME development, employment, income security and self-employment?	x			x		x

Causality when answering the evaluation questions

The evaluation questions differ in terms of whether the answers provided need to establish a causal link, or can be established by non-causal analysis (for instance by making comparisons or examining relevance). This also determines the selection of cases. Causal theory distinguishes between type causal claims and token causal claims, where a type comprises many cases and focuses on general relationships, while a token is a specific case (Wetzel, 2018). For the evaluation questions that were answered by means of non-causal analysis, the evaluation looked at all ten structured funds as types. This applies to questions 1 to 4 (sets 1 and 2). For the evaluation questions that were answered by means of causal analysis, the evaluation looked at a small number of selected cases, including through case studies (tokens). This applies to evaluation questions 5 to 7 (set 3) (see Table 2). This meant the evaluation team did not need to select cases for questions 1 to 4, as all ten funds were considered. For questions 5 to 7, however, cases were selected.

Selection of cases for causal analysis

The evaluation aimed to identify typical cases. The evaluation team based their selection of cases on criteria that differ in relation to the level of selection of the funds and countries, and are designed to answer evaluation questions 5, 6 and 7. The cases need to typify the causal relationship under investigation, and the evaluation team needs to be able to assume that the cases are subject to factors which are at least similar. This means that findings can only be generalised to other cases classified as typical, however (Rohlfing, 2012). The evaluation team also identified 'most likely' cases in which the assumed causal effect was most likely to occur. Due to the limited availability of data, studying 'least likely' cases might lead to incorrect findings.

The evaluation team determined which funds could be analysed for their possible causal effects on FIs and sub-borrowers in relation to three evaluation questions. Evaluation question 5 addresses the effect of TA interventions on the structured funds' objectives. The first criterion was therefore the existence of a TA facility that would enable measurement of the effects of TA on the success of structured funds. The MEF is the only fund that does not have a TAF. To determine *to what extent structured funds affect FIs' portfolio quality and their success in reaching new target groups* (evaluation question 6), the evaluation team needed to look at funds that monitor objectives indicators on portfolio quality in accordance with the KfW matrix. These indicators usually measure the default rate or the percentage of non-performing loans. To be able to answer evaluation question 7 the evaluation team restricted the selection of funds to those that focus mainly on MSME development and promote financial products designed for MSMEs. This is the case with all funds except MIDF, REFFA and AATIF, whose primary development focus is on education, agricultural production and infrastructure. A further criterion was which funds define income and job creation as an objective, ideally in the KfW matrix or in their own documents**.** This criterion is met by EFSE, SANAD, AATIF and REGMIFA. However, SANAD is the only fund for which there is a KfW indicator. Another indicator is for which funds a maximum loan amount, and thus a specific focus on MSME promotion, has been set. This is the case with SANAD, MEF, EFSE and REGMIFA.

The cases selected for the causal analysis were those funds that focus on MSME financing. The evaluation team selected those funds that best met the criteria, as these were the most likely cases where effects might be observed, thus making them suitable for testing the theory. An overview of the selected cases is provided by Table 11 in Annex 9.4. The cases selected for causal analysis are:

- European Fund for Southeast Europe (EFSE)
- SANAD Fund for MSME (SANAD)
- Regional MSME Investment Fund for Sub-Saharan Africa (REGMIFA)
- Microfinance Initiative for Asia (MIFA) Debt Fund.

The countries were then selected in a criteria-based process according to the principle of the typical and most likely case. The following criteria were included at country level (see Table 12 in Annex):

- fund-specific criteria such as the number of FIs financed by the fund
- country-specific financial market development criteria
- socio-economic criteria such as income group as defined by the World Bank or Human Development Index.

The selection of the FIs examined in the case studies was also based on the principle of the typical and most likely case. To guarantee data collection, FIs were selected that are currently being financed by funds. The FIs also had to have signed the agreement at least 12 months beforehand, so that initial effects and experiences would at least potentially already have been able to occur. Furthermore, selected FIs were also required to reflect the fund's business model, i.e. the type of FI (e.g. bank or MFI), the type of financing (senior loan, subordinated debt etc.) and TA, also had to be typical for the fund. Moreover, the FIs had to account for a significant proportion of the country-specific fund portfolios.

3.2 Method integration

When answering the questions the sources and methods were triangulated. The analysis of each individual evaluation question was informed by at least three data sources (see Table 4). For all evaluation questions, fund documents (including quarterly reports and issue documents), programme proposals and reports to the BMZ, as well as interview records, were analysed. A total of 122 interviews were conducted with representatives of the BMZ, KfW Development Bank, the investors, the boards of directors of the funds and the fund managers, as well as with the FIs, sub-borrowers and experts (see Table 20 in Annex 9.11). To answer the questions concerning the alignment of structured funds with the objectives of German development cooperation and the development principles, 16 BMZ strategy papers were analysed. Concerning the set of questions on effects on FIs and MSMEs/employment, impact studies were examined. Furthermore, a survey of FIs was conducted, to which 50 FIs of the funds responded. Finally, for the quantitative analysis secondary data at the level of countries (World Bank indicators, ILO) and FIs (MIX Market) were used. MIX Market provides a database containing annual information on the financial and social performance of MFIs worldwide.

Table 4 Triangulation of sources

Question	Fund documents	Reports and programme proposal	BMZ strategies	Evaluations and impact studies	Interviews	Survey of FIs	Secondary data/specialist literature
1. Objectives of structured funds – strategic objectives of the BMZ	x	x	x		x		
2. Division of labour, donor harmonisation, strengthening of local actors	x	x	x		x		
3. Leveraging of private capital	x	x			x		x
4. Sustainable financing structures	x	x	x		x		
5. Effects of TA	x	x		x	x	x	
6. Effects on the quality of FI portfolios and success of FIs in reaching new target groups	x	x		x	x	x	x
7. Effects on MSME development, employment, income security and self-employment	x	x		x	x		

Answering the evaluation questions required an integrated approach comprising different methods. This approach combines mixed methods (in the broadest sense a combination of qualitative and quantitative research approaches) (Johnson et al., 2007), with multi-method research that seeks to establish causal inference both across and within the cases (Goertz, 2017). The strengths of the mixed methods and multi-method research approaches were combined in an integrated methodical approach. First of all, this offset weaknesses of individual methods. While quantitative methods are suitable for capturing heterogeneity and variance across a large number of observations, and thus supplying generalisable findings (Hammersley, 1989), qualitative methods are particularly well-suited to analysing the context and answering questions as to 'why'. Secondly, this meant that the evaluation combined different evaluation methods – depending on the evaluation questions – in order to facilitate causal inference on both a cross-case and within-case basis.

Depending on the nature of the question, adapted data collection and analysis methods were used, and combined on the basis of their complementarity. Table 5 provides an overview of method integration for each evaluation question. To analyse all evaluation questions, elements of process tracing were used to assess the quality of the evidence. To answer questions concerning whether an effect occurred or whether there is a link between input and output, a contribution analysis was performed and quantitative methods of analysis were applied. Statistical regularities were identified through descriptive statistics, regression analyses and through the so-called quasi-experimental design of the Difference-in-Differences (DiD) method. The methods of qualitative comparative analysis and comparative content analysis were used to answer questions concerning the factors influencing the mobilisation of private capital and the financial sustainability of the structured funds. The wording of all the evaluation questions should be understood as implying that for each evaluation question, the various methods were combined to determine both whether the assumed effect occurred, and how this came about.

Table 5 Method integration

Question	Content analysis	Elements of process tracing	Contribution analysis	Qualitative Comparative Analysis	Descriptive statistics	Regression analysis	Quasi-experimental design
1. Objectives of structured funds – strategic objectives of the BMZ	x	x					
2. Division of labour, donor harmonisation, strengthening of local actors	x	x					
3. Leveraging of private capital	x	x		x	x		
4. Sustainable financing structures	x	x			x		
5. Effects of TA	x	x	x		x		
6. Effects on the quality of FI portfolios and success of FIs in reaching new target groups	x	x	x		x	x	x
7. Effects on MSME development, employment, income security and self-employment	x	x			x		

The methodical approaches applied are described briefly below.

Content analysis and evidence assessment

To answer all seven evaluation questions the content of more than 500 documents and 122 interview records for the ten funds was analysed and assessed (Flick et al., 1995; Kuckartz, 2014)**.** The systematic assessment of the information allows the findings of the analysis to be largely related to the population of the funds. This analytical method was applied to all the evaluation questions. The objectives and the modus operandi of the funds were systematically compared with the BMZ strategies and principles of development cooperation, as well as with comparable financing instruments and investment options for private investors. For the causal analysis of the third set of questions, interviews were conducted with the management of the FIs, the loan officers and sub-borrowers as part of the case studies, and the information obtained was likewise submitted to a systematic content analysis. Operationalisation of the content analysis (the code system) was performed for each evaluation question using the evaluation matrix, and was analysed using computer-based technology.

To assess the quality of the evidence that was gathered and analysed by means of content analysis, elements of process tracing were used. Process tracing is used in its entirety to test a causal mechanism. George and Bennett (George und Bennett, 2005, p. 206) define process tracing as a method to identify an intervening causal process – or to be more precise the chain or the mechanism between an independent variable[19] and the outcome of a dependent variable. The mechanism is described in the literature on process tracing as the system that transfers the causal forces to the outcome (Machamer et al., 2000). Process tracing takes place in four steps (Punton and Welle, 2015a):

- Step 1: Develop a hypothetical causal mechanism
- Step 2: Operationalise the mechanism
- Step 3: Collect data (referred to as 'evidence' in process tracing) in accordance with the defined mechanism
- Step 4: Analyse and assess the strength of the evidence

In this evaluation an approach based on step 4 was used to assess the evidence.

The strength of the evidence was assessed based on the assumption that the interests of the sources influenced the information disclosed.[20] To determine the strength of the evidence, in a first step the evaluation team looked at how many sources provided information that was driven (in different ways) by interest (triangulation). In a second step the team considered whether or not the information provided was as expected, based on the source's interest.

When information has been confirmed by different sources with different interests, the information is less likely to be biased. For this analysis the sources were clustered into groups. These differ by their assumed interest (for instance, one group with a largely commercial interest and one group with a largely development interest). The interest was inferred from the sources' roles. For example, it was assumed that interviewees from the BMZ had a development-policy interest, whereas the funds also pursue commercial interests. The more different groups that included a certain piece of evidence, the less likely it was to be biased.

[19] Or several independent variables
[20] See the concepts of 'type I error' and 'sensitivity' in the literature on Bayesian updating.

When this includes a source making a (negative) statement that is unexpected (based on the source's role), it is also less likely that this information is biased. For this analysis groups were also formed: Is the information supplied an expected positive statement, an unexpected positive statement, an intended criticism or an unintended criticism?

Rating the evidence along a scale from strong to weak is of course only an approximation, but does allow comparison of the evidence base for different outcomes. For each question, all the information elicited was aggregated in tables.[21] These tables systematically indicate how many sources supplied each piece of information, and whether the statement was assumed to be intentional or unintentional. It then becomes clear which findings were based on weaker evidence and which on stronger evidence.

This evidence assessment was performed in each step in the analysis, and only those findings based on strong evidence were included in the evaluation report.

Qualitative Comparative Analysis (QCA)

The evaluation used the QCA method to analyse the factors affecting the mobilisation of private capital (evaluation question 4). This analytical method is used primarily when seeking possible causes of a given outcome, and when assumptions about the interrelationships can be construed as conditions. In QCA, interrelationships between states are analysed in the form of quantity relations, which in turn are interpreted as conditions (Wagemann and Siewert, 2018). In this evaluation the analytical method was used to investigate whether and in what combination fund-specific characteristics such as the defined risk buffer, other shareholders in the fund or local currency financing, are a condition for successful mobilisation of private capital. To this end the QCA was used to perform a systematic comparison between the states in the various tranches of all ten funds in which private investors can invest. Through this systematic comparison between the 13 private tranches of structured funds, this analytical method generates findings that indicate which characteristics promote the mobilisation of private capital (see Section 5.2).

Regression analysis (logit)

Another method for analysing causal factors is regression analysis. This was used to analyse factors affecting the selection of countries and FIs (evaluation question 6). The regression analysis identifies statistical regularities with respect to average interrelationships across all countries and financial institutions examined. It does not analyse individual cases, which may also be inconsistent with the findings presented. Unlike QCA, regression analysis is based on the law of large numbers and is only used to analyse large data sets. The regression analysis was used to determine, for the four funds that were part of the causal analysis, in which characteristics the countries and FIs refinanced by the structured funds differ from those without refinancing. Here the logit model was used to calculate whether and how specific variables at the level of countries and financial institutions affect the probability of being refinanced by the structured funds. This interpretation of the outcomes is based on the assumption that the countries or FIs do not differ with respect to those indicators not analysed (ceteris paribus). For the analysis at country level, the evaluation team used country-specific World Bank indicators on the country income group, the financial market and the business environment. To analyse the FIs, data on the financial and social performance of MFIs taken from MIX Market were used. For the logit model the evaluation team calculated what effect the financial performance of the financial institution and its target-group focus[22] have on the probability of its being refinanced by the structured funds. The findings from this analysis form part of Section 6.1 and are summarised in Table 15, Table 16 and Table 17 in Annex 9.9.

[21] Based on an encoding system in MaxQDA

[22] Table 14 in Annex 9.9 provides an overview of the indicators used for the analysis.

Difference-in-Differences (DiD)

DiD is a quasi-experimental method. It is used to substantiate causal effects using observational data. This requires investigators to explore as precisely as possible what would have happened without the intervention. DiD compares the trend in a treatment group that has received the invention, with the trend in a control group that has not received the intervention. The trend is measured using outcome indicators for which values are recorded at two points in time: before and after the intervention. It is assumed that without the intervention the treatment and control groups would have followed the same trend (this is referred to as the 'parallel trend assumption'). If the treatment group has changed more over the given period than the control group, this change can be attributed to the intervention (Shadish et al., 2002).

This evaluation used DiD to analyse the effects of the funds on the FIs. As in the case of the regression analysis the evaluation team used the MIX Market database, which collects annual data worldwide on MFIs – though not on commercial banks or leasing companies. MFIs make up 124 of the 202 FIs financed by the four funds with a focus on MSMEs. The analysis is confined to these four funds. Of these 124 MFIs, around 70 are included in MIX Market, depending on the indicator. They constitute the treatment group. The control group comprises all other MFIs in the countries where the funds finance at least one MFI. Changes in the treatment and control groups were analysed using criteria for the size of the MFIs, their financial performance and their target-group-orientation (see Table 14 in Annex 9.9). Two points in time were compared: one year prior to establishment of the fund, and the last year for which data were available, provided that this was between 2016 and 2018. The year prior to establishment of the fund was selected as a proxy for the date of financing, because data indicating the year in which the FI was first financed by a structured fund were not available in all cases.

Contribution analysis

Contribution analyses are used to systematically test assumed causal links. They systematically analyse the causal pathways in a ToC in order to determine how plausible it is that causal effects occur, why (or why not) this is the case, and what factors play a role in this (Mayne, 2011). To examine the causal pathways, previously defined assumptions and risks, as well as expected effects, are operationalised through indicators that are subsequently tested using the evidence gathered. If the evidence then for instance substantiates a risk or several risks that underlie the path, but not the expected effects, this indicates that due to the risks which materialised the expected effect did not occur. The analysed assumptions and risks are then used to rate the plausibility of the individual causal pathways, in order to subsequently update the ToC (Mayne, 2012).

This evaluation used inter alia the contribution analysis to assess the effects of the structured funds on the target groups (evaluation questions 5 and 6). As well as to substantiate assumed causal pathways, contribution analysis was also used to analyse which factors or steps can increase the probability of the anticipated effect. The aforementioned steps of the contribution analysis were applied to all causal pathways between input (TA and capital) and induced output (simplified access to financial products for target groups of the structured funds) in the ToC (see Figure 11). The analysis left out the causal pathways at the outcome and impact levels, because it was not possible to generate any empirical evidence here. The evidence used comprised the findings generated by the quantitative and qualitative methods – chiefly the content analysis, the descriptive statistics, the regression analyses and the quasi-experimental method. A summary of all assumptions and risks can be found in the Annex (Section 9.2). The original ToC was adjusted on the basis of the evidence concerning the assumptions, the risks and the actual effects (see Chapter 7).

3.3 Assessment of the methodology

Integrating different data collection and analysis methods enabled the evaluation team to triangulate the findings, and thus largely offset weaknesses inherent in the individual methods.

One limiting factor for evaluating structured funds is the complexity of the causal chain. This chain is long due to the many actors involved, which include investors in the funds (the BMZ and other official donors, development banks, private investors), fund managers, FIs and finally the sub-borrowers. FIs are the direct target group of structured funds, and sub-borrowers the indirect target group. The effects on sub-borrowers in particular are achieved through refinancing by FIs, and therefore can only be an indirect effect of structured funds. The causal chain thus includes many theoretical assumptions, and might potentially be broken at several points.

The regional and sectoral distribution of the structured funds poses a challenge for the evaluation, particularly with respect to the analysis of development impact. Structured funds are used in many sectors, for instance in MSME financing, climate action or education. Due to the sectoral and regional heterogeneity of funds, the evaluation team decided against 'analytical breadth', which presupposes that cases are comparable, and in favour of 'analytical depth', involving intensive and in-depth survey/investigation and analysis of individual funds, countries, FIs and sub-borrowers. The causal analysis thus focuses on MSME financing. Transferring the findings on effects of structured funds to other sectors is thus only possible to a limited extent.

For funds in the MSMSE financing sector, the criteria-based selection of the funds did ensure the transferability and relevance of the findings, although the small number of units actually surveyed/investigated limits the extent to which the findings can be generalised to the population (i.e. their external validity). The criteria-based selection was performed successfully with regard to the case study countries and financial institutions.

For selection of the surveyed sub-borrowers, no criteria-based or randomised selection of cases was possible, which limits the extent to which the findings at this level can be generalised. In general, the effects of MSME loans on sub-borrowers were not the focus of this evaluation, as these have already been analysed extensively in the scientific literature (see for example Maitrot and Nino-Zarazua, 2015). Moreover, this aspect does not take into account the particular feature of structured funds – i.e. financing through FIs. In order to nevertheless be able to draw conclusions concerning the effects of structured funds at the level of sub-borrowers, the evaluation team looked at the processes and standards applied by FIs when lending to sub-borrowers.

A further limiting factor for this evaluation was access to information. Full information on financial and social metrics with respect to the FIs was not available to the evaluation team, as this information is only partially recorded for reporting to the BMZ. To deal with this limitation the evaluation team first of all drew on secondary data from MIX Market, and secondly collected data of their own at the level of the FIs. However, it was not possible using these two data sources either to cover the population of all FIs refinanced by the four funds operating in the field of MSME financing, or to produce a random sample of the population. The MIX Market database contains only information on MFIs. Although more than half of the FIs financed by the funds are MFIs, refinanced commercial banks or leasing companies are still not included when using this data source. Furthermore, the MIX Market database only contains information on just over half the MFIs refinanced by the structured funds. However, it is not assumed that this leads to a distortion of the findings, as the MFIs included in MIX Market are not significantly larger or smaller than the MFIs which are not in MIX Market.[23] The response rate for primary data collection at FI level was around 25 per cent. This is explained inter alia by the fact that the survey was not always sent to all FIs; due to the high costs for fund managers,

[23] For this analysis the figure for the total assets of the MFIs not available in MIX Market was researched manually. This information was publicly available for 21 of the 52 MFIs.

only a selection of typical FIs was included. When interpreting the findings from the analysis of these two data sources, it was therefore assumed that the FIs for which no information is available do not differ systematically from the FIs for which information is available. Nonetheless, it is not possible to rule out a possible distortion of the findings of the analysis resulting from information gaps either in MIX Market or in the data collected. This must be taken into account when interpreting the findings.

To decrease the probability of a possible confirmation bias that limits the interpretation of information, elements of process tracing were applied. Confirmation bias is the tendency to seek, interpret and favour information that confirms (one's own) expectations (Punton und Welle, 2015b). When only information is analysed that is believed to be relevant for the hypotheses being tested, important information may be overlooked because it is difficult to integrate into those hypotheses. The term 'confirmation bias' also describes the tendency of interviewees to respond in ways that confirm what they take to be the hypotheses. To deal with this limitation, this evaluation used elements of the process tracing method to assess the evidence. When assessing the strength of the evidence, factors were included that were designed to prevent a confirmation bias, such as the triangulation of sources and the distinction between expected and unexpected statements.

The quality of the findings is largely ensured by a systematic approach in all methods. This was achieved for instance by operationalising the evaluation questions in the data collection instruments based on the evaluation matrix, and through computer-based analysis of the indicators in relation to the matrix. The findings were triangulated with respect to methods (cross-method synthesis), data (e.g. comparison of case study findings with uninvolved sector experts and benchmark groups) and team members (cross-check principle within the team for case summaries and synthesis). All products of the evaluation (concept note, inception report and this final report) underwent both internal and external peer review processes, were checked for factual correctness together with the reference group, and content was discussed where rival interpretations of findings arose.

4. WHEN IS A STRUCTURED FUND APPROPRIATE FOR ACHIEVING DEVELOPMENT OBJECTIVES?

To understand how best to use structured funds in German development cooperation, DEval analysed under which circumstances the financing approach is appropriate for achieving development objectives and in which cases other financing approaches may be preferable. The possible advantages of structured funds include

- the pooling of financial resources
- cooperation and harmonisation between various donors
- the mobilisation of private capital
- the financial sustainability of the structured funds themselves.

Structured funds are not a financing approach designed solely to achieve a development funding goal. They should also operate on a financially sustainable basis, to ensure responsible management of the budgetary resources used. In the long term, structured funds should also be viable on the financial market without official investment. The present chapter explores the extent to which structured funds achieve the financial sustainability and development impact to which they aspire, and what preconditions need to be in place to make this happen. This chapter is based on the answers to evaluation questions 1, 2 and 4. It will analyse the logic and the financial structure of the funds, and identify the extent to which their development impact is ensured by appropriate management of the financial approach.

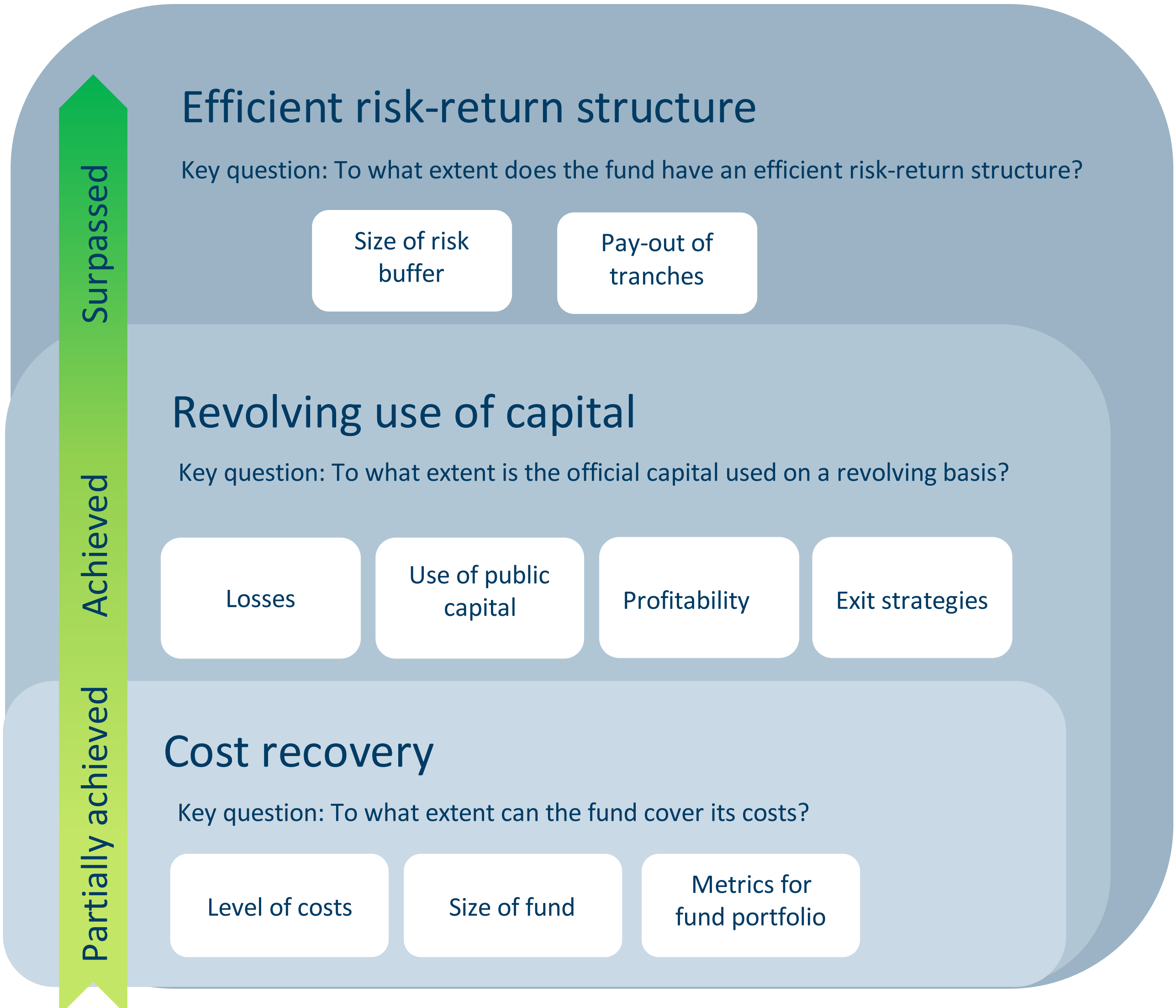
4.1 Financial sustainability

As well as their development orientation, the financial sustainability of structured funds is also pursued as a fundamental prerequisite for using structured funds in development cooperation. In the long term it is envisaged that this financing approach will become self-sustaining, i.e. will be able to manage in principle without receiving any additional financial flows. This presupposes, among other things, that the revenue generated from interest payments is sufficient to cover the funds' costs. The official capital paid in is used according to the revolving use of capital principle (see Section 2.1). Once paid in, this capital should be retained in the fund and help enable it to continuously extend new loans.

Conceptual framework for rating financial sustainability

The evaluation examined the financial sustainability of the financing approach and identified the necessary conditions for it. For this purpose the evaluation team constructed a multi-dimensional concept of financial sustainability. The financial sustainability of financing approaches in the narrow sense is often equated with their long-term ability to cover their costs. However, the findings of this evaluation indicate that when analysing the financial sustainability of structured funds there are other criteria that should be taken into account. These concern the revolving use of the official capital and the appropriateness of the funds' risk-return structure. Taken as a whole, these criteria reflect whether or not structured funds are an efficient financing approach that can be used sustainably. Each of these criteria is assigned to a category that can be used to rate the financial sustainability of a fund. The categories are designed to show what level of financial sustainability the funds have achieved. The categories are arranged along a scale that ranges from 'partially achieved', through 'achieved' to 'surpassed' (see Figure 12).

Figure 12 Rating scale for financial sustainability



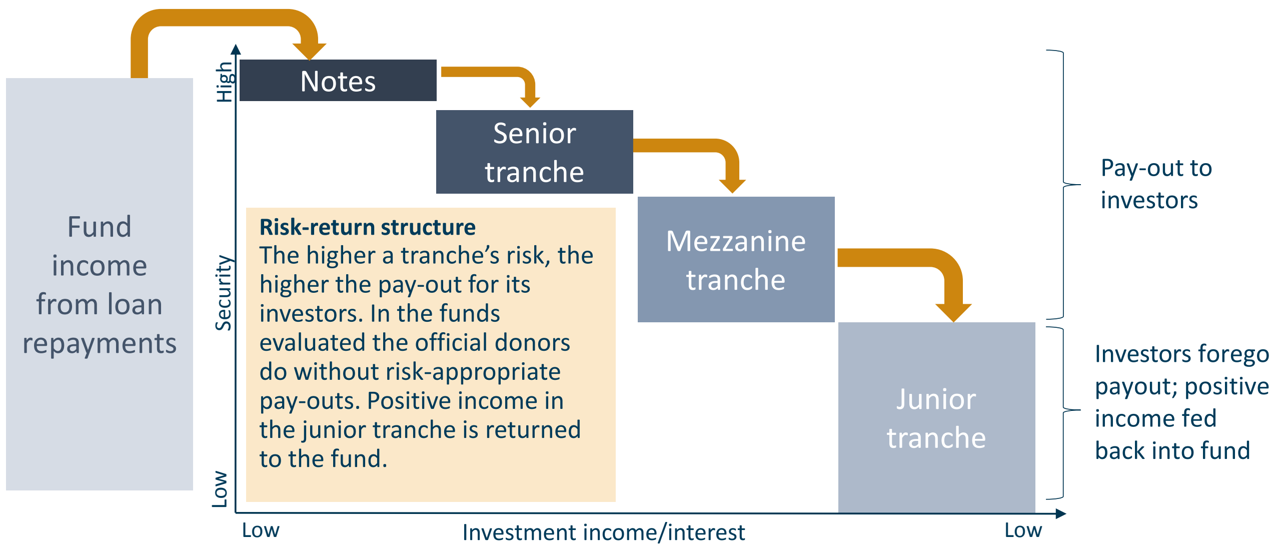
Source: authors' own visualisation.

The evaluation team considers a fund to have 'partially achieved' financial sustainability when it can break even. For the analysis the evaluation team identified three indicators: the size of the fund, the level of its costs and the nature of its investment. The basic assumption is that a fund must be of a certain size in order to be able to cover its costs (Latzko, 1999; Malhotra et al., 2007; Rea et al., 1999). For this purpose the team first of all measured the size of the fund in terms of its financing volume and the number of countries in which it operates. In a second step the fund's cost structure was analysed. This involved ascertaining the total costs of the fund, examining the various cost components and identifying possible cost drivers. In a third step the fund's investment portfolio was analysed. Depending on their nature and size, investments can have a considerable effect on a fund's cost structure, thus permitting further conclusions as to whether the fund can break even.

The evaluation team considers a fund to have 'achieved' financial sustainability when the official capital paid in is actually used on a revolving basis, and a strategy is in place that defines options for the official donors to exit the fund in the long run. The revolving use of capital principle means that once paid into the fund, the official capital is maintained and can be used for continuous lending without requiring any further inflows from official donors. This assumes that the returns from the loans extended are sufficient for the fund to cover its running costs and the dividends it has promised to investors. To analyse the revolving use of capital the evaluation team looked at the amounts paid in by official donors since the fund was set up, and payments into the first loss tranche. These payments may be due to losses incurred by the fund when replenishing the first loss tranche, or may be used to increase the size of the fund. While the latter leads to a growth of the fund, replenishing the first loss tranche following losses means that the official capital is not being used on a revolving basis.

The evaluation team considers a fund to have 'surpassed' expectations of financial sustainability when, as well as being able to break even and use the official capital on a revolving basis, it also distributes risk and return efficiently for the investors. According to the logic of the waterfall structure, investors in riskier tranches receive higher dividends, while investors in less risky tranches receive a lower remuneration (see Figure 13). At the same time the riskier tranches serve as a risk buffer for investors in higher tranches. For each tranche, securities with different risks, returns and maturities are issued to investors who are then able to pursue their specific investment and risk strategies. The evaluation analysed the efficiency of the risk buffer profile and the monetary returns of the tranches, i.e. the risk-return structure. To this end the team looked at the size of the risk buffer and the costs incurred by the fund in deploying the risk buffer. These costs vary depending on the size of the individual tranches and their pay-out structure.

Figure 13 Waterfall structure of a structured fund



Source: authors' own visualisation.

Findings on the financial sustainability of the funds

4.1.1 Cost recovery

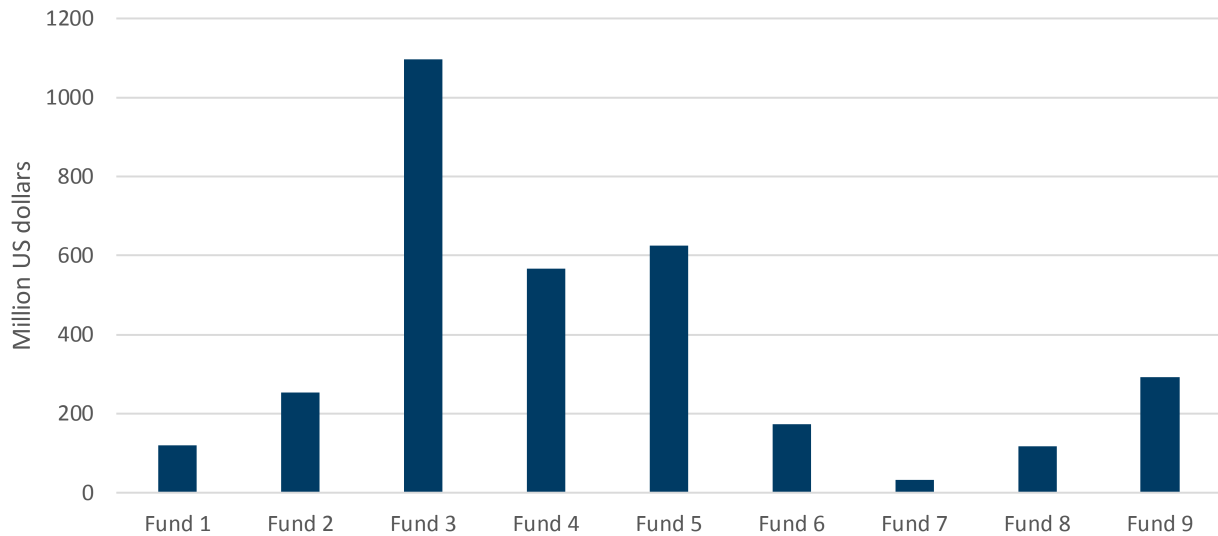
Nine of the ten funds break even, hence in these cases financial sustainability has already been partially achieved. By contrast, one fund was wound up because it was unable to recover its costs. In relation to the three indicators (size of funds, level of costs and nature of investment), the funds evaluated differ in some cases considerably. This section will discuss the findings on each of the indicators.

Size of the funds

The ability to break even depends largely on the size of the fund. This applies to both the financing volume of the fund and to the number of countries in which it operates. For the financing volume the evaluation team identified a benchmark of around 100 million US dollars that a fund should have at its disposal, at least in the long term, in order to break even (I035). In the case of the fund that was wound up the volume fell far short of this value. As a result, it was no longer able to recover its costs in the low-interest environment of its target region (D287; I035). For the remaining nine funds the financing volume varied widely depending on the maturity of the fund and the target region (see Figure 14). Eight funds have a financing volume of at least 100 million US dollars, while one fund has just 31 million US dollars. This can be attributed to both the difficult market in its target region and to its short duration (D403). This fund was not seen to have had any problems recovering its costs so far. In the long term, however, there are plans to grow the fund to 100 million US dollars (D403).

The average total investment of the funds is around 342 million US dollars. Figures range between 21 million and one billion US dollars, depending on the size and age of the funds. In many cases the volume of investment has been continuously increased since the funds were set up. In a small number of cases difficult macroeconomic conditions in the target countries or a poor-quality portfolio have led to a stagnation or sometimes a reduction in investment (I059; D430).

Figure 14 Financing volume

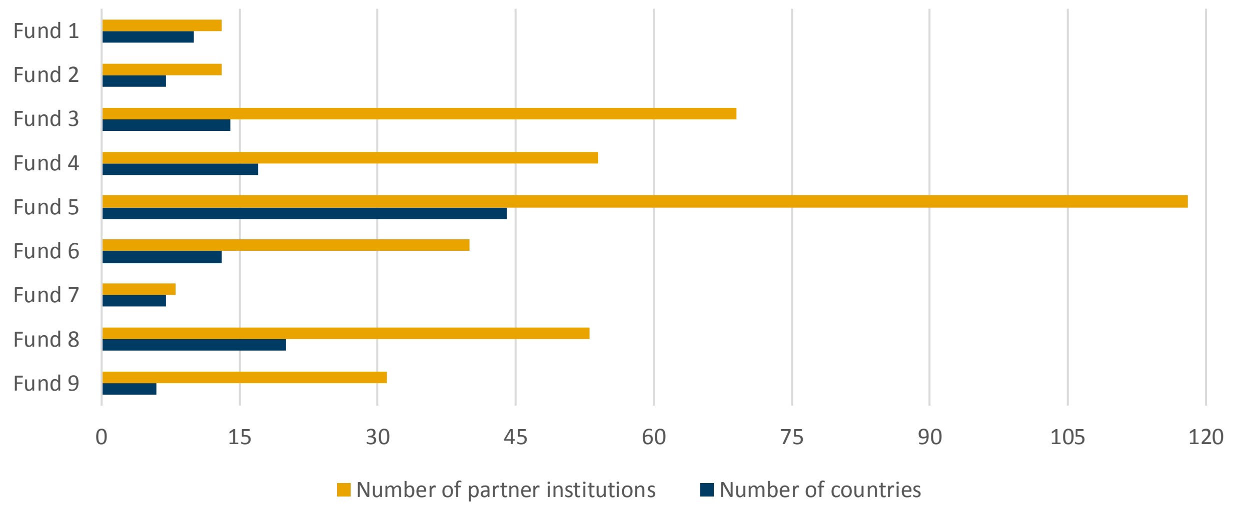


Source: authors' own visualisation, based on the funds' annual reports; figures as at: 31 December 2018.

The analysis showed that most of the funds operate in fewer than 15 countries. This low number of countries can have a negative effect on the development of a fund's business (I042). Depending on the economic situation in just one or two of a fund's target countries, for instance, the fund might then generate only moderate profits or face increased losses. Funds with a strong regional focus are most likely to poorly diversify their risks.[24] One example that demonstrates this is the liquidated fund. The target region of the fund was confined to six countries, all of which were subject to a similar economic cycle. The market environment in the region, which was characterised by historically low interest, made it impossible for the fund to generate the returns it needed in order to break even. As a result the fund had to be wound up (D287; I035). Figure 15 shows the nine active funds together with the number of countries in which they operate and number of partner institutions.

[24] The scope for diversifying risk is one of the basic ideas underlying this financing approach. This includes both the number of countries and the number of FIs in which a fund can invest. Diversification enables a fund to achieve a broad spread of the country-specific and financing risks associated with its investments, thus minimising the risk of a write-off.

Figure 15 Number of countries and partner institutions



Source: authors' own visualisation, based on the funds' annual reports; figures as at: 31 December 2018.

Cost structure

The total expense ratio of the selected funds[25] is between 1.5 and 2.16 per cent, which is significantly lower than the industry average of 2.3 per cent (Symbiotics, 2019). Even compared to selected actively managed emerging market funds, the total expense ratio of the evaluated structured funds ranges from average to above average. The total expense ratio reflects the administrative and management fees of the fund in relation to their outstanding average loan volume. However, this method of calculation ignores other costs incurred by funds inter alia as a result of hedging transactions or the payment of dividends and interest to their investors. To obtain a more comprehensive and better contextualised picture of the cost structure, DEval therefore calculated an expense ratio for the nine active funds that relates all their identified cost components to their average investment volume.[26] According to this method of calculation the total expense ratio of the funds is between 4 and 20 per cent.

The level of costs and the cost structure vary widely depending on the size and type of investment of the funds. On the operational side, the costs include for all funds the direct operating costs (costs for administrative and legal services, marketing etc.) and costs for the fund manager. The latter are generally based on a basic fee that is aligned with the managed portfolio volume, plus a performance bonus that is based on previously defined performance criteria (I038). In many cases costs are also incurred for hedging interest and exchange rate risks (see Box 3 on hedging). These costs are significantly higher for funds that provide local currency financing than for funds that provide financing chiefly in hard currency. Usually, however, these hedging costs are passed on to FIs financed in local currency, which means they do not remain with the fund (see next section on 'Type of investment'). All funds also incur financing costs in the form of interest and dividend payments to their investors. These costs are determined chiefly by the number of investors, the risk they carry and the performance of the fund.

[25] The data on the total expense ratio are only available for six of the nine active funds (as at 31 December 2018). Due to the limited availability of data the team looked only at funds focused on MSME financing.

[26] This method of calculation takes account of direct operating costs, management fees, costs for hedging transactions, and interest and dividend payments to noteholders and to A and B shareholders. The sum total of these costs is placed in relation to the outstanding investment volume of the funds. The figures are average values for the period 2016-2018.

Type of investment

The average size of loan granted by the funds varies between 2.3 and 18.5 million US dollars. Table 6 shows the distribution of the average loan sizes. Most funds issue mainly small loans of less than 10 million US dollars, plus occasional larger loans. The size of these loans is determined largely by the type of FI financed and the sector in which the financed FI operates. Banks or project financing arrangements in the renewable energy sector, for instance, usually require larger loans than small MFIs. Since the award and management of small loans is relatively cost-intensive (I015; I017), FC approaches that operate cost-effectively often extend loans in excess of ten million euros. By contrast, the cost structure of structured funds enables the financing of smaller loans in some cases. So compared to other FC approaches the pooling of resources by a fund is additional particularly in cases where the financed FIs are served with relatively small loans.

Table 6 Average loan sizes and their distribution (in US dollars)

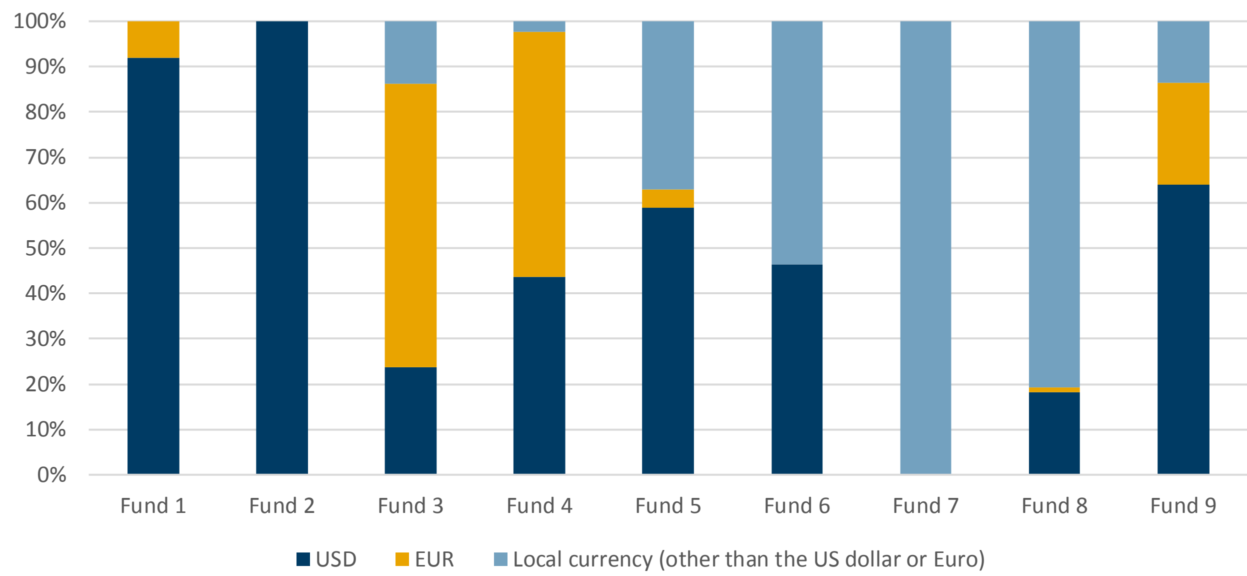
	< 8 million	8 – 10 million	> 10 million
Number of funds	4	3	2

Source: authors' own table.

The majority of the evaluated funds provide local currency financing – depending on the needs of the FI and the risk framework prescribed by the fund. Figure 16 shows local financing as a percentage of the volume of investment[27] for each fund. Only one fund spends 100 per cent of its investment volume in a local currency (other than the US dollar or the euro). By contrast, two funds provide financing only in euros or US dollars. The issue of local currency loans depends on the needs of the FI and the risk framework prescribed by the fund. Funds have defined limits for the assumption of exchange rate risks, for instance. If these limits are exceeded due to the absence of hedging options for the fund, or if the costs entailed are no longer financially viable, the fund is no longer able to make the relevant local currency transactions (see next section). The evaluation shows that local currency financing need not necessarily mean that the fund assumes the exchange rate risks. In one case, for instance, a loan was granted in local currency, but the loan accounts entered the balance sheet in US dollars and therefore the loan had to be repaid in US dollars. So although the fund had spent local currency, the exchange rate risks remained with the FI taking out the loan (I091). The conditions attached to local currency loans – and the transparent handling of them – are thus a crucial factor.

[27] A distinction is drawn between financing in US dollars, euros or a local currency (other than the euro or the US dollar). When interpreting this it is important to note that in some target countries the euro or the US dollar are considered local currency. These countries include Kosovo, Montenegro, Ecuador, El Salvador and Panama.

Figure 16 Percentage of investment in local currency



Source: authors' own calculations, based on the funds' annual reports; figures as at: 31 December 2018

The funds have various options for managing the exchange rate risks. The costs incurred are usually passed on to the FIs taking out the loans (see Box 2**).** Access to the international capital market and the expertise of the fund managers often enable the funds to manage the exchange rate risks better and more cost-effectively than the FIs taking out the loans. Local currency loans are provided where needed, however, as larger banks or more formalised FIs in particular are able to bear the risks themselves, or do not require local currency financing. In many cases the costs incurred by the funds when hedging the exchange rate risks are passed on to the FIs taking out the loans in the form of a risk premium. The funds may become less competitive as a result, and therefore do not fully hedge the risk exposure of all their local currency transactions, which means they bear some of the risks of the financing (D134). Some funds have introduced so-called L shares on the liabilities side, which absorb losses from transactions not hedged (D470; I047; D122). These enable the funds to issue financing in local currency without hedging the risks, as the high costs of hedging would not be cost-effective (I031). The risks are then borne chiefly by the investors in the L shares, which are usually official donors. The L shares are remunerated in accordance with the waterfall structure of the fund in question.

Box 2 Local currency financing – Risk management solutions of the funds

Hedging

Various hedging solutions are available to the funds. One possibility is to pursue their own hedging strategy by themselves trading in financial derivatives (swaps, futures and options), thus hedging part of their portfolio (D3012, D413). Another possibility is to have the currency risks hedged by a currency solution provider. The best-known of these is the TCX Fund, which – also operating as a structured fund – pools a large number of different currency risks in a single fund. This enables it to provide hedging solutions for highly volatile or non-marketable currencies (TCX, 2018).

L shares

In some funds so-called L shares have been introduced within the capital structure that bear the risk of the funds' unhedged currency positions (D470). This enables the funds to issue local currency loans which would otherwise not be financially viable due to the high hedging costs. The risks are assumed by the investors in the L shares, which are usually official donors. The pay-outs for the L shares are based on the waterfall principle of the fund in question.

Back-to-back financing

In this risk management mechanism the local currency loan is passed on to the FI through a local third-party provider. For this purpose the fund makes a hard-currency deposit, which has the same term as the loan to be issued, with a local bank. The local bank then issues a loan in local currency to the FI. The fund's deposit serves as collateral for the loan (I091).

The supply of local currency financing delivers considerable additional development benefits compared to other financing approaches, as the latter usually issue loans in foreign currencies (see Section 4.2.1). The exchange rate risks that arise then remain entirely with the borrowers, who have to manage them either by hedging or by paying risk premiums (Colla, 2017). However, in view of high risk premiums or non-marketable local currencies, numerous borrowers in recipient countries are unable to fully offset the exchange rate risks. Furthermore, many borrowers underestimate the currency risk and are therefore unwilling to accept the risk premiums, which are sometimes high (Colla, 2017). Consequently, many borrowers are not fully protected against the exchange rate risks. For a long time this practice was considered acceptable, because it was assumed that local currencies would remain stable. However, not least the financial crisis in 2008 exposed the unexpected volatility of global foreign exchange markets (e.g. the South African rand in 2008, the Ukrainian hryvnia in 2015 or the Nigerian naira in 2016), along with the associated consequences for the borrowers, which in some cases threatened their livelihoods.

4.1.2 Revolving use of capital

The findings of the analysis show that the majority of the funds use the official capital on a revolving basis. The majority of the funds therefore had either few losses to report, or none at all. In most cases losses occurred especially after the funds were launched, as at this point in time they did not have any significant repayments that would enable them to cover their initial costs (e.g. I024; D065). In some cases funds also recorded losses later on, due largely to defaults on loans issued (D419; D259; D019). All these losses were absorbed by the junior tranche of the funds, which means that the investors in the mezzanine and senior tranches were not affected. In two cases the junior tranche had to be replenished with official capital following losses, in order to maintain the required capital in the tranche (D020; D259).

If losses can be compensated by prior or subsequent profits they can be considered harmless with regard to the financial sustainability of the funds. One fund has recorded losses almost without exception since its establishment, as a result of heavy loan defaults (D020; D019). This suggests that the official capital has so far not been used on a revolving basis. Consequently, the financial sustainability of this fund can only be considered to have been partially achieved. Although appropriate measures[28] have since been taken to improve the fund's management and portfolio quality, it remains to be seen how effective they will be over the next few years.

There are considerable differences between the funds in terms of their profitability. While the returns of some funds are just about sufficient to cover their operating costs and the agreed targeted dividends for the investors in the mezzanine and senior tranches, in other cases they allow additional dividends to be paid out to shareholders (D255; D089; D239). One reason for this is the different ages of the funds. It emerges that the three funds that generated the highest profits[29] have existed the longest. This is partly due to the higher repayments that they receive compared to younger funds. Secondly, the cost efficiency of the funds also plays a role. The more cost-efficient a fund is, the higher its profits will be. Finally, the market environment in which the funds operate is also very important here. The findings of the evaluation show that the profits of the funds operating in sub-Saharan Africa are lower than those of the funds operating in other regions. This is due to the macroeconomic conditions in sub-Saharan Africa, which are often more difficult (D413; D403).

The analysis of the exit options for official donors shows that only two funds have a defined maturity for the BMZ shares (D065; D343). While the securities of the mezzanine and senior tranches all have fixed maturities, in most cases the capital of official donors is paid into the junior tranche with unlimited maturity. A clear exit strategy that defines dates for reviewing the continued need for the official capital and the nature of the exit was in most cases not yet in place when the capital was paid in, as it was at that point very difficult to predict ex ante when the right time to exit would be, and what the best exit strategy would then be (I122). The findings of the analysis indicate that an exit by official donors might make sense particularly when the fund has been operating sustainably for several years, when the supply of financing has been successfully established in the target markets, or when other investors have been found for the junior tranche (D403). In the case of the evaluated funds these conditions were not yet met as of the date of the evaluation, and there were no examples of an exit by official donors. In a small number of cases, once the fund has been operating for a certain period a review will be conducted to examine when and how an exit might be possible (D403). This might for instance involve a pay-out to the official donors, or a transfer of the official capital to the fund. In the first case the capital would be returned to the federal budget (D497). In the second case the shares could be sold to another investor or transferred to the partner countries (I122; D020; D403).

4.1.3 Risk-return structure and its efficiency

In many cases the funds display partial efficiency losses in the design of their risk-return structure. Only in a few cases can the target of financial sustainability be rated as 'surpassed' (based on the defined rating criteria, see Section 4.1). Although the waterfall structure of the funds is basically an efficient structure for various risk-return profiles of different investor types, in a few cases its specific design displays partial efficiency losses. These result first of all from the cost structure of the mezzanine tranche, and secondly from the country windows in the junior tranche applied in some funds. The complexity of this structure means that investors require more information.

Since the official donors have so far done without a risk-appropriate remuneration of their shares, the mezzanine tranche is the most expensive asset class of the funds (I008). Generally speaking, higher-risk tranches are remunerated with higher returns. According to this logic the junior tranche would then need to be remunerated with the highest returns. This is not the case, however, as the investors in the junior tranche – so far almost exclusively official donors – have not claimed their risk-appropriate remuneration. The investors in the mezzanine tranche therefore receive the highest returns (D470). In some funds the mezzanine tranche is currently being restructured in order to save costs and simplify the structure of the funds (I047; I040) (see also Section 5.2). This should make the funds more efficient and create more space

[28] These include an investment of the fund manager in the junior tranche (and in the losses) and expanding the local presence of the fund manager.
[29] Average figures for the years 2016 to 2018.

for private investors. While some funds are reducing the volume of the tranche, one fund was already configured with just two tranches (junior and senior tranches) when it was set up (I048).

Furthermore, the use of country windows within the junior tranche in its present form limits the efficient distribution of risks by the funds. The so-called country windows stipulate that the BMZ capital may only be used for investments in predefined countries. Country windows enable a fund to use bilateral resources from the BMZ, and thus to focus on particular countries within its structure (I030; I031). Country windows are currently being used in four funds. The approach followed to date affects both the assets side and the liabilities side of the evaluated funds. On the assets side the budgetary regulations on the use of resources lead to restrictions on the funds' scope for diversification.

On the liabilities side, in the present form they also lead to efficiency losses in the distributions of risks within the funds (I042; I031). In the evaluated funds the country windows require the introduction of additional C shares to cover specifically the risks of the respective country investments. This means that the risk buffer of the junior tranche has to be spread across different C shares, and that the funds' profit and loss account has to be adjusted. As a result the structure of the fund becomes more complex, more expensive and – for private investors in particular – more difficult to understand. This is why the KfW Development Bank and the BMZ are already discussing a possible simplification of the structure on the liabilities side. One recently launched fund was set up without any further sub-division of the junior tranche.

4.2 Development orientation

This section will focus on the question of how the development orientation of the funds is realised and ensured both when they are set up and in the course of their business operations.

Structured funds can pursue development objectives through:

- complementarity to other development activities
- the strategic orientation when a fund is set up
- adjustment of the funds after launch
- decision-making on the funds' day-to-day business
- the division of tasks within the fund
- harmonisation of the approaches of the donors involved in the fund
- strengthening of local actors

The following sections look at how effectively these options are used.

4.2.1 Complementarity of structured funds and bilateral development cooperation approaches

A distinctive feature of structured funds is that they address the following objectives:

- Support local FIs in order to stabilise and strengthen the financial sector
- Deliver a higher number of loans through the supported FIs, thus increasing access to finance
- Design and build a portfolio of supported FIs to benefit sub-borrowers with a particularly high financing requirement
- Build markets and platforms in various sectors and areas such as MSME development, and climate and education finance. Create and develop financial services for the respective markets through these FIs, and support platform-building through dialogue between countries and between groups and associations (see Section 4.2.5) (I038; I060)
- Set regional priorities – which is enabled by the regional structure of the funds
- Bring together individual bilateral FC projects (I122; I047)
- Mobilise private capital
- Pool the finance provided by individual donors and investors (I030; I126; I050; I043).

See Table 10 in Annex 9.3 for an overview of the objectives of each fund.

Structured funds meet the need to finance small-scale loans to FIs that is not met by other bilateral cooperation approaches. It is particularly appropriate to compare direct lines of credit with structured funds because the objectives pursued through these two financing approaches coincide. Both finance the development of MSMEs or other development-related interventions. Direct lines of credit to single FIs are provided by individual donors, which means that for smaller loans, for instance to support MFIs, they are usually not cost-effective. Structured funds operate particularly in cases where an intervention is too small to be a project in its own right. By pooling the finance provided by various donors and bringing together several projects (some of which already exist), structured funds can also operate efficiently with small-scale loans (I038). While it is true that under the so-called APEX approaches, which are classified as direct lines of credit, resources are also pooled and small-scale loans thus become financially viable, the financing delivered through this approach is tied to its guidelines. In the case of structured funds, the issue document produced when a fund is set up defines the fund's own guidelines, which are important for managing the fund in line with its development orientation (I038; I002; I122; I123).

Structured funds also support interventions that are not covered by an existing BMZ priority area, through which local currency financing is to be offered or which seek to cooperate with private FIs. Since their operations involve a regional financing approach, funds can set regional priorities that complement existing bilateral projects and interventions. This enables them to address topics that do not fall within an existing BMZ priority area. Unlike other approaches, structured funds enable financing in local currency and/or cooperation with private FIs. In bilateral projects both are currently possible only to a limited extent (I038; I017), which demonstrates the complementarity of bilateral development cooperation and structured funds. Supporting interventions that do not fall within a BMZ priority area, however, also means a thematic fragmentation that will need to be harmonised with the future development-policy priorities that the BMZ sets in relation to the core areas of the 2030 reform process (BMZ, 2020).

Structured funds are a market-oriented financing approach that delivers loans on normal market terms, and should therefore be seen as complementary to other approaches and instruments. For example, as described in Section 4.1, as part of the risk diversification strategy only a small number of riskier countries and FIs are promoted, and the approach allows only limited control at the level of the sub-borrowers. The approach should therefore be seen as complementary to other approaches and instruments. For financing in least developed countries (LDCs), and for interventions whose impact at target group level need to be directly influenced, other instruments can be considered. The traditional choice is grants. For financing that is to be provided on concessional terms that do not reflect market conditions, instruments such as development loans are used. In development loans, the official funds are used to reduce costs for the borrowers by offering more favourable terms, whereas in structured funds they are used to cover the risk of private investments. This has clear advantages for attracting private investors. On the other hand, as long as the premise of market conformity needs to be met the approach is unlikely to elicit a willingness to finance target groups that are more risky, even if they are highly relevant for achieving development objectives.

Setting up a fund is a time-consuming process that is not well suited for quickly closing acute financing gaps. The average time taken between the first programme proposal, i.e. the design of the fund, and its actual establishment, is at least one year. Designing a fund involves consulting with the parties involved in establishing the fund concerning its strategy, and setting up the fund's structure in accordance with applicable law (in this case Luxembourg law). This affects the speed at which a fund can respond to acute financing gaps (D014; D070; D124; D213; D270; D294; D343; D397; D424; D501).

4.2.2 Strategic orientation when a fund is set up and scope for adjustment thereafter

When a fund is set up the development objective is defined jointly by the BMZ and the KfW Development Bank, and any other relevant official actors. Under Luxembourg law (SICAV-SIF), when structured funds are set up they have great flexibility in their strategic orientation. At this point both the regional focus and the sector to be addressed are defined, and the principles and objectives of the relevant BMZ strategies are integrated (I002; I003; I035; I020; I038). Here, it must be remembered that the budgetary resources provided by the BMZ need to be ODA-eligible based on the refinancing of ODA-eligible countries (D590).

The objectives pursued by the funds closely match the goals defined in the BMZ strategies. The evaluation compared all objectives formulated by the funds, with those formulated by 16 strategies of the BMZ (see Annex 9.5) that are linked to the structured funds either thematically or geographically. Both the thematically oriented sector strategies and papers, and the regional strategies, show a close match (D522; D523; D524; D525; D526; D527; D528; D529; D530; D531; D532; D533; D534; D535; D536; D537). However, it should be borne in mind that the 16 strategies cover a broad array of themes. The core areas and initiative areas defined as part of the BMZ 2030 reform strategy prioritise development themes that may also affect the future orientation of funds and their objectives. However, that fact that funds' objectives match the BMZ's goals in itself does not yet indicate whether or how much exchange there is between structured funds and related interventions, for instance in the field of financial market development, or whether synergies are being harnessed.

The structured funds are for instance aligned with the SDGs of the 2030 Agenda and with Germany's 'Development policy for 2030' strategy. Because the structured funds cover topics such as business development (especially MSMEs) and job creation, gender equality, climate action, renewable energy, and environment and biodiversity, they make a particular contribution to SDGs 1 (no poverty), 2 (zero hunger), 5 (gender equality), 8 (decent work and economic growth), 12 (responsible production and consumption), 13 (climate action) and 17 (partnerships for the Goals) (D019; D065; D122; D212; D259; D290; D335; D403; D430; D496; SDG website[30]). At the same time, the strategies 'Development Policy for 2030' and 'BMZ 2030' plan to focus German development cooperation on a smaller number of themes and countries. These countries include reform-minded bilateral partners, global partners for transboundary challenges, and nexus and peace partners. In the future, regional projects (which include structured funds) will be implemented exclusively in BMZ partner countries, and will be thematically oriented toward the BMZ's core areas and initiative areas (BMZ, 2020). To harmonise this strategy with the regional approach, the BMZ will need to clarify for future funds how they can be aligned with these priorities. (D527; D019; D065; D122; D212; D259; D290; D335; D403; D430; D496, (BMZ, 2017b)).

The objectives of the structured funds also reflect the goals of the BMZ's Africa policy. The BMZ's Africa policy is embedded in the strategies 'G20 Compact with Africa', 'Africa and Europe' and the 'Marshall Plan with Africa'. Funds pursue two key objectives of the Africa strategy: the use of ODA funds to mobilise private investment (strategy for Africa and Europe), and the improvement of macroeconomic, business and financial frameworks in order to boost private investment (D522; 523; D515; D512; D019; D403; D430).

The objectives of the structured funds are largely consistent with the objectives of the BMZ's sector strategy for 'financial systems development'. However, there is relatively little exchange between the bilateral portfolio or country division working on private sector and financial systems development, and the structured funds. Both the evaluated structured funds and the sector strategy aim to support partner countries in developing inclusive and stable financial systems. This does not mean simply promoting specific target groups through lending; it means strengthening the financial system in the partner country as a whole (D537). Through local FIs, structured funds indirectly extend loans to specific sub-borrowers such as microentrepreneurs or entrepreneurs, thus providing them with access to finance. At the same time, by using and strengthening local FIs such as MFIs, banks and leasing companies they also strengthen the financial

[30] https://sustainabledevelopment.un.org/sdgs

system of the partner country concerned. Furthermore, the funds also support the capacity development of sub-borrowers, FIs and the financial system as a whole, for instance through dialogue forums with banking and business associations.

Currently, however, there is relatively little exchange between the activities of the structured funds and the bilateral portfolio or the country division in private sector and financial systems development. Examples of bilateral programmes in the case study countries with which there is little or no exchange at all include the start-up financing programmes in Serbia (start-up initiative) and the SEDIN programme in Nigeria, which provides SME training and promotes microenterprises. Close exchange, particularly with larger funds that generate systemic results in individual countries, would enable the BMZ to manage financial sector development more strategically and to create synergies.

The sector strategy 'financial systems development' identifies MSMEs and small farmers in particular as (indirect) target groups, as they often lack access to credit. However, structured funds are of only limited suitability for serving small farmers. Structured funds are geared entirely to MSMEs as sub-borrowers, whereas only one of the ten evaluated funds targets smallholders (D537; D019; D065; D122; D212; D259; D290; D335; D403; D430; D496). Structured funds are of only very limited suitability for financing this target group. This is due to the fact that in Africa there are only few MFIs or banks that offer agricultural finance – and those that do, issue large-scale loans to agricultural corporations. Furthermore, loans of the size required by farmers are usually not financially viable for funds, and should be delivered through other financing approaches (Dalberg, 2018).

Scope for adjustment once a fund is set up

When structured funds are designed and set up there is flexibility regarding the envisaged target groups, sectors and regions. Once they are established, however, strategic adjustments are a very complicated matter. This is due to the way the funds are structured. Adjustments to the investment strategies require approval by the shareholders' meeting as well as amendment of the issue document. This complex process protects the fund's strategy that was defined when the fund was set up against particular interests of the various investors in the fund. Discussing and defining the strategy when setting up the fund, as described in Section 4.2.1, therefore takes on even greater importance with regard to the development orientation (issue document). In this respect the limited flexibility of structured funds makes them less suitable for responding quickly to acute liquidity problems and acute crises outside of their defined area of operation.

Nonetheless there are opportunities for (strategic) adjustment of funds in their business operations. This is made possible first of all by the funds' leeway for responding to market developments provided for in their issue documents. This leeway exists for instance with regard to the possible credit volume as well as the volume of current assets and investment loans (all issue documents of the nine funds). Secondly, major changes of direction can be agreed by vote at the shareholders' meeting. Examples from the ten evaluated funds include

- thematic adjustments, such as supplementing biodiversity with adaptation to climate change and emission reduction (EBF) or the addition of renewable energy to energy efficiency (GGF) (D056; D234)
- adjustments to the regional focus, such as broadening it to include the MENA region and the European Neighbourhood Region (D234)
- adjustments to the fund structure, such as extending the maturity or modifying the elative sizes of the tranches (I055; I039; I040; I041)
- adjustments to monitoring and reporting, usually with regard to reporting indicators (D019, D068)
- in one case the complete dissolution of the fund (I035).

The introduction of country windows makes funds less flexible and adversely affects their risk diversification (I003; I123; I030; I031) (see Section 4.1.3). As well as FCR resources, the structured funds also include bilateral resources and resources from special initiatives. Budgetary regulations stipulate that these resources must be used for their designated purpose. For example, country allocations must be used for the country concerned. Furthermore, additional C shares have been introduced for specific countries and regions (I028; I030) within the funds. This means that the profit/loss distribution must be adjusted. The BMZ and the KfW are currently discussing whether and to what extent the structuring on the liabilities side is necessary or might be amended in the future.

4.2.3 Decision-making within the funds and distribution of tasks

Decision-making on fund business by official bodies, and their roles

In operational decision-making for the funds an important role is played by the members of the official bodies, in particular the fund's Board of Directors and the Investment Committee. The Technical Assistance Facility Committee also decides on the use of additional funds for TA. These bodies ensure compliance with a fund's strategy, including its development objectives, for instance by deciding on which FIs to select for support. The Board of Directors is responsible for all general affairs of the fund. In two funds this body is supplemented by a Supervisory Board. On the basis of the investment proposals put forward by the fund manager the Investment Committee decides either for or against investment in particular FIs, or in some cases for or against direct investment**.** These decisions are taken within the framework set out in the investment guidelines. Some funds require a minimum number of committee members to be provided or proposed by the official institutions involved (in some cases at least 50 per cent, and in others at least 75 per cent). The Technical Assistance Facility Committee decides which interventions will be provided to which partner institutions in order to help achieve the fund's objectives. This Committee coordinates its actions with those of the Board of Directors, but is independent of the latter (D400; D429; D272; I029).

Key decisions are taken at the Meeting of Shareholders, where all investors are represented and enjoy voting rights on a basis commensurate with their shareholdings. The Meeting of Shareholders votes on fundamental matters concerning the fund such as amendments to the articles of association or the issue document, and concerning the annual financial statements. These meetings usually take place by telephone, and opportunities for investors to dialogue tend to be limited (D019; D065; D122; D212; D259; D335; D403; D430; D496, D016; D075; D136; D228; D272; D352; D400; D429; D489).

One fund has also appointed a compliance advisor, who ensures that the fund complies with environmental and social standards in the course of its business. This compliance advisor is tasked to audit FIs and ascertain whether and to what extent they observe internationally recognised standards of responsible finance (ESG standards) and comply with these in their onward lending to sub-borrowers. These audits thus focus specifically on the development impact of the funds and the risks (D013; D019; I002; I026; I059). A compliance advisor of this kind is an exception, and only a single fund has one.

The Board of Directors, the Investment Committee and the Technical Assistance Facility Committee are comprised among others of representatives proposed by the KfW Development Bank and elected by the Meeting of Shareholders, as well as KfW Development Bank employees or external experts. The members of these bodies are personally mandated to perform important roles in the fund bodies regarding the governance, decision-making and supervision of the funds. Decision-making on the development orientation of the funds is therefore highly dependent on the individuals who are active within the fund bodies (D364; D013; D434; D056). In one large fund a BMZ employee has a seat on the Board of Directors; there are no BMZ employees with personal mandates within the other bodies.

There are three main points at which the BMZ is able to exercise political management: when the fund is being set up, when financial resources are being increased, and when comments are made in reports. The BMZ decides on financial increases or replenishments of the junior tranches in two cases in particular: when there are plans to expand the fund's activities, or when the fund has incurred losses that are to be offset by replenishing the junior tranche (see Section 4.1.2) (D019; D065; D122; D212; D259; D335; D403; D430; D496).

Furthermore, the KfW Development Bank sends an annual report to the BMZ containing information on the achievement of the agreed indicators. The BMZ is also able to exercise control through its comments and queries on these reports (I001; I003; I006). Within the BMZ the funds are usually the responsibility of the country divisions. As a result, the focus tends to be on the activity and effects of a fund in a particular country, while the regional focus of the funds tends to be neglected. This makes political management more difficult. In other cases the funds are managed by lead or sector divisions, which are better able to respond to the regional focus of the funds. In many divisions the capacities for dealing with this financing approach – which is very different from bilateral FC – are not sufficiently well developed. This is a further factor which makes strategic management of this financing approach more difficult (I002; I003; I122).

Through dialogue with the KfW Development Bank during project implementation, the BMZ is also able to influence how the KfW Development Bank performs its role as a shareholder in the funds. The bank's large shareholdings in the funds, and the extensive voting rights which this entails, enable it to influence strategic decisions. Depending on the size of their investment investors have different voting rights (one vote per share), and in almost all funds the KfW Development Bank – on the BMZ's behalf – is the largest shareholder. Some funds ensure that the mezzanine tranche holds a simple majority of the voting rights (D075; D272; D429).

Influencing decision-making on fund business through reporting

The agreed indicators for reporting relate to the FIs as the direct target group of the structured funds. The funds thus report among other things on

- the amount of additional capital mobilised
- disbursement of the invested capital to partner financial institutions and/or enterprises
- disbursement of the capital by the FIs to the sub-borrowers
- the credit default rate
- the nominal amount of the funds
- the number of loans in local currency
- the number of countries where investments were made (D019; D065; D122; D212; D259; D335; D403; D430; D496).

Since the structured funds also promote local FIs in order to stabilise and strengthen the financial sector, as described in Section 4.2.1, the aforementioned indicators for reporting reflect this objective.

Only one fund has an indicator specifying which type of FI should be supported. For the MIFA an indicator was agreed that defines a minimum proportion of institutionally less mature FIs (tier 2 and tier 3 FIs) that the fund should support. This minimum percentage is monitored through reporting on the indicator.

Furthermore, indicators were occasionally defined at FI level to monitor which groups within the FI portfolio were the recipients of sub-lending (inter alia, to determine whether the FIs' micro/MSME portfolio was enlarged). The MEF, for instance, indicates how many female borrowers in the FI portfolio should be reached. Indicators of this kind were not agreed in other funds, however. This means that reporting does not sufficiently monitor which sub-borrowers are given access to financing through lending by the FIs, or whether for instance the micro/MSME portfolio or the percentage of female sub-borrowers in the FI portfolio was increased. On the whole, therefore, too little weight is attached to measuring how effectively the defined sub-borrowers of the funds are being reached, hence the BMZ lacks the foundation for effective political management.

Some indicators provide information on how the funds affect the sub-borrowers. Indicators for instance involve measuring the area of sustainably managed land (EBF), energy savings (GGF), the safeguarding and creation of jobs (SANAD) or the enhancement and boosting of agricultural production (AATIF) (D019; D065; D122; D212; D259; D335; D403; D430; D496). However, this is the case for at most one out of usually six indicators per fund.

Reporting on how the funds affect the sub-borrowers largely relates to output parameters, however. Most of the data is collected through the FIs, and operational and financial information is monitored monthly (I024;

D301; D065), while more detailed information on social performance and on the portfolio is reported at quarterly or six-monthly intervals (D301; D136; D231; I052). For example, information is reported on total investment, volume of lending, number of loans and borrowers, type of loan and default rate (D403; D011; I124; D301; D284). Reporting on the funds' sub-borrowers is confined largely to output parameters such as the number of sub-borrowers reached. With one fund, for example, this figure is calculated as the sum of each investment by the fund in each FI, divided by the average loan balance of the FIs per borrower (D414). The percentage of women and the rural population among the borrowers is also often ascertained (D011; I124; D301).

As well as the quarterly reports, most of the evaluated funds also issue annual impact reports (e.g. GGF, EBF, EFSE and MIFA) that cover the effects of their activities in more detail. The GGF and EBF, for instance, report on CO2 savings and energy production from renewables, or CO2 storage in (agro-)forestry and on water savings. In the MSME-focused funds such as the EFSE and MIFA, figures are estimated for the numbers of jobs protected (EBF, 2018; EFSE, 2018; GGF, 2018). Other development effects and the contribution made to them by the funds are not measured, as this can usually only be achieved through time-consuming and costly evaluations (I010; I052).

Division of tasks within the funds

The strategy and objectives of each fund defined at the outset are ensured through clear roles and tasks of the stakeholders and in the funds' official bodies. This encompasses the division of tasks between investors in the fund, fund managers and fund bodies, as well as the composition of the bodies and the division of tasks within them.

In the funds' business operations the BMZ is represented by the KfW Development Bank as the responsible implementing organisation (trustee). When funds are established the BMZ – through the KfW Development Bank – plays a key role in shaping the fund's strategic orientation, as described in Section 4.2.1. Thereafter the KfW Development Bank takers charge of day-to-day business, and the BMZ can influence how the KfW Development Bank performs its role as a shareholder through regular information sharing (see Section 4.2.4). The KfW Development Bank wields major influence at shareholder level. It and other investors propose their representatives for positions in all fund bodies. These appointments are finally approved by the Meeting of Shareholders, and the appointees are personally mandated to perform leadership, managerial and supervisory roles (see Section 4.2.4 on management). The KfW Development Bank participates in the funds first of all as a trustee on behalf of the BMZ. Secondly it invests its own funds, usually in the mezzanine tranches of the funds (D019; D065; D122; D212; D259; D335; D403; D430; D496, websites of the funds (see Annex 9.9)). There is usually little exchange between the other investors. This is coordinated by the fund managers (I007; I009).

The responsibilities of each of the bodies are clearly defined and demarcated. However, conflicts of interest arise when individuals are appointed as director of more than one of these bodies. These are dealt with using the rules described below. The official bodies of the fund comprise the Meeting of Shareholders, the Board of Directors, the Investment Committee and the Technical Assistance Facility Committee. As described in Section 4.2.4, each body has clear responsibilities. Conflicts of interest may arise where

- in some cases, the same individuals are appointed to the boards of directors of several funds or the investment committees of several funds (D193; D234; D254; D364; D408; D510; websites of the funds)
- in some cases, the same individuals are appointed to the Board of Directors (or the Investment Committee as a subcommittee of the Board of Directors) and the Technical Assistance Facility Committee within a fund (D193; D413; D025; D254; D076)
- in a small number of cases, the same individuals serve on the boards of directors of the funds and of the FIs financed by them (D250; D089)
- in some cases, the fund managers are represented on the boards of directors of the funds (D364; D408; websites of the funds).

The rules for dealing with conflicts of interests are set out for each fund in its issue document and conflict of interest policy.

With all funds, if a conflict of interests arises the Board of Directors is notified. The Board is then required to decide on an appropriate solution that is in the interest of the fund and its investors. A conflict of interests is described in the issue documents as an 'interest conflicting with the interest of the fund'. Accordingly, what constitutes a conflict of interests can be interpreted very differently (D016; D075; D136; D228; D272; D352; D400; D429; D489). The exception to this is two funds in which a Supervisory Board decides on conflicts of interest instead of the Board of Directors. The Supervisory Board also ensures that the members/directors concerned do not deliberate or vote on matters that relate to the object of the conflict of interests. Reports on all conflicts of interest are prepared every three, six and twelve months (D272; D352).

If a conflict of interests exists with regard to particular directors that affects the work of the Board of Directors, in some funds the member in question is excluded from voting. This is detailed explicitly in the issue documents of three funds. Furthermore all conflicts of interest must be documented before the next vote (D228; D429; D489). In another fund the members concerned are excluded from the deliberations (D016). However, a few individuals are members of both the Board of Directors of the fund and the Board of Directors of an FI financed by the fund, which can lead to a conflict of interests in the selection of FIs to be supported. In such cases of significant risk there is therefore no standard rule to exclude the member in question from voting in cases where this affects the object of the conflict of interests. These cases for instance include votes by the Board of Directors on future support for the financed FI in question.

If a conflict of interest exists for individual committee members that affects the work of the Investment Committee, the committee must be notified. In three funds this entails exclusion from voting. Three funds stipulate in their issue documents that a member must be excluded from voting as a result of a conflict of interests (D075; D136; D429). Two funds also require disclosure of any conflict of interests, although the member of the Investment Committee is entitled to participate in voting, for instance when the fund invests in areas in which a member of the Investment Committee has already invested (D228; D016).

4.2.4 Harmonisation of donor approaches

The structure of the funds with various asset classes brings together official investors (D)FIs and private investors in a single financing approach. The different risk-return profiles offered by the individual asset classes enable the funds to serve the interests of different investors, and bring together official and private investors along with (D)FIs. Unlike credit lines, in which only one investor provides finance, the structured funds bring together between 6 and 21 different investors. Table 7 breaks down by type of investor the number of investors in each fund (I031; I030; I022; I043; I044; I050; I054; I055).

Table 7 Number of investors per fund

Funds	Official investors	(D)FIs
Africa Agriculture and Trade Investment Fund S.A., SICAV-SIF (AATIF)	2	3
Eco-Business Fund S.A., SICAV-SIF (EBF)	3	3
European Fund for Southeast Europe S.A., SICAV-SIF (EFSE)	8	6
Green for Growth Fund S.A., SICAV-SIF (GGF)	4	6
Microfinance Enhancement Fund S.A., SICAV-SIF (MEF)	2	6
Microfinance Initiative for Asia Debt Fund S.A., SICAV-SIF (MIFA)	2	2
Regional Education Finance Fund for Africa S.A., SICAV-SIF (REFFA)	1	2
Regional MSME Investment Fund for Sub-Saharan Africa S.A., SICAV-SIF (REGMIFA)	5	8
SANAD Fund for MSME S.A., SICAV-SIF (SANAD)	3	3

Source: D013; D042; D089; D205; D250; D364; D382; D521; D510.

In most cases several official donors and (D)FIs are actively involved in the funds. Alongside the BMZ as a founding member, another official donor involved in most funds is the European Commission. Several donor country development agencies also invest. These include the Swiss State Secretariat for Economic Affairs (SECO) in three of the evaluated funds, and in one case a German federal state as well as some governments of the countries in which the fund invests. On the (D)FI side the KfW Development Bank is invested in all the funds. Also invested in many funds are the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), the Dutch Entrepreneurial Development Bank (FMO), the IFC, the Austrian Development Bank (OeEB) and the OPEC Fund for International Development (OFID) (D013; D042; D089; D205; D334; D364; D250; D382; D521; D510; I040; I041).

The number of investors in a fund and their agreement with uniformly applicable investment guidelines is key to harmonisation. These guidelines are laid down by the founding members of the fund and must be accepted by all investing parties. They guidelines can only be amended through a resolution of the Board of Directors (and the Meeting of Shareholders), in order to protect the fund against the particular interests of individual investors (D015; D074; D137; D219; D278; D353; D402; D426; D490; D122).

As well as approving standard investment guidelines, the funds also promote harmonisation by serving as a platform for stakeholder dialogue. For example, annual meetings take place in the countries where the funds invest, at which both investors and local FIs and other stakeholders meet to deliberate on specific issues relating to the fund (e.g. FinTec) (D120; D121; D122; D492; D493; D494; D495; D496; D335; D339; D338; D337; D336). SANAD for instance supports the annual meeting of the largest microfinance network in the MENA region (Sanabel), which is attended by all investors in the region (D126; D127). The annual meetings hosted or supported by the funds are seen by some stakeholders as expert forums for private sector and financial sector development (e.g. the EFSE annual meetings in 2015, 2017 and 2019, the Sustainable Futures Forum and the GCF Clim@ Competition in 2018, and the Eco.business Conference in 2019) (D082; D083; D084; D085; D086; D087; D088; D089).

There is some competition between the funds and (D)FIs not investing in them, which constrains the harmonisation of different forms of investment. Since both the funds and (D)FIs invest in similar FIs they compete for these institutions, particularly when the latter are attractive for economic or social reasons. With regard to sub-borrowers the funds and the (D)FIs do sometimes agree that the fund should serve micro and small enterprises when the direct clients of the (D)FIs invested in are medium-sized enterprises, in order to reduce competition (I022; I030; I126; I127; I046; I056; I057).

4.2.5 Strengthening local actors

The financing of FIs in the funds' partner countries strengthens regional actors.[31] The special feature of structured funds is that they do not lend to end borrowers directly. They do so (usually) through FIs. Most of these FIs are local or regional banks and MFIs that are strengthened and supported in their formalisation processes. The latter is important particularly for less well-established MFIs. With banks and established MFIs, on the other hand, the aim is to strengthen portfolio development to benefit the target group. The MIFA, for instance, explicitly pursues the objective of supporting less formalised FIs, which often have less access to finance from other investors (D335). On the other hand, four of the nine evaluated funds support between 7 and 15 listed FIs; the fact that they are listed suggests that these intermediaries are already highly formalised (D538; D539; D540; D541; D542; D543; D544; D545; D546; D547; D548; D549; D550; D551; D552; D553; D554; D555; D556; D557; D558; D559; D560; D561; D562; D563; D564; D565; D566; D657; D568; D569; D570; D571; D572; D573; D574; D575; D576; D577; D578; D579).

While structured funds support mainly local and regional FIs, some of the FIs are subsidiaries of international holding companies. Theirs numbers vary from fund to fund: In three of the nine funds there are ten or more. In the remaining six funds there are fewer than ten (see Figure 17) (D538; D539; D540; D541; D542; D543; D544; D545; D546; D547; D548; D549; D550; D551; D552; D553; D554; D555; D556; D557; D558; D559; D560; D561; D562; D563; D564; D565; D566; D657; D568; D569; D570; D571; D572; D573; D574; D575; D576; D577; D578; D579).

[31] The Global Partnership for Effective Development Co-operation (GPEDC) recently adopted the so-called Kampala Principles on Effective Private Sector Engagement in Development Co-operation. These comprise inclusive country ownership, results and targeted impact, inclusive partnership, transparency and accountability, and leave no one behind. They build on the basic principles of effective cooperation, and extend them in line with the SDGs. The focus on strengthening local actors in this section will also provide information on inclusive country ownership as one of the Kampala Principles.

Figure 17 Geographic reach of FIs (left) and proportion of them listed (right)

Source: authors' own visualisation based on data from the funds' annual reports.

In a few cases local actors are shareholders in the funds, which enables them to represent the interests of the partner country. For example, in two funds the governments of various countries supported by the fund are present as shareholders. At the shareholder meetings they are able to partially influence the orientation of the fund in accordance with their own development strategies (I046; D122; D212). In one fund the central bank of an investment country is represented (I046), and in another the partner banks from the fund's investment countries are represented (I035). These actors are thus able to articulate the interests of the local financial markets within the funds. However there is a risk of conflicts of interests, particularly where these actors for instance receive TA through the funds.

Some large funds also have an Advisory Board comprised of local authorities and organisations, which is designed to link the fund with local interests. These advisory boards are comprised for instance of representatives of local authorities, business and banking associations, central banks, as well as ministries of finance, energy or the environment in the investment countries, and articulate their interests within the funds. Their recommendations are not binding, however, and the boards of directors take the final decisions both on implementation of the recommendations brought forward and on the existence and composition of the advisory boards (D429; D430; D212; D122; I046; I031). Such advisory boards exist chiefly in very large funds that are networked at sector level, as their activities generate additional costs for travel, overnight stays and conferences.

Particularly the TA at sector level strengthens local actors. Some 41 per cent of all TA interventions are conducted at sector level, and each has an average budget of 65,000 US dollars. The SANAD and EFSE funds, for instance, are advising the central banks of the investment countries e.g. on rehabilitating a state-owned agricultural bank, on local currency financing and on developing a financial literacy campaign for SMEs that have previously had no access to official financial services (D509; D510; D089). These interventions also address the financial policy of the investment country and are in the funds' interests.

TA also includes dialogue forums at which financial sector development issues are discussed together with local actors. Examples of this include the financing of the annual meeting of the Arab microfinance network Sanabel by the SANAD, the Economic Forum involving the EFSE and for instance the central banks of the Republic of Moldova, Armenia and Georgia, the annual meeting of the MIFA and the GGF Round Table with energy experts from six markets (I046; D089; I126; I127; I047; D205). A further aim is to build regional networks by supporting incubators for start-ups (I031). To further develop the sector or tap into new markets, feasibility studies and market research is performed for instance to identify mechanisms for avoiding deforestation risks associated with cattle rearing (D046).

As well as strengthening FIs, three of the nine funds also invest directly in enterprises and projects. This includes for instance investment in agricultural enterprises designed to boost the development of integrated value chains in the agricultural sector, as well as investments in companies and projects in the fields of energy efficiency and renewable energy (D205; D013; D042).

Finally, the local presence of the fund managers ensures that the funds' business is aligned with local circumstances and that local actors are strengthened. One fund manager that manages four of the nine funds maintains a strong regional presence with 17 regional offices with experienced personnel that cover a large proportion of the funds' investment countries. Other fund managers have regional hubs – usually one office in each of the continents where the funds invest. It is more difficult to align business with local conditions through these hubs (websites of the funds; I046).

4.3 Summary in relation to the DAC criteria

The financial sustainability and development orientation of the structured funds can be summarised in relation to the selected DAC evaluation criteria[32] as follows:

Relevance: Given the high financing requirement for sustainable investment and MSMEs in developing countries, structured funds make an important contribution to development by creating reliable access to financing opportunities for FIs and sub-borrowers. Since some regions, particularly sub-Saharan Africa, suffer more than others from liquidity bottlenecks in the MSME sector, structured funds play an important role particularly in regions where markets are less formalised but where the financing requirement remains high. In view of the current Covid-19 pandemic, however, more regions and markets may be affected by liquidity bottlenecks in the MSME sector in the future. At the same time the waterfall structure of the funds is particularly well-suited to financing innovative sectors that have so far been poorly served by commercially oriented approaches, because it addresses different risk-return profiles. These include for instance renewable energy, education and nature conservation.

Effectiveness: This financing approach provides the financed FIs with direct access to financing, thus covering – in the case of the MSME funds examined – the high requirement for MSME finance. By supporting the development of less formalised (M)FIs and providing FIs that are already formalised with reliable access to financing opportunities, structured funds have a stabilising effect on partner country financial systems. At the same time local actors such as banks, MFIs and leasing companies are strengthened through the intermediary structure.

By selecting the FIs to be financed, the funds ensure that the envisaged sub-borrowers are reached. However, the latter has so far not been adequately monitored, primarily because reporting to the BMZ focuses more on the FIs and less on the sub-borrowers. Once a fund has been established, the BMZ's scope for political management is generally limited, as operational decision-making in line with the development objectives and the selection of the FIs is primarily the responsibility of the fund's bodies.

Sustainability: The majority of funds break even within a few years of their establishment, and use the official capital on a revolving basis. In this respect the funds meet the criteria for financial sustainability defined by the evaluation. Some funds surpass these criteria by also distributing and compensating their risk efficiently. On the whole the majority of the funds represent a financing approach that can be used sustainably and for the most part works effectively. In one case the sustainability criteria were only partially met, as no revolving use of capital was evident. By ensuring their own financial sustainability, the funds can also generate sustainable development results.

Efficiency: Structured funds operate more efficiently than other financing approaches chiefly when they issue a large proportion of their loans in small sizes and/or in local currency. This is particularly true with regard to MSME financing, as this sector is already being served by many other financing approaches with loans of over ten million US dollars. On the other hand, the waterfall structure is particularly well-suited to financing innovative and risky sectors (such as green investments and education) that have so far barely been served by commercial approaches. Apart from that, the costs incurred by the fund structure for fund management,

[32] The DAC criteria in relation to which each of the evaluation questions was to be addressed were defined in the evaluation design. This is why the criterion of 'impact' is not included at this point.

maintenance of the fund and payments to investors need to be weighed up against the objectives achieved by the funds.

The waterfall structure is basically an efficient solution for serving different risk-return profiles of various types of investor. In some cases, however, the design of the waterfall structure to date displays partial efficiency losses. These result from the cost structure of the mezzanine tranche, and the country windows on the liabilities side applied in some funds.

5. HOW SUCCESSFULLY DO STRUCTURED FUNDS LEVERAGE CAPITAL?

Structured funds are designed to leverage additional private capital in order to achieve development objectives. This chapter looks at their success in achieving this objective. To transparently assess the leverage of structured funds it is first of all necessary to take a critical look at the different approaches to measuring mobilisation. The definitions of blended finance used by the OECD-DAC and the DFI Working Group differ in key respects, which also affect how the two bodies measure leverage effects. Section 5.1 presents the different approaches for measuring the mobilisation of private capital, and compares them in order to highlight the significance of the different approaches for interpreting metrics. Section 5.2 describes how much private capital structured funds leverage. It also discusses the factors that enable or constrain mobilisation. As well as official donors who leverage private capital with their own resources, (D)FIs also invest in structured funds. Their role in mobilisation is discussed in Section 5.3.

5.1 Measuring the mobilisation of private capital

German and international development cooperation set different priorities when determining how successfully private capital is mobilised. To close the financing gap for achieving the SDGs in developing countries, donors aim to use financing mechanisms that can mobilise private capital (DANIDA, 2016) To measure this mobilisation, different actors in German and international development cooperation use different metrics, and by doing so set different priorities. The OECD and the DFI Working Group are working to harmonise some of these different approaches (DFI Working Group, 2018; OECD, 2018a). This section will present and compare the different approaches for measuring the mobilisation of private capital for the financing approach of structured funds.

A distinction is drawn between four approaches to measuring the mobilisation of private capital: Mobilisation of private capital as the

a) absolute amount of private capital deployed

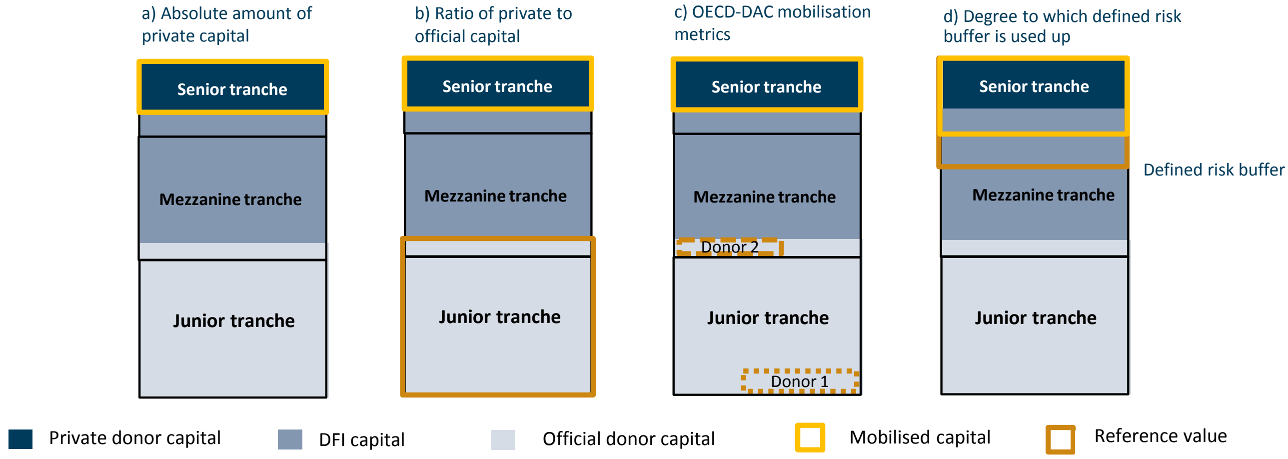
b) total amount leveraged by official investment

c) amounts leveraged by individual donors

d) degree to which the risk buffer defined by the fund is used up.

In these approaches, the mobilisation of private capital is measured either on the basis of the source of the capital (approaches a), b) and c)), and/or on the basis of the tranches in which the capital is invested (approaches c) and d)). In approach a) the private capital used to achieve the SDGs is measured in full (expressed in absolute figures) and not in relation to other investment (see approach a) in Figure 18). In approach b) the total official investment in the fund is measured in relation to all the private investment in the fund. In this approach the uniform categorisation of the capital as official or private investment is key to the assessment. Approach c) distinguishes between the various official donors (see measurement approach c) of the OECD-DAC in Figure 18). In this approach the amount of private capital mobilised is calculated for each individual donor. This metric takes into account both the amount of capital invested by the donors and the risk tranche of the investment. Thus the fictitious example in Figure 18 c) acknowledges that donor 1 has mobilised more capital than donor 2, as donor 1 invests in the riskier junior tranche. In approach d) the mobilisation of private capital is calculated according to how much private capital could be mobilised and how much actually is mobilised due to the structure of the fund. Why is the mobilisation of private capital controlled by the structure of the funds? The official capital and the capital of the (D)FIs function in the fund as a risk buffer for the invested private capital, by being invested in the junior (and in some cases mezzanine) tranches, which is subordinated to the senior tranche. This risk buffer is determined for each fund, and defines the minimum share of the total volume of the fund that must be accounted for by the subordinated tranches (see defined risk buffer in Figure 18 d). This definition of the risk buffer leads to a situation in which private capital cannot be mobilised endlessly in the fund, and in this respect limits the mobilisation of private capital. In approach d) the defined risk buffer (yellow box in Figure 18 d) is related to the risk buffer actually used up (red box in Figure 18 d). This shows the extent to which the risk buffer defined in the structured funds has actually already been exhausted.

Figure 18 Approaches to measuring the mobilisation of private capital in structured funds



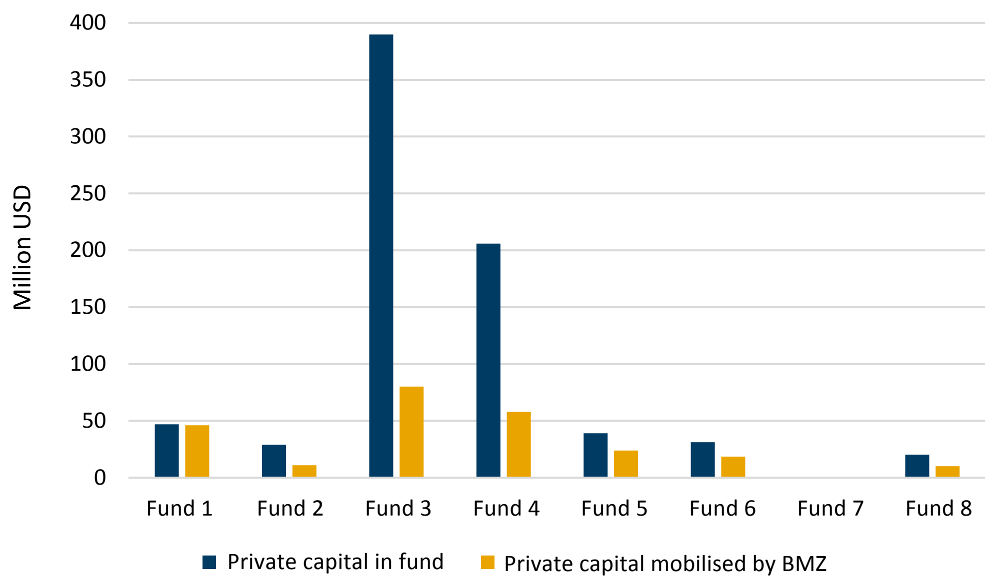
Source: authors' own visualisation of a fictitious example.

The question of the attribution of mobilisation to different actors is also the subject of controversial debate in international development cooperation (Attridge and Engen, 2019). The DFI Working Group differentiates between direct and indirect mobilisation (DFI Working Group, 2018). In direct mobilisation, the private capital is attributed only to the lead multilateral development bank. No leverage is attributed to the multilateral development banks that provide co-financing but do not play an active role in mobilising private capital (indirect mobilisation). By contrast, in the OECD method the question of attributing leverage relates to the level of risk assumed by investors.

The amount of private capital mobilised by the BMZ depends very much on whether the calculation involves the absolute figures for private capital, or whether it includes only the private capital attributed to BMZ investment using the OECD-DAC method. To highlight the importance of using different indicators, Figure 19 compares the absolute figures for private capital invested by the funds between 2012 and 2017 (blue bar). The yellow bars represent the share of private capital in the funds that is attributed to BMZ investment. This is calculated using the OECD-DAC method (OECD, 2018b). According to this method, 50 per cent of the private capital mobilised is attributed to those donors that serve the riskiest junior tranche. The remaining 50 per cent is attributed to all other investors, regardless of which tranche they invest in.[33] The advantage of this method is that it takes into account both the amount of official investment and the risk appetite of individual donors. A comparison of fund 1 with fund 3 clearly shows how the calculation method applied affects the figure obtained for private capital mobilisation. In fund 1 the BMZ is the only official donor involved in the highest risk tranche. 100 per cent of the private capital invested is therefore attributed to the BMZ. In fund 3, far more private capital was invested in absolute terms. However, since other official donors are involved in the fund only 20 per cent of the private capital mobilised is attributed to the BMZ. In other words, the more non-private investors that invest in the fund, the lower the figure obtained for mobilisation by the BMZ is when using the OECD-DAC method. This does not, however, necessarily mean that the fund is mobilising less private capital overall.

[33] The OECD-DAC method for tracking private capital mobilisation by Official Development Finance (ODF) is applied as follows: Capital mobilised by the BMZ = 1/#donors senior tranche*(private capital in the fund*50 per cent) + BMZ capital/total capital senior and mezzanine*(private capital*50 per cent). The private capital is only attributed to the official investment over a period of five years.

Figure 19 Private capital and mobilised private capital 2012 – 2017



Source: authors' own visualisation based on KfW data on mobilised private capital calculated using the OECD-DAC method. The fact that eight funds are shown is due to two reasons: in one fund no private investor had invested until 2017, while in another fund no data on private capital mobilisation are available.

The figure given for mobilised capital in the funds' reports sometimes also includes both the private investments and the (D)FI investments (approach b)). In the funds' reports, leverage is often given as the ratio of German Federal Government capital to all other capital invested in the funds (D212; D263; D122). Presenting the data this way implies that as well as the private capital, the capital of the (D)FIs is also leveraged by the financing approach of structured funds and the risk buffer provided by the official investment. It is thus assumed here that the capital of the (D)FIs is additional investment, which is not in fact the case for all (D)FIs (see also Section 5.3). In a transparent analysis of leverage a distinction is drawn between the sources, i.e. between private investment and (D)FI investment. Figure 20 shows what share of the respective fund is accounted for by investment by the private sector, the (D)FIs, the official donors and the fund managers. Presenting the data in this way permits a differentiated analysis of leverage by the various funds.

When assessing the amount of capital mobilised we also need to take into account the defined risk buffer. The funds are designed such that the various tranches address the risk appetite of the various types of investor (source of capital). Private investors usually invest in the tranches with the lowest risk, i.e. the senior tranches and/or notes. This means that when analysing mobilisation by structured funds, we can also include the share of the total volume of the fund accounted for by the individual private tranches. However, we also need to remember here that the risk buffer defined in the fund also determines the mobilisation limit of the private tranches – i.e., the minimum share of the total volume of the fund that must be accounted for by the tranches subordinated to the private tranches. The share usually corresponds to the sum of the mezzanine and junior tranches. Figure 21 in Section 5.2 shows the risk buffers defined and those actually used in each fund. The difference between the two indicates the extent to which the risk buffer defined in each fund has already been exhausted. If it has – and the size of the subordinated tranches remains the same – private investors can no longer make any investments in the 'private' tranche.

The different measurement methods need to be taken into account when interpreting the amount of capital mobilised. The discussion above shows that the figure obtained for the capital mobilised by structured funds depends on the measurement method used. Therefore, the indicator(s) selected are crucial for correctly interpreting the amount of capital mobilised. The assessment of leverage by the structured funds is based on a method that relates the sources of capital in the funds to each other. As discussed in connection with approach b), this method looks at the share of the total volume of the fund accounted for by the capital invested by official donors, (D)FIs and private investors. This analysis avoids any supposed underestimation of the mobilisation of private capital, as would probably result using the OECD-DAC method due to its inclusion of other donors. Furthermore, the method used in this evaluation distinguishes between the different sources of capital. This avoids any overestimation of the mobilisation of private capital, as would be probably result from a simple comparison between the official capital and the capital from other sources in a fund.

5.2 Mobilisation of private capital by the structured funds

By deploying budgetary resources to 'subsidise' the investment risk for private investors, the evaluated structured funds mobilised private capital of more than 700 million UD dollars up to 2018.[34] **To this end, roughly similar amounts of budgetary resources were invested in the funds up to 2018.** Figure 20 shows the distribution of capital in the funds by source. Across all the evaluated funds, the share of capital accounted for by official donors is 36 per cent, the share for (D)FIs 40 per cent and the share for the private sector 22 per cent. By international comparison, the shares accounted for by official donors and private investors are thus below the average values (42 and 26 per cent respectively), while the share of (D)FI capital is above the average (31 percent) for comparable approaches (Basile and Dutra, 2019).[35]

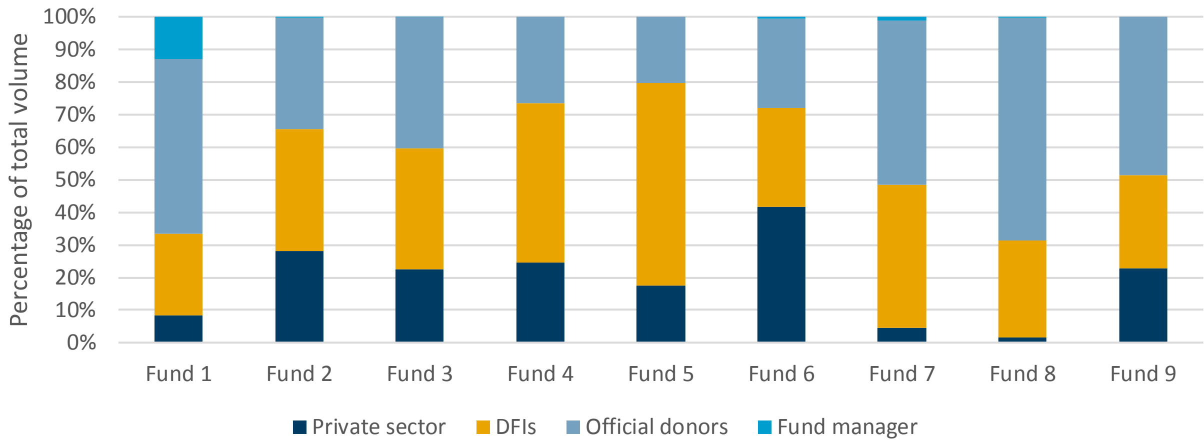
The share of the total volume of the funds accounted for by private capital varies widely by region and sector. The average share accounted for by private capital excluding the capital of the fund managers is 19 per cent, and varies between 2 and over 40 per cent from fund to fund. Since the funds operate in very different regions and sectors that entail different risk appetites for private investors, this variance is not surprising. The funds themselves barely formulate any specific objective for mobilising private capital. Only the Eco Business Fund has an indicator for such an objective. This indicator states that the capital invested by private investors must amount to at least 15 per cent.

Some funds, however, do have indicators for leverage by BMZ investment. The target ratio of BMZ investment to investment from all other sources within the fund varies between 1:1 for funds in sub-Saharan Africa and 1:4 for funds in Southeast Europe. Across all ten funds, the average figure for leverage is 1:3.5 (BMZ investment to investment from all other sources in the fund). To assess the mobilisation of private capital across the funds, despite the different orientations of the funds a point of reference is required. In the funds' reports on private capital mobilisation and from interviews, it emerged that across various funds a private share of over 20 per cent was considered high (I056; D212; D444; I026). By this measure, more than half the funds evaluated achieved a high degree of mobilisation. This benchmark is applied in this instance across all funds, and is not suitable for assessing the mobilisation of private capital by individual funds. For this purpose a benchmark should be applied that takes into account the region and sector in which the fund operates. For example, at the end of 2018 private capital accounted for less than ten per cent of the total volume of funds operating in sub-Saharan Africa. For private investors this remains one of the riskier regions, which makes it more difficult to mobilise private capital.

[34] This assessment of private capital mobilisation is based very largely on the figures for the 4th quarter of 2018. It includes all the funds, except for the MIDF, which is already being wound up. This fund had not mobilised any private capital prior to its liquidation. The assessment is based on the analysis of the amount of private capital in the fund, the types of investor from the private sector and the factors influencing the mobilisation of private capital.

[35] In 2018 the OECD conducted a survey of funds and facilities, to which 180 funds and facilities responded.

Figure 20 Source of investment as a percentage of fund volume



Source: authors' own visualisation
Note: Due to its special structure the SANAD Equity Fund is not included here. Nor is the liquidated fund included, hence the total number of funds is 9.

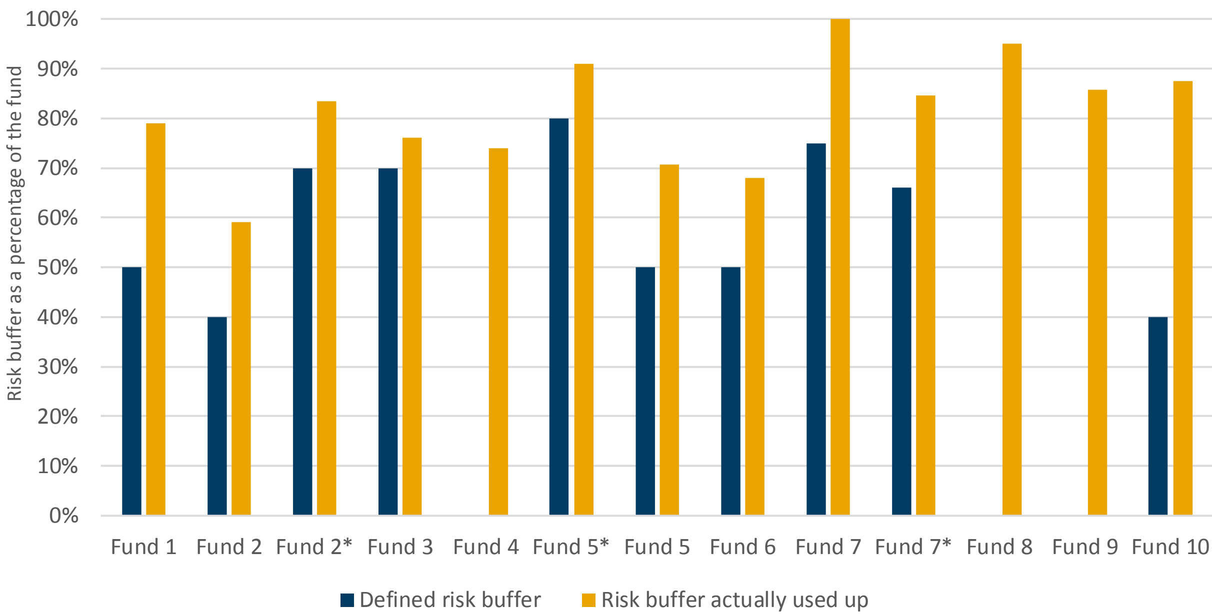
In most funds the private tranches account for less than 30 per cent. Since the risk buffer is set very differently, the degree to which it is used up varies widely. Depending on the fund the private sector invests in senior tranches and/or notes, referred to here as private tranches. However it is not necessarily only the private sector that invests in these tranches. If private capital mobilisation is considered in terms of the percentage of the total volume of the funds accounted for by the private tranches, it emerges that in 11 out of 13 private tranches considered, the risk buffer provided through junior and mezzanine tranches is over 70 per cent (see Figure 21). The risk buffer is exhausted in 2 of the 13 tranches considered. Here the difference between the risk buffer as defined and the risk buffer actually used is around ten percentage points. In these cases, therefore, it can be assumed that if the amount of capital in the subordinated (mezzanine and junior) tranches remains the same, it is no longer possible to mobilise further private capital. In most funds, however, the defined risk buffer is not yet used up and additional investment in the private tranches is possible (D412; I056; I041).

Despite the willingness of some private investors to take on more risk, the defined risk buffer plays an important role in mobilising private capital. The majority of funds that mobilise a high degree of private capital[36] have a defined risk buffer of over 60 per cent (QCA). The evidence from the qualitative interviews also shows that the risk buffer secured through the waterfall structure is important for mobilising private capital (D025; I043; D065; D124; I031; D118; I050; I017). Particularly in times of crisis, when private investors see their investment risk as higher, a sufficiently high risk buffer can absorb the predicted fluctuations in default rates and thus have a positive effect on investment decisions by private investors. On the other hand, some investors rate the existing risk buffer of the structured funds as high (I007; I040) and express an interest in investing in the mezzanine tranche. This shows that as well as the private investors that invest in the structured funds due to the high risk buffer, there are also investors with a higher risk appetite (I122; I050; D340; I040; I024; I048; I011). Adjusting the defined risk buffer in funds that enjoy a high level of confidence due to their good performance can enable private investors to obtain a higher return if they take on a higher level of risk, while at the same time smoothing the path for mobilising a greater amount of private capital (I047; I042; I009; I017; I028). Reducing the risk buffer would increase the share of private capital at the expense of the official capital and the capital of the (D)FIs. Since private investors – unlike official donors – receive dividend payments, their investments in the senior tranches are more expensive than investments

[36] A share of capital from the private sector of over 20 per cent is seen as representing a high level of private capital mobilisation (I056; D212; D444).

by official donors in the junior tranche, but less expensive than the investments (of the (D)FIs) in the mezzanine tranche.

Figure 21 Defined and actually used risk buffer for the private tranches of the structured funds



Source: authors' own visualisation, funds 4, 8 and 9 do not have a defined risk buffer.
**Fund has different risk buffers in notes and senior tranche.*
SANAD Equity and SANAD Debt Sub-Funds are treated separately here.

Confidence in the funds promotes the successful mobilisation of private capital. Thanks to the participation by official donors, the funds gain a certain track record as well as a more differentiated and low-risk portfolio. Since the structured funds in most cases are not rated by a renowned rating agency, the confidence that inspires investment is created largely by their positive track record (I043) and the fact that they are domiciled in Luxembourg (I050). The majority of the funds with a relatively high proportion of private capital have more than two official donors in the junior tranche (QCA). Furthermore, confidence in the fund is also generated by a diversified and lower-risk portfolio (QCA). This is also reflected in the fact that private investors tend to invest in funds that operate in potentially lower-risk and more investment-friendly regions; in other words, in countries a) that have a good investment rating[37], b) in which a business-friendly infrastructure exists[38] or c) that have a well-developed financial market[39] (QCA). One crucial factor for private investors here is that the reputational risk of their investments can be minimised (I058; I111; I016).

The 31 investors in the structured funds represent a wide range of investor types. According to the funds' issue documents, well-informed professional institutional investors such as banks, reinsurers, social insurers, foundations and others with the same attributes such as family offices can invest in the funds[40] (D296; D349; D231; D429). In other words, there are a wide range of private investors that could invest in the structured funds. Figure 22 shows the percentage shares of private investors in the ten evaluated structured funds. It shows that the 31 private investors represent 11 different investor types. These investors pursue different investment strategies and have different investment conditions. These conditions include the risk taken, the

[37] Data source: Moody's. A rating of Ba2 or higher is considered a good investment rating.

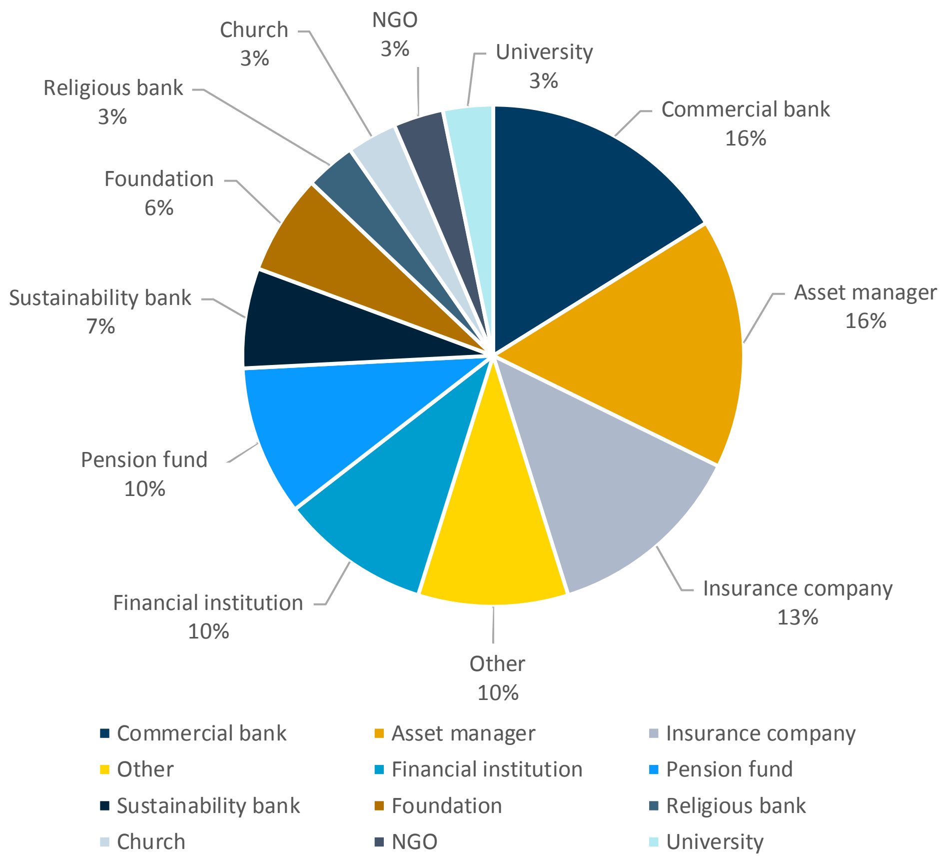
[38] The getting credit score of the Doing Business Index is used as a proxy for a business-friendly infrastructure. A country's infrastructure is considered business-friendly when it achieves a score of more than 45 out of 100.

[39] The World Bank's Entrepreneurs Survey is used to operationalise access to the financial market. When fewer than 30 per cent of respondents see access to the financial market as the main barrier to business, access to the financial market is considered good.

[40] The term 'family office' refers to organisational forms and services that involve the management of large private assets.

size of investment, the duration of the investments, the return expected and the focus of the investment. The characteristics of the structured funds with their waterfall structure, their sectoral and regional orientation, and their reporting, would appear to appeal primarily to commercial banks and asset managers (see Figure 22). However, the fact that only five commercial banks are involved suggests that the funds could acquire more investment from the banks.

Figure 22 Private investors in structured funds



Source: authors' own visualisation.

Impact-oriented investors are only partially being reached. More and more private investors[41] are taking environmental and social issues into account in their investment decisions (HSBC, 2019)**.** According to the fund managers, the development orientation of the structured funds appeals to these impact-oriented investors (I050; I031; I009; D065; D496). So-called sustainability banks are usually among the first private actors to invest in the funds (I043). Currently two sustainability banks, one religious bank, four impact-oriented asset managers and one non-governmental organisation have invested in the funds. This shows that the funds have not yet exhausted their full potential for acquiring investment from impact-oriented investors. Investors cite the lack of expertise and inadequate information on ecological and social issues as the greatest obstacle to impact-oriented investment (HSBC, 2019). The interviewees emphasised that in response to this interest on the part of investors, the funds should keep track of their development orientation and report transparently on the results achieved (I052; I043). To this end, various strategies are being pursued in the field of sustainable finance.

[41] Of the 500 respondents in the study more than 50 per cent were asset managers, over 15 per cent commercial banks and some 10 per cent insurance companies.

These include for instance the formulation of exclusion criteria, the application of principles, the use of certificates, information on target groups reached for instance among the FIs and sub-borrowers, and the measurement of impact among these target groups (Richter, 2018). These strategies to ensure transparent communication on sustainability issues differ significantly in terms of their focus and intensity.

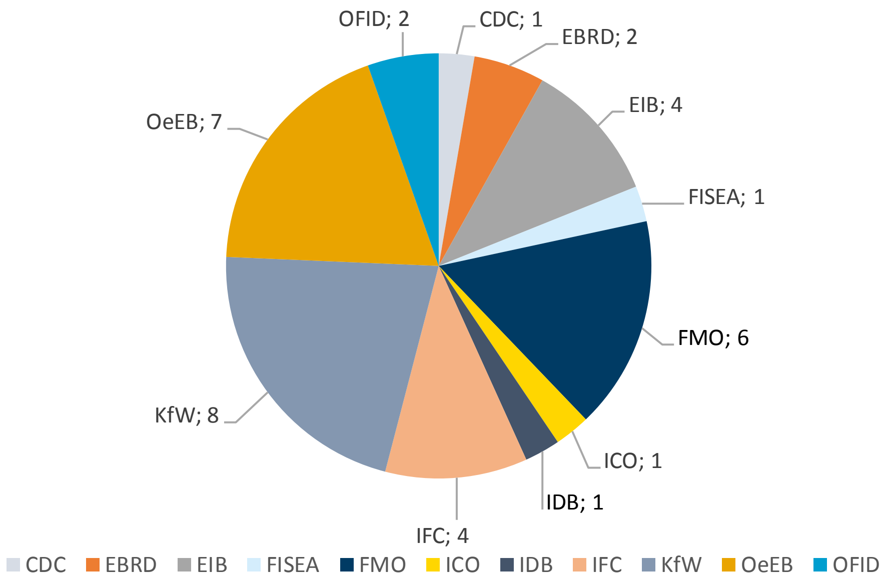
Ensuring impact orientation in the structured funds is based chiefly on the formulation of development objectives at the levels of the FIs and sub-borrowers. Reaching sub-borrowers and achieving impact at their level is only monitored through appropriate indicators in a few cases, however. Four funds report indicators at the level of the sub-borrowers, and two of these funds pursue sophisticated impact monitoring. This is based on evidence of the International Labour Organization (ILO), the Food and Agriculture Organization (FAO), the scientific community and a data survey conducted by the fund itself, and determines among other things the impact of the fund's investment on reducing CO2 emissions (D076). The methods used to measure impact are explained very transparently. The funds' effects on employment are estimated using an ex ante impact model based on project-specific inputs and regional elasticities (D118, D062). In addition, in three funds TA finances impact studies that report on impact in various countries. In eight of the ten funds the envisaged development impact at the level of sub-borrowers is not monitored by corresponding indicators. Although four funds do formulate target indicators at the level of sub-borrowers, in the case of two funds these indicators are limited to the number of sub-borrowers to be reached. They do not capture the dimension of impact.

The absence of ratings, the complex waterfall structure and investment in local currency for private investors make it difficult to compare the structured funds with other investment options. Due to the development orientation of structured funds and their relatively high number of tranches, a standardised rating for the structured funds is not seen as conducive (I031; I057; I020). As a result not a single structured fund has a rating from a well-known international rating agency, despite the fact that for some investors this is a precondition for investment and that this prevents some potential investors from investing in the structured funds (I009; I057). Nevertheless, one European corporate group did rate individual tranches of the three funds EFSE, GGF and SANAD with respect to the actual investment decisions made by individual private investors. Without a rating, potential investors find it difficult to assess the risk-return structure. This is due to the waterfall structure and the relatively high number of different tranches in some cases (I043; I011), as well as to the fact that some investments are made in local currency (QCA). In some cases the funds invest in several currencies, the risk management of which is spread across various tranches (I050) and risk management instruments (see Section 4.1). Since the complexity of the structured funds makes it difficult to assess the investment, cross selling plays an important role here. Once an investor has understood the product of the funds, they often also invest in other similar products (I043; I050).

5.3 The role of (D)FIs in mobilising private capital

(D)FIs play an important role for the structured funds in terms of both the size of their investments and the number of them that invest. Across all the funds, (D)FIs account for over 40 per cent of the total volume of the funds. Between the individual funds, (D)FI capital accounts for between 25 and 62 per cent (see Figure 20). In one fund the combined capital of the (D)FIs and the official donors is so high that, given the limited scope for investment in the target region of the fund, there is no need for additional private capital (I040; I022; I002). The (D)FIs invest mainly in the mezzanine tranche, and in some cases also in the senior tranche of the same fund. A total of 12 (D)FIs invest in the structured funds. Figure 23 shows that seven (D)FIs invest in more than two structured funds, while the five remaining ones invest in only one fund.

Figure 23 Number of funds in which each (D)FI invests



Source: authors' own visualisation based on information supplied by the fund managers.

The (D)FI capital tends not to be leveraged by the official investments, but is important for mobilising private capital. In some cases the funds' reports present the resources provided by (D)FIs as leveraged capital (D212; D263; D122), which suggests that the (D)FIs would not have invested in the funds had it not been for the official donors. This interpretation is understandable for funds that operate in riskier sectors and regions. In MSME financing, however, many (D)FIs invest outside the fund in similar regions and in some cases also directly in the same FIs. Therefore, the investment of (D)FIs in the funds with a focus on MSME financing should usually not be considered additional in the sense of financial additionality. It is rather the case that the (D)FIs serve the mezzanine tranche, thus enlarging the risk buffer for private sector investment. Moreover, the (D)FIs possess a high level of expertise on the markets in which the funds invest. Their investment in the funds shows other investors that the (D)FIs have confidence in the structured funds (I011; D432; I030; D268 (Clark et al., 2018)). In this respect the investment made and the signal sent by the (D)FIs are an important instrument for leveraging private capital in structured funds, particularly when the funds are launched.

5.4 Summary in relation to the DAC criteria

Relevance: With their development orientation and risk buffer, structured funds are suitable for mobilising private capital to achieve the SDGs. More and more investors are taking social and ecological issues into account in their investment decision-making. The structured funds enable private investors to make such investments at low risk, as they are subsidised by official donors.

Effectiveness: The structured funds usually succeed in mobilising private capital. In sub-Saharan Africa, however, a region that requires a high level of financing in order to achieve the SDGs (SDSN, 2019), this presents a challenge. This is also due to the fact that investment opportunities on market terms that also meet the criteria of financial sustainability and development orientation are limited in this region. In one fund the need for additional private finance is limited due to the extensive investment of official donors and (D)FIs.

Moreover, private investors associate investments in sub- Saharan Africa with possible (reputational) risks, due to the poorer governance structures there. When evaluating the structured funds, however, we should remember that the funds use official investment in the junior tranches and in the risk buffer which this provides to 'subsidise' the risk faced by private investors, thus encouraging them to make investments like those in sub-Saharan Africa.

Efficiency: The potential to mobilise private capital that is inherent in the structured funds is not being used to the full. In the private tranches of two funds the defined risk buffer is virtually exhausted, which means that the funds' defined limit for mobilising private capital has been reached. At the same time a small number of private investors indicate that they would be willing to take on more risk. There are various reasons why mobilising private capital has so far been a challenge for other funds. First of all, due to the amount of official and (D)FI capital they already have, plus the limited investment opportunities they offer, some funds do not require further investment. Secondly, these funds for the most part lack a clear strategy for attracting private investors.

Financial additionality: The private capital mobilised can largely be classified as additional. Through the structured funds, private investors are able to invest in regions, such as the Middle East/North Africa or sub-Saharan Africa, that are less well covered by the purely private-sector microfinance funds which operate globally. However, especially in sub-Saharan Africa, where MSMEs have too little access to finance and where the private capital would provide financial additionality to a particular degree, the mobilisation of private capital was rather low as of the end of 2018. Here we see the tension between financial sustainability and additionality. Private capital mobilisation, which is necessary in order to secure financial sustainability, is more successful with a lower-risk portfolio. However the structured funds, with their official donors in the junior tranche and the risk buffer provided, are designed to subsidise the risk for private investors and thus encourage them to invest in riskier areas. More successful in mobilising private capital are funds that operate in sectors and regions where the investment risk tends to be low, but where at the same time there is also more access to finance. Financial additionality can thus also be considered rather low. One reason for this assessment is that many (D)FIs and some private investors in the structured funds also invest directly in the financial institutions refinanced by the funds. There is no financial additionality for the capital of these investors.

6. HOW DO THE FUNDS AFFECT THE FIs AND SUB-BORROWERS?

The structured funds aim to provide sub-borrowers with easier access to financial products and services through FIs. This chapter will examine how successfully this is achieved. It will first of all look at how the funds select the countries and FIs. The funds can control the effect the finance has on sub-borrowers chiefly through their selection of FIs, for instance by refinancing FIs that lend largely to vulnerable groups. To reach the sub-borrowers targeted by the funds, the objectives of the funds and the FIs therefore need to coincide. Finally, the chapter analyses the effects of the finance and the TA on FIs and sub-borrowers.

The effects on FIs and sub-borrowers were analysed using a contribution analysis based on the reconstructed ToC (see Figure 11). The key assumption of the ToC[42] is that the supported FIs use the capital provided to align financial products more closely with the needs of the targeted sub-borrowers (output level)[43] and/or to expand their business segment for these groups. In many cases the finance is accompanied by TA interventions. It is assumed that these will enable the sub-borrowers to meet the formal requirements for receiving financial products (also output level). The ToC assumes that these changes simplify access to financial products for the sub-borrowers (induced output) and that they will take up the financing offerings more often as a result. The assumption is that the income of borrowers will be increased and secured as a result, that enterprises will grow and that jobs will be created. It is also assumed that the simplified access to financial products will lead to a stronger demand, as a result of which the FIs will grow and/or new FIs will emerge (outcome level).

The contribution analysis systematically examined whether the causal links within the ToC described above actually hold true. The links were analysed up to the level of the induced outputs (simplification of access to financial products). For each of these links, underlying assumptions and risks were formulated (see Table 9 in Annex 9.1). The elements of the ToC and the assumption and risks were operationalised with indicators, which were subsequently verified using quantitative and qualitative evidence.[44]

One key assumption of the ToC is that the anticipated development impact can only be achieved if the selection of countries, FIs and sub-borrowers is also based on their relevance for development and additionality. However, economic reasons mean that the selection is not based exclusively on development criteria. Instead, the selection needs to balance financial and development concerns**.**

Sections 6.1.1 and 6.1.2 therefore examine how these conflicting aims affect the selection of countries and FIs, and which aspects are prioritised when selections are made. Section 6.1.3 looks at which FIs benefit from the TA in addition to the finance, and how these TA interventions are aligned with the needs of the FIs. The second part of the chapter (6.2) focuses on how the capital provided by the funds affects the FIs (6.2.1) and the sub-borrowers (6.2.2). It analyses whether the aforementioned assumptions contained in the ToC are borne out by the evidence, and adjusts the ToC accordingly. Finally, this chapter summarises the findings in relation to the selected DAC criteria and the criterion of additionality (6.1.3). Apart from Section 6.1.1 on the selection of countries, the analyses look mainly at the funds which focus on MSME financing (see Section 3.1).

[42] The assumptions in the contribution analysis are based on the reconstructed ToC, and are explained in Section 3.1 with reference to scientific literature.

[43] The terms used for the various levels refer to the ToC that was reconstructed for this evaluation (see Section 3.1). These differ from the levels used in the funds' results matrices.

[44] The findings of the contribution analysis are shown in Annex 9.2.

6.1 Reaching the targeted FIs and sub-borrowers

6.1.1 Selection of countries in which the funds operate

Which countries are selected for the funds is largely determined by the issue documents. As indicated in the description of the portfolio (Section 2.2), the evaluated funds operate in 78 countries worldwide. Three funds focus on sub-Saharan Africa, one each on the MENA region, Latin America and Asia, two on Southeast Europe, and one on Southeast Europe and Asia. One fund is not restricted to any particular region or regions. The issue documents stipulate the countries or regions in which the funds may invest. This specification of countries is based amongst other things on feasibility studies and needs analyses. There are also stipulations concerning risk diversification (see Section 4.1): To reduce the likelihood of major losses caused by negative developments in a country, the issue documents place a maximum limit on the percentage of the total investment volume that may be invested in a given country. This is usually 20 per cent, and in the case of one regional fund is 35 per cent. In some funds this diversification is restricted by country windows or prescribed minimum percentages in certain countries (see Sections 4.1.3 and 4.2.2). At the same time, however, the country windows and stipulations on minimum percentages do offer the opportunity to prescribe a stronger focus on countries that are particularly important for achieving development objectives. Moreover, the selection of countries depends on how many suitable FIs exist in the particular country. Depending on the region this can mean a major restriction on the selection of countries.

The structured funds make 79 per cent of their investment in lower and upper middle-income countries.[45] **The distribution of income groups varies widely between the funds, however (Figure 24).** While funds 3 and 4 operate mainly in upper middle-income countries, funds 1 and 8 focus chiefly on low and lower middle-income countries. One reason for this is the different regional orientations of the funds. A comparison of the selected countries with other countries within a region shows that the probability of being selected as an investment country is lower for high-income countries (finding of the regression analysis[46]). Nonetheless, the funds do also invest in three such countries (Poland, Panama and Croatia).[47]

Risk diversification also enables investment in LDCs[48]; these are not reached to the same extent as other countries, however. To reduce risk the funds endeavour to invest in as many and as many different countries as possible. For example, the funds offset the risk of investing in small, economically rather unstable countries by also investing in large, economically stable ones. This is also reflected in the fact that most of the funds invest in three or more different income groups (see Figure 24). Risk diversification also enables investment in LDCs, though only to a minor extent. The funds operate in only 19 of the 47 LDCs; four of the nine funds are not present in any LDC, and within a region and income group LDCs are selected less often than other countries (finding of the regression analysis). The low percentage of LDCs limits the potential development impact and additionality of the funds, as LDCs have less access to financing. The United Nations Conference on Trade and Development (UNCTAD) estimates that the rate of growth in private investment in LDCs would need to be doubled in order to close the financing gap (UNCTAD, 2014).

45 The World Bank income groups are defined more precisely in Table 14 in Annex 9.9.

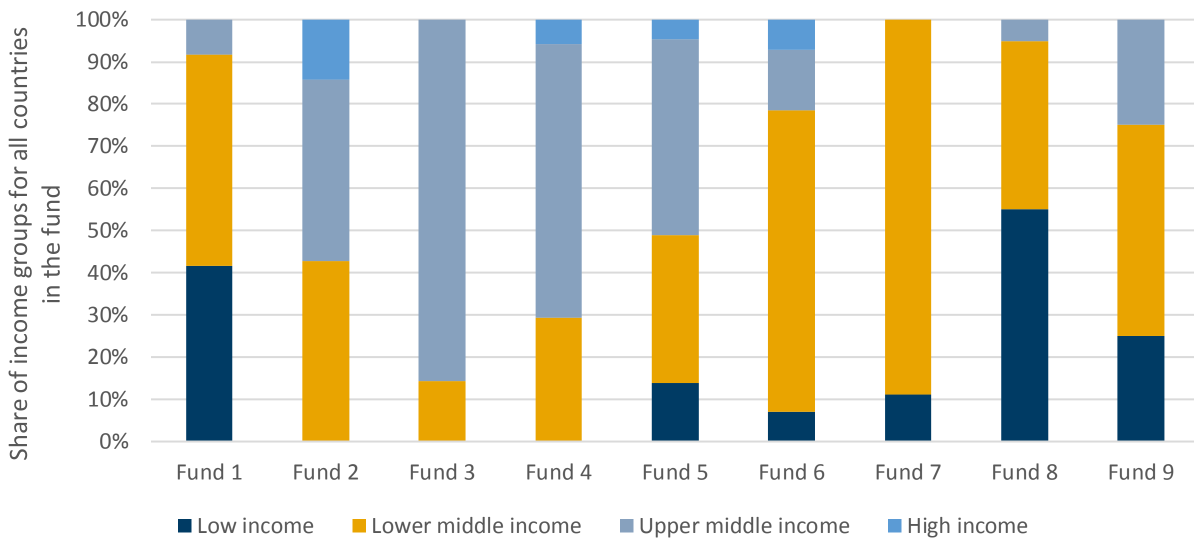
46 The regression analysis did not examine how many funds operate in a country or how much they invest there. It only looked at whether one or several funds operate in a country.

47 Another MFI is domiciled in Hong Kong, though its business operations are in mainland China.

48 LDCs are a group of 47 countries defined by the United Nations as especially needy. Three criteria are used to identify them: per capita Gross National Income, the Human Assets Index (HAI) and the Economic Vulnerability Index (EVI) (UN-OHRLLs, 2020).

At present, LDCs benefit from only six per cent of the private capital mobilised by development finance. Low-income countries also have difficulty gaining access to finance: Studies show that they are unable to provide the finance needed to achieve the SDGs, and are dependent on funding from international development cooperation (IMF, 2019; SDSN, 2019). One possible reason for the lower levels of financing of LDCs and low-income countries is that these countries are often characterised by high instability, which increases the probability of a default by an FI in the country concerned, and might therefore negatively affect a fund's financial sustainability. Moreover, investing more in financially weak regions might make it more difficult to mobilise private capital (see Section 5.2).

Figure 24 Income status of countries by fund



Source: authors' own visualisation based on the quarterly reports for Q4/2018

The funds invest in regions with a relatively high investment risk. Most of the selected countries either have no investment rating (23 per cent) or a rating below Baa3[49] (58 per cent), which is considered speculative (Country Economy, 2020). The country ratings are a main criterion in the investment decisions taken by private investors – particularly for institutional investors, who are bound by strict requirements in this regard (see Section 5.2). For countries with poor ratings or none at all, it is safe to assume that without the risk buffer provided by structured funds, private investors would not invest directly in those countries. Within a region the investment ratings for the selected countries do not, however, differ systematically from those for other countries (finding of the regression analysis). Nor do business friendliness or corporate regulation[50] in the selected countries differ from those of other countries in the same region. This means that the financial additionality of the funds is achieved through their focus on risky regions, but not through a selection of countries within those regions with an above-average risk.

[49] Moody's investment ratings. BAA3 = lower medium grade borrowers that are currently operating successfully.

[50] Measured using the ease of doing business score. The ease of doing business score is a World Bank index published annually that rates business friendliness and the regulatory environment in national economies.

Interpreting the findings

The funds select mainly countries rated as risky, but only a few LDCs. The funds focus on regions that are in line with development objectives, and select countries that are typical of the respective region – which means mainly lower-middle or upper-middle income countries. Most of these countries are rated as risky (speculative). Since risky investment ratings discourage private-sector actors from investing in these countries directly, the additionality of the country selection should be considered high. Due to the sometimes higher levels of instability and uncertainty in LDCs, however, the funds invest only little in these countries, even though their developmental relevance and financial additionality is especially high. This is the case particularly in sub-Saharan Africa, where 24 of the 31 low-income countries are located. Given the need for the funds to achieve financial sustainability, the financing approach does not appear suited to investment in LDCs on a large scale. However, the option of portfolio diversification does enable funds in a few cases to offset the relatively high investment risk in LDCs with investments in less risky countries.

6.1.2 Selection of the FIs refinanced by the funds

The analysis below examines which development and financial aspects play a role in the selection of FIs. The section begins by looking at the conditions for selecting the FIs. This encompasses the agreed reporting indicators and the criteria for deciding on investment proposals. The section then identifies which types of FI the funds actually invest in, and examines how these differ from other FIs. This analysis permits conclusions as to whether the selected FIs are relevant for achieving development objectives, and whether it is therefore likely that the FIs will offer more favourable terms and focus more strongly on the sub-borrower target groups.

Conditions for selecting the FIs

To ensure that investments contribute to development, the funds select FIs whose portfolios are aligned with the funds' objectives, and provide earmarked financing. Most of the funds define the sectors and target groups for which the loans may be used in the contracts with the FIs. In most cases this means that the loan product, for instance an MSME loan, and other conditions such as the maximum size of loans, are stipulated. Should the FI fail to comply with this or other contractually stipulated conditions (including anti-money laundering requirements), the fund managers can either withdraw their capital from the FI (I111; I059), take protective measures or impose sanctions such as demanding additional collateral (D228). However, the contractual agreement cannot ensure that the previous financing of the business segment by other investors is not substituted by the fund financing (I091). One fund stipulates, for example, that microenterprises must account for at least 50 per cent of the FI's portfolio. In practice, however, it is not possible to say which money of the FI – i.e. the money from the fund or money from another source of financing – is being used for this group (I091).

Although the funds endeavour to strike a balance between development benefits at the level of sub-borrowers, and the establishment or support of sustainable financial institutions, the indicators for reporting to the BMZ refer mainly to the FIs. Generally speaking the fund managers take into account both development-related and financial considerations when selecting the FIs (D496, D489; D414; I035; D025; I028). As a general rule, however, only financially viable institutions are supported (D134; D017; D264). The investment guidelines stipulate the conditions that FIs must meet in order to qualify for financing. The eligibility criteria include indicators on reaching sub-borrowers (eligible FIs must for instance demonstrate that their portfolio serves these sub-borrowers, or must have set a maximum loan size), indicators on the financial strength of the FIs (e.g. on their portfolio quality and risk management) and on ESG standards (D015; D074; D137; D219; D278; D353; D402; D426; D490). Most of these eligibility criteria are also reflected in the investment proposals of the fund managers.[51] As well as describing the financial strength and analysing the

[51] The investment proposals are prepared by the fund managers following the due diligence audit of the FIs and submitted to the investment committee for assessment.

portfolios of the FIs (D370, D410), in some cases the investment proposals also describe the anticipated development effects of the investment (D478; D078, D010, D031). One criterion here for instance is which sub-borrowers will be reached by the FI. Sometimes the investment proposals also include a section on additionality, where for instance they describe how high the FI's need for international finance is (D410, D010). Since these assessments are not quantified, it is for the investment committee to decide how much they influence the investment decision. The reporting criteria that the BMZ uses for steering (see Section 4.2.3) primarily include aspects of the FI's financial stability, such as the maximum default rate and/or the maximum share of non-performing loans (portfolio at risk – PAR) (D019; D065; D122; D212; D259; D335; D403; D430; D496). For all the funds, only a few of the indicators reported to the BMZ aim directly to ensure effects on the sub-borrowers and/or the additionality of the funds; instead, they are confined mainly to indicators such as the number of sub-borrowers or the average maximum loan size of the FIs.[52] The funds, on the other hand, require the FIs to supply additional information on the loans deployed, for instance on their distribution across urban and rural areas, demographic information on the end clients, and the purposes to which the loans were put.

Only few funds ensure that they also reach FIs which have poorer access to financing and are therefore especially important for the objective of promoting sustainable institutions. Here too there is a certain conflict of objectives. On the one hand, selecting financially stable FIs helps to promote a stable financial system and ensure the sustainability of the funds. On the other hand, selecting financially weaker FIs is especially additional in development terms, as these FIs have fewer alternative financing options (D335). Only one fund stipulates that at least 30 per cent of financing must be provided to tier 2 or tier 3 MFIs,[53] which are institutionally less mature. Even with a 30 per cent share of financing, tier 2 and tier 3 MFIs are under-represented, considering that according to a study, in 2013 tier 2 and tier 3 MFIs together made up 93 per cent of all MFIs (MicroRate, 2013). In two funds, financial incentives were also created for fund managers to invest in riskier FIs (e.g. tier 2 and tier 3) (I050; I030). In one fund there is a risk pot that accounts for some five per cent of the investment volume and invests in tier 3 institutions using small loans (200,000 – 300,000 US dollars) (I020).

All the funds rate and/or assess the ESG standards of the FIs; however, a few FIs with very poorly rated ESG standards are also financed. The ratings are based on up to 100 indicators that cover various dimensions such as working environment, financial inclusion and client protection (D419). The funds also check that the FIs do not contravene the exclusion criteria (exclusion list), for instance by financing weapons. The investment guidelines of most funds do not, however, set a minimum standard that must be met in order for FIs to qualify for financing. In some cases the fund managers themselves set a limit value for their ratings. FIs with a rating below this critical value are then only proposed for investment if the financing is tied to a TA intervention designed to improve environmental and social standards. In the absence of such standards, FIs with very poor environmental and social standards may also be selected. This is demonstrated by the example of one of the four commercial banks financed by the funds that were rated by Morgan Stanley Capital International (MSCI).[54] While three of the banks received an average (BBB) to good (A) rating, one bank received a B rating, making it one of the worst nine per cent of all banks rated by MSCI (D581; 582; 583; 584).

[52] Only the indicators for reporting to the BMZ are included here. The fund managers receive more information from the FIs (see Section 4.2.3).

[53] The tier system classifies MFIs into different groups depending on their institutional maturity. Tier 1 institutions: mature, financially stable and large MFIs that are highly transparent; tier 2: small or medium-sized, slightly less mature MFIs; tier 3: start-up MFIs or small NGOs that are not yet financially sustainable (MicroRate, 2013).

[54] MSCI awards ESG ratings based on performance in various areas such as corporate governance, privacy & data, security, financing environmental impact, human capital development, access to finance, financial system instability and financial product safety.

Characteristic features of the selected FIs

The funds prioritise FIs with a high percentage of female borrowers. The evaluation team used regression analyses to compare the selected institutions with non-selected institutions in the same countries. Due to the data available (MIX Market), this analysis is confined to MFIs (microfinance banks and non-bank actors), which do, however, make up more than 50 per cent of all FIs selected by the funds.[55] The analysis shows that the probability that an FI will receive financing from a fund rises with the percentage of women in its portfolio. This finding is consistent with the objective of many funds to prioritise support for women (e.g. D263). It also suggests a development orientation in the selection of FIs by the funds. A high percentage of women in the portfolio also has financial advantages for the funds, however, as a higher percentage of female borrowers correlates with a better portfolio quality (PAR90).

Structured funds tend to select large FIs.[56] The probability that an FI will be financed by the funds rises with the size (financial assets) of the FI. This finding suggests that investment decisions focus primarily on reducing the probability of default by FIs, in order to prevent losses and thus ensure that financing can be delivered sustainably. The analysis of the MFIs, however, also shows that the selected MFIs do not differ from the non-selected MFIs with respect to portfolio quality or profitability.[57] In other words, diversification means that riskier or less profitable MFIs are treated neither more nor less favourably in the selection process, even though they usually have few other financing options.

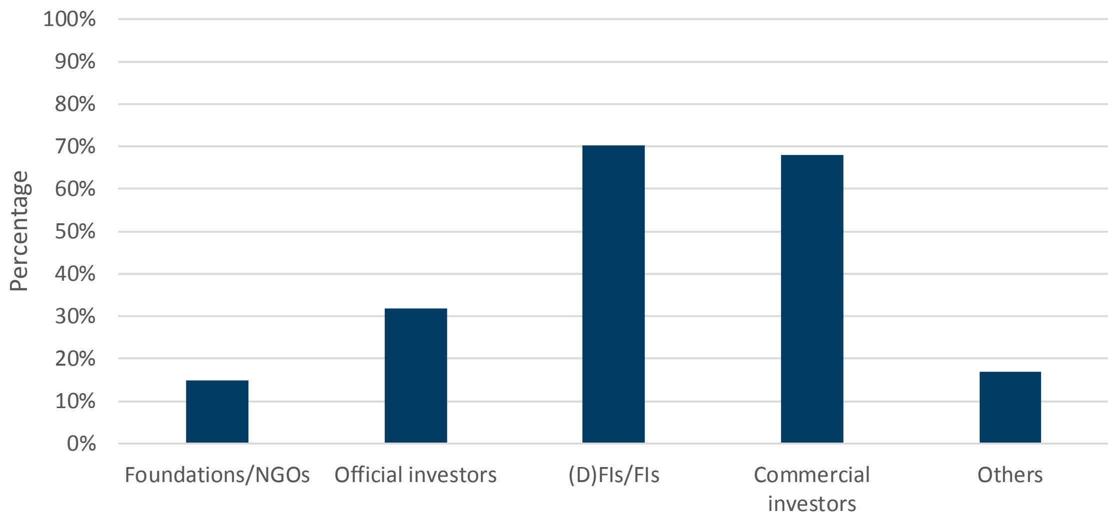
Almost all selected FIs are also financed by other investors; many of them are among the FI market leaders. Only one of the 40 FIs that took part in the survey is not financed by any investor other than the structured fund in question. One reason for this might be that in many regions, MFIs are not allowed to accept deposits and therefore rely on various investments to refinance their lending business. Most of the financed FIs (75 per cent) are also financed by at least two other types of investor in addition to the fund (see Figure 25) – very often (D)FIs, international financial institutions (IFIs) or commercial investors. The (D)FIs often finance the same FIs as the structured funds, even though they are often also investors in the funds (I059; I007; I011; D228; I091; I104). There is also a major overlap between the structured funds: 19 per cent of FIs are refinanced by two or even three of the funds (source: FIs per fund). One reason for the major overlap between the investments of the structured funds, private funds and (D)FIs is that many FIs are among the market leaders in the respective country (D025; D241; D463; I064; D081; D031; D370). All things considered, this shows that in the selection of FIs, the objective of financial sustainability is more of a prime concern than supporting riskier FIs with fewer financing options. The latter are supported by the funds only in a few cases as part of the diversification strategy (see next section).

[55] Commercial banks and leasing companies, which together account for 45 per cent of all FIs, are not included in the regression analysis. Furthermore, only around half of MFIs are available through MIX Market, though these do not differ significantly from MFIs that are not available (see Section 3.3).

[56] The finding that many of the factors examined do not have any significant effect on the probability of selection does not mean that these factors do not play a role in the selection process. The selected FIs do not, however, differ significantly in these respects from FIs that were not selected.

[57] The following indicators were compared, and were found not to differ significantly: *Portfolio at Risk 30 (PAR30), Return on Assets, (ROA), Return on Equity (ROE), Capital Adequacy Ratio (CAR), Debt-to-Equity Ratio (DER).*

Figure 25 Percentage of FIs surveyed that are also financed by other types of investor as well as the structured funds



Source: survey of FIs financed by the four funds selected for the causal analysis.

Risk diversification enables high-additionality investments in risky, less mature FIs. However, these account for only a small proportion of all FIs, in order not to jeopardise the financial sustainability of the funds (for example, only 20 per cent have a PAR90 of over five per cent). The regression analyses described above, which showed for instance that larger FIs are more likely to be financed, only look at how the FIs selected differ on average from those not selected. They do not say anything about the variance or diversification of the portfolio. Yet portfolio diversification plays a major role, particularly as regards the tension between financial and development factors when selecting FIs. To maintain the junior tranche the funds must avoid high losses, which is only possible when investments in smaller or riskier FIs are offset by investments in larger or less risky FIs (I040). In all funds the investment proposals place checks on diversification by defining limits to the share of the total volume of the fund that an FI may account for (normally 10 to 15 per cent). The distribution of the FIs actually financed reflects this high level of diversification, particularly the portfolio quality of the FIs, which is a crucial determinant of the degree of risk of a fund's portfolio (see Figure 30 in Annex 9.5). The PAR over 90 days varies between 0 and 44 per cent, which means that some FIs have no interest or principal payments in arrears after 90 days, while others have 44 per cent in arrears. However, three quarters of the FIs of all funds have a PAR90 of between 0 and 3.44 per cent. This shows that by refinancing low-risk FIs, the funds are then able to finance a small number of FIs with a very high risk. The distribution of assets is also highly diversified (see Figure 31); they vary between 25,000 and 2.38 billion US dollars. Two funds in particular also finance extremely large FIs. The high level of diversification also enables the financing of some FIs that operate mainly in rural areas or would like to expand in that direction (I124; I089; I064; D241), but do not have a track record (D432) or do not receive financing from other donors (D313, I104).

Interpreting the findings

The analysis of the conditions for selecting FIs, and the institutions actually selected, shows that in a first step, FIs are selected which already have a business segment – in this case MSME financing – for the targeted sub-borrowers. From these, mainly FIs with a high degree of financial stability are then selected in a second step. Selecting FIs involves a balancing act between the conflicting aims of financial sustainability and development impact. To ensure financial sustainability, mainly financially robust FIs are selected as this minimises the probability of payment defaults. Conversely, this means that the financing approach is suitable primarily for financing FIs that are already economically successful and therefore have easier access to financing. Investments with greater development benefits and additionality, such as investments in FIs that have riskier portfolios and fewer other financing options, are made possible by risk diversification, though only to a minor extent.

6.1.3 Technical assistance (TA) – selection of FIs, usefulness and financing

In addition to capital, some FIs also receive support in the form of TA interventions. Which FIs are selected for this is crucially important for the effectiveness of these interventions. It is assumed that TA will only lead to a stronger focus of the FIs on the targeted sub-borrowers, such as MSMEs, when the FIs have a strong need for support in this area, i.e. when additionality is high and the FIs are highly relevant for development. This analysis therefore looks at the criteria by which the FIs are selected for the interventions, how the additionality of the interventions is to be assessed, how the FIs rate the usefulness of the TA and how sustainable the financing of the interventions is.

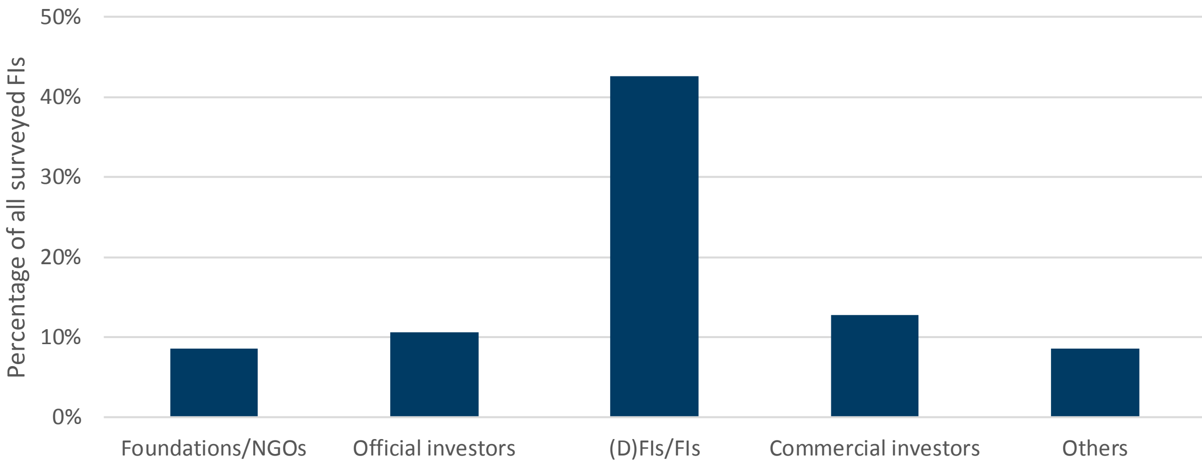
FIs selected for TA often have deficits with regard to their environmental and social standards, their risk management or their ability to reach sub-borrowers. The selection of FIs thus also depends on the objective of the intervention (see Figure 10 for an overview of the interventions). In many cases interventions are carried out for FIs whose environmental and social standards are not yet very mature. The need in this area is often identified by fund managers during FI due diligence audits. Some funds make their financing dependent on the introduction of a social and environmental management system or a package of measures to manage social performance and client protection; others support the introduction or improvement of such systems through TA delivered concurrently with the financing (D025; D413, D195). In other cases, FIs are supported that have a risky portfolio and therefore also represent a high risk of default for the funds. For example, one fund supports especially tier 2 and tier 3 institutions[58], i.e. less formalised FIs, with TA designed to increase the financial sustainability of their operations. Others use TA to compensate riskier investments, for instance in cattle farming (D045). One fund also provides TA to FIs that are already financially very successful, and in some cases are among the FIs with the best ratings in the region (D580). However, these interventions can be also relevant for financially strong FIs, if they do not yet have the necessary processes and systems in place to reach new sub-borrowers with particularly high financing requirements.

The additionality of the TA is limited by the fact that the financial scope of the interventions is relatively small. FIs often also receive TA from other investors. The costs for such interventions are relatively low, averaging 65,000 euros each. For FIs with average assets of 225 million euros, this hardly seems sufficient to facilitate structural changes. Just as they receive financing from several investors, FIs also receive TA interventions from several investors. In the survey, 20 out of 25 FIs[59] indicated that they receive additional TA from at least one other type of investor. This is delivered especially often by invested (D)FIs/IFIs (see Figure 26). It is nevertheless assumed that the interventions do provide additionality, as the relatively low level of funding for TA suggests that funding is required from several providers in order to bring about structural changes.

[58] Tier 1 institutions: mature, financially stable and large MFIs that are highly transparent; tier 2: small or medium-sized, slightly less mature MFIs; tier 3: start-up MFIs or small NGOs that are not yet financially sustainable (MicoRate, 2013).

[59] This refers only to surveyed FIs that also receive TA from the funds.

Figure 26 Percentage of surveyed FIs that also receive TA from other investors



Source: survey – response to the question: 'From which other investors do you also receive technical assistance?'

The usefulness of the TA is reflected in the needs-orientation of the interventions, the positive feedback from the FIs and the strong demand. In most cases the providers of the interventions apply similar methods for all FIs, but adapt implementation of the projects to the respective FI to ensure that the interventions are demand-driven (D412; I045). In most cases the TA requirement is identified either by the FI and the fund manager jointly (39 per cent), or by the FI alone (29 per cent) (finding of the survey).[60] This indicates that FIs consider the intervention necessary, and therefore have an interest in its successful implementation. The usefulness of the TA is also confirmed by the positive feedback from the FIs, 99 per cent of which rate the TA as 'largely helpful' or 'very helpful' (finding of the survey). The strong demand for TA also indicates its usefulness: Many FIs point to the combination of capital and TA as a reason for selecting the fund as an investor, as borrowing conditions are otherwise based on standard market terms – in line with the funds' objective of not distorting the market (I048; I064; I020; I028). In some cases the continued disbursement of the loan is tied to successful implementation of the recommendations that the TA providers make to the FIs (D389, D025). The contribution made by the TA to the additionality of the structured funds as a financing approach is also corroborated by a World Bank evaluation of blended finance instruments (World Bank, 2020).

The TA is usually financed from donor grants, fund revenues and cost sharing by the FIs. In most funds the TA Facility is funded from grants provided by several donors (D389; D412; D217; D287). In most funds additional funding for the interventions comes from fund revenues, if the fund makes a profit. In these cases the maximum percentage of profits that can be spent on the facility (e.g. 6 per cent of profits or 0.2 per cent of the net asset value) is defined in the issue document. However, the Board of Directors decides annually on the actual amount disbursed (D136; D231; D296; D429; D075; D489; D400; D025). The third channel for funding the TA is cost sharing by the FIs, which on average contribute between 20 and 30 per cent of the project costs (D134), though depending on the size and financial strength of the FIs this can be between 5 and 70 per cent (D134; D333; I024; D412). Not all funds use all three financing channels, which reduces the sustainability of the financing. One fund had to discontinue the TA, because the donor financing was not forthcoming and it was not possible to use fund revenues (I125).

Cost sharing creates an incentive to implement the interventions, and ensures that the FIs actually require the support. Nonetheless, there are cases where the recommendations are not implemented due to a lack of will or capacity on the part of the FIs (D580). In one case, one or two FIs paid consultants out of their own pockets to improve their processes before the fund interventions were implemented (D580), which places a question mark against whether the funds need to share the costs in all cases.

60 The survey covers the four funds included in the causal analysis, and elicited responses from 40 FIs.

The costs of implementation are sometimes reduced by synergy effects. In many cases synergies are created by using the same method or by replicating the same intervention in different FIs across sectors or countries (I045; D432). Costs are saved here for instance through the standardisation of processes by fund managers, e.g. for monitoring, or through group discounts for consulting firms implementing the interventions (D318).

Many funds also address the sector and country levels through TA. At the sector and country levels, projects are usually realised through programmes involving central banks, associations and incubators (to promote start-ups) (I045; D082; I031). These are designed to promote networks and knowledge building, as well as to further develop the local financial market (see Section 4.2.5). One example is the support of a central bank in Southeast Europe in the field of financial technology (D093), which was identified as an increasingly important topic for the financial market in the country concerned. At a workshop, good practices for handling guidelines, regulations and system development were discussed with the management of the central bank, and a plan of action was drawn up to create an enabling environment for promoting financial technology. However, cooperation with central banks can lead to conflicts of interests, as TA interventions often serve to regulate new products that refinanced FIs may introduce in the country concerned. This may give them a competitive advantage over other FIs. Furthermore, some central banks are also investors in the funds and therefore have an additional interest in creating regulatory conditions from which the invested FI will profit.

Some funds address the sub-borrowers directly through TA. At the level of the sub-borrowers, some interventions serve to enhance the quality of FI portfolios, for instance by providing training for school principals in the management of schools. Other interventions aim to provide financial literacy for sub-borrowers, for instance through radio broadcasts (I064).

Interpreting the findings

The analysis indicates that the TA is relevant for achieving development objectives. Although it is not unique to the funds, in many cases it is additional despite its small financial scope. The selected FIs often display deficits in their environmental and social standards or in some cases have a risky portfolio, which suggests that the FIs that are selected for the TA are relevant for achieving development objectives. The interventions themselves are also of developmental relevance, as they largely focus on enhancing access to sub-borrowers. The FIs see the TA as highly beneficial, express a strong need for the interventions and share the costs, which also indicates that the interventions provide additionality. At the same time, many FIs also receive TA from other investors. In other words, TA is not a unique characteristic of structured funds. The additionality of interventions may nevertheless be high, however, if they focus on areas that are not financed to a sufficient degree by other donors.

6.2 Effects of the financing and TA on the FIs and sub-borrowers

This section will examine the effects of the financing and the TA on the FIs (Section 6.2.1) and on the sub-borrowers (Section 6.2.2), for example through the portfolio and the responsible finance processes established by the FIs. As described in Chapter 3, the analysis is largely based on the four MSME funds selected for the causal analysis.

6.2.1 Effects on the FIs

Effects of local currency financing and the signalling effect

The local currency financing offered by some structured funds enables the FIs to better manage the exchange rate risk. Local currency financing (see Section 4.1.1) is a bottleneck in MSME financing, as it is rarely provided by international donors despite the strong demand (D134; D284). At least a few structured funds provide local currency financing, and in doing so assume the exchange rate risk. At the same time this enables the FIs to better manage their risk, although the additional costs are usually passed on to them through higher borrowing costs. Furthermore, for some FIs structured funds were the first investor to offer fixed interest rates (D580) and thus protect the FIs against interest rate fluctuations.

Financing by structured funds sends a signal to other investors. This signal can have an effect both at the level of individual FIs and at the level of the financial market. The 'prestige effect' associated with an investment by an international donor boosts the profile and the track record of FIs, making them attractive for other investors (D580; D105). This is also reinforced by the fact that structured funds ensure stable, long-term financing (I046), and help diversify the financing structure D580; I009). This reduces the investment risk for other investors. If a country is in crisis, investment by a structured fund can create confidence in the market and encourage other investors to also invest in the market or the FI itself (I091; D264). In some cases the fund was the first commercial investor (D105).

Effects on the volume of investment by the FIs

The FIs financed by the structured funds have increased their volume of investment significantly since the inception of the funds. The evidence confirms that since the funds were launched, the financed FIs have grown significantly in terms of both their volume of investment and their overall size (Source: MIX Market[61]). However, the average growth of the selected FIs was not significantly higher than that of non-selected FIs in the same countries over the same period (Table 18 in Annex 9.9). This contrasts with the signal effect of the financing described above, for which there are various possible explanations.

- The other FIs have access to financing, e.g. from IFIs or (D)FIs, that does not differ significantly from that of the structured funds, and also sends a signal.
- The financing provided by the structured funds sends a signal to the microfinance sector of the country, from which FIs not financed by the funds also benefit.
- The financed FIs would otherwise have obtained finance on similar terms, had they not received financing from the funds.
- A combination of these factors will probably come into play, depending on the sector and region.

[61] The analyses, which used MIX Market as their source, include only microfinance banks and non-bank actors. See Sections 3.2 and 3.3.

In many regions and sectors where the structured funds operate there remains a strong demand for financing, which means that additional financing is highly beneficial despite the presence of other sources. This applies particularly to sub-Saharan Africa (D370; I083, D521) and the LDCs (OECD/UNCDF, 2019). However, the funds also operate in countries where there is strong competition between financial institutions, at least in the field of MSME financing (I092; I096; I074; I067; I082; I064). This suggests that at least certain groups of sub-borrowers already had good access to financing before being financed by the fund (see Section 6.2.2), and that the added value of the additional financing is low.

In other sectors such as education, environment and climate the funds have market-building effects. In these sectors the financing from the funds supports some established financial institutions in adopting new financial products for sub-borrowers that the fund in question is targeting (D396). The healthcare sector too, where the structured funds have not yet been active, has great potential. In the Convergence database (2019b), for instance, only three per cent of projects are in the healthcare sector; the role of blended finance in the healthcare sector is considered undersized (Convergence, 2019c). One example of a successful blended finance project in this sector is the guarantees provided by the Swedish International Development Cooperation Agency (SIDA), the Bill and Melinda Gates Foundation and other investors to facilitate market entry for medicines in low income countries (BSR, 2017). The additionality of the structured funds thus depends on the financing needs in the sector and the region.

6.2.2 Effects on the sub-borrowers

This section will look at which sub-borrowers are reached by the funds, and how the increased volume of investment and implementation of the TA affect which sub-borrowers are reached. The authors assume that the additional capital and the TA lead the FIs to strengthen their focus on the sub-borrowers targeted by the fund, for instance by adapting financial products more closely to the needs of these sub-borrowers and by employing processes to protect them.

Reaching the sub-borrowers

Four funds monitor the extent to which the selected FIs reach the sub-borrowers through indicators used in their reporting to the BMZ, though these indicators are only partially reflected in the investment proposals. In three cases indicators determine the average size of sub-loans (D430; D496; D259), which depending on the fund may amount to a maximum of 5,000, 10,000 or 15,000 US dollars. In two cases the number of individuals to be reached within the respective group of sub-borrowers is also defined (depending on the fund, e.g. small farmers or households) (D403; D019). However, these indicators are only partially described in the investment proposals. Compliance with the average loan size (up to 10,000 US dollars) is only considered in the investment proposals of one fund (D410). Further development criteria that relate to reaching sub-borrowers and are described in the investment proposals, are the ratio of MSME loans or educational loans to the portfolio as a whole (in both cases at least 50 per cent) (D370, D410).

Each fund reaches the targeted sub-borrowers because the majority of financing it provides is earmarked. However, many of the sub-borrowers already had access to financial services prior to receiving the loan from the refinanced FI. The borrowers of the fund-financed FIs are mostly micro and small enterprises with fewer than ten employees. The sub-borrowers also include medium-size enterprises (D412; I109; I092; D217; D306; D124; D122). These enterprises operate mainly in the trade, agriculture and services sectors (D412; I129; D232; D340; I078; I070; I071; I108; D028). In five funds women account for between 50 and 80 per cent of the sub-borrowers (D403; D520; D412, I092; I124; I129; D312; I076; I082; I071; I108; D240). This is also corroborated by the regression analysis, which shows that FIs with a higher percentage of female sub-borrowers are more likely to be selected (see Section 6.1.2) (source: MIX Market).[62] As the sub-borrowers

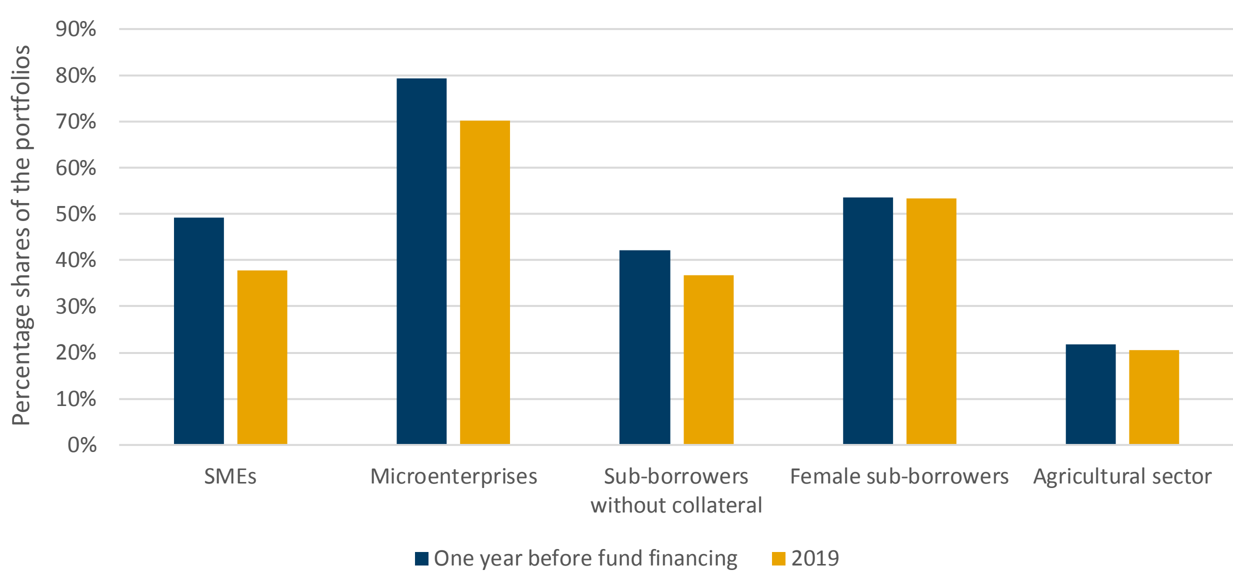
[62] See Section 6.1.2.

usually take out follow-on loans with the same FI, and the FIs already served the MSME business segment before being financed by the funds[63], the FIs only rarely reach individuals who previously did not have access to financial services (I096; I098; I099; I100; I074; I076; D282). This also results from the fact that the FIs offer their financial products on market terms (D310; I082, I071; I097; I100, I064). Many sub-borrowers also have loans with other FIs. However, a small number of FIs target sub-borrowers that are not served by other FIs (I104).

Expanding the portfolios for the sub-borrowers targeted by the funds, and terms of the FIs

There is no relative expansion of the business segments for the targeted sub-borrowers. With MFIs at least, this is because they already specialise in these target groups. Based on the survey data collected for the four funds in the MSME financing sector, the evaluation team analysed whether the business segments for the targeted sub-borrowers were expanded between the year prior to fund financing and 2019. The percentage of female sub-borrowers, SMEs, microenterprises, enterprises in the agricultural sector and sub-borrowers without collateral[64] in the FI portfolios did not change significantly, or even tended to fall over time (see Figure27). The FIs attribute this not to the financing or TA provided by the funds, but to external factors. However, since the overall volume of investment by FIs has increased (see Section 6.2.1), more sub-borrowers are being reached in absolute terms even though the portfolio shares remain the same. One reason why the business segments for the sub-borrowers have not increased in relative terms might be that the financing provided by the funds often accounts for only a fraction of the total financing of the FIs, in one case for instance just 0.4 per cent (I071). Furthermore, in the case of MFIs the group in question – micro and small enterprises – already accounts for such a large share of the total portfolio (sometimes up to 100 per cent) that no further expansion is possible. In some cases, one or two large loans may also distort the relative proportions of business segments.

Figure 27 Percentage shares of the portfolios by sub-borrower group



Source: survey.

[63] As explained in Section 6.1.2, the existing business segment is often the criterion for selecting FIs.
[64] The percentage share of borrowers without collateral fell from 46.3 to 41.7; $t(35) = 1.9212$, $p = 0.0314$.

In many cases the TA leads to financial products being aligned more closely with the needs of sub-borrowers targeted by the structured funds. As discussed in Section 2.2, more than half the TA interventions at FI level promote access to sub-borrowers. These involve

- support for the (further) development of financial products for various sectors such as agriculture (D028), affordable housing (D313) or MSME financing (I062)
- support for the introduction of new products that are geared more closely to sub-borrowers, such as loans for renovating buildings (I064), agricultural loans (I071), products for pensioners (I104) or leasing products for MSMEs (D586)
- training for loan officers, for instance to improve the assessment of MSMEs' creditworthiness (I062)
- support for digitalisation measures, for instance to facilitate sub-borrowers' loan repayments (I092, I062), particularly when they live in remote areas (D134, D025, I129)
- training for sub-borrowers, for instance in financial literacy, with modules on income and expenditure, savings and deposits, and credit management (D306; D305; I062)
- support for the expansion of FIs into rural areas (I124; I089; I064; D241).

Here it should be noted that developments at the level of sub-borrowers are not attributable solely to the TA.

Box 3 Example of an FI financed by the REFFA fund

The FI is a non-bank actor that offers lending and deposit services for MSMEs in Ghana and plans to expand its business in the education sector. The TA intervention supports this objective through

- research and analysis of the potential for financing education
- support for the development of financial and savings products
- testing of the products with sub-borrowers
- training of staff
- full product roll-out.

The intervention helps facilitate access to financing for education providers and meet the need for savings products among learners and their families.
This is especially important because over the last few years many private schools have emerged in Ghana that are also directly accessible for the middle class, which increases considerably the number of people in the country who can access quality education.

Box 4 Example of an FI financed by the REGMIFA fund

This FI is a commercial bank in Tanzania that focuses on the microfinance sector and offers financial services for MSMEs. The TA supports the bank in developing loans that are specially geared to the needs of the agricultural sector. This involves an automated credit scoring system to assess the creditworthiness of the sub-borrowers. The bank has also been advised on which branch offices would be best suited to piloting and implementing the score card.

Like other FIs, the FIs financed by the funds offer their financial products on market terms; the reduction of interest rates since the funds began providing the financing is also a general trend. While the average monthly interest rate of the FIs has fallen significantly from 14.35 to 13.61 per cent since the fund financing began (finding of the survey), the FIs state that this is due to external factors. The quasi-experimental analysis (source: MIX Market) confirms this: Although the portfolio return of the refinanced FIs has fallen significantly since the funds were launched, it has not fallen any further than that of the control group of non-selected FIs in the same countries.[65] The falling interest rate thus reflects a general trend in those countries where the funds invest. The lending terms of the financed FIs are generally considered to be in line with the market, and do not differ from the terms of other FIs with regard to either loan size or interest (D310; I082, I071; I097; I100, I064). One possible reason for this is that the funds also lend to the FIs on market terms D501; D580; D134; D218; D025; I009). In the cases examined there is also no indication that the financial services to which the sub-borrowers previously had access were offered on less favourable terms.

The average portfolio yield[66] of the supported FIs in the field of MSME financing is between 24 and 38 per cent, depending on the fund. This portfolio yield is a proxy for interest rates that also includes other revenue generated by the loan portfolio such as penalties and fees, and therefore more accurately reflects the actual costs for the sub-borrowers. The portfolio yield is largely determined by the FIs' operating costs and financing costs, rather than by loan losses and profit (see Figure 32 in Annex 9.7).

In some cases, refinancing the FIs in local currency leads to more favourable terms for the sub-borrowers. The fund managers of some funds monitor the currency in which the FIs lend to the sub-borrowers. In at least two cases the percentage is even higher than the percentage of local currency loans to the FIs (D310). However, there is also the converse case – in which the FIs extend loans in hard currency (euros or US dollars), even though they were refinanced by the fund in local currency (I105; D496). Some of the FIs that are refinanced accordingly also offer their clients loans in different currencies and leave the choice of currency to the sub-borrowers (I108). The sub-borrowers are sometimes tempted by the more favourable interest rates of the loans in US dollars, and underestimate the risk they then face from currency fluctuations. One general problem with credit lines and with structured funds is that financing in hard currency tempts the FIs to grant more hard-currency loans in order to lower their own risk (D105; D134; D310). Unlike credit lines, however, structured funds can support local currency financing.

Processes to protect sub-borrowers

This section will describe how the FIs ensure that sub-borrowers are protected, for instance by preventing over-indebtedness and aggressive sales tactics. Here too, the authors analyse first of all the conditions and then the measures taken.

Microcredit in particular has repeatedly been criticised for leading sub-borrowers into over-indebtedness, which is partially confirmed by studies in Cambodia. The high level of over-indebtedness of some microborrowers came to light following the suicide of microfinance clients in India in 2010 (Mader, 2013). This prompted a debate on the practices of FIs and on microfinance in general. In 2019 the problem once again became the focus of public attention when the human rights organisation LICADHO published a study on the effects of microfinance in Cambodia. LICADHO surveyed 28 households that had suffered repeated or serious human rights violations in connection with a microloan, and found that 22 households had been forced to sell their land, while 26 households had to reduce the quantity or quality of their food (LICADHO, 2019). A large-scale study involving more than 1,600 microborrowers in Cambodia found that around 56 per cent of the sub-borrowers were moderately indebted and up to nine per cent were heavily indebted.[67] More than one-fifth of respondents indicated that in order to repay the loans they had to make sacrifices which they found unacceptable such as taking out new loans, selling their property or deferring medical treatment (D585). Over-indebtedness is made more likely above all by the taking out of several loans at the same time (Microfinance Opportunities, no date).

[65] The quasi-experimental analysis compares the year prior to inception of the fund with the last year for which data are available, provided that this is no more three years ago (2016 to 2018). These data are therefore less exact that the survey data, which compare the year prior to fund financing with 2019.

[66] Proxy for interest rate: financial revenue from loan portfolio/average gross loan portfolio

[67] The study uses various data sources to construct a metric for over-indebtedness that includes both subjective and objective dimensions.

When selecting the FIs the funds emphasise the importance of complying with the principles of responsible finance. However, the investment proposals do not monitor the implementation of these principles sufficiently. The Responsible Finance Forum, which was founded by among others the BMZ and the IFC, defines responsible finance as the guiding principle for the way in which financial services are delivered in order to meet the challenge of promoting sustainable development (RFF, 2011). For the KfW Development Bank, responsible finance essentially comprises transparency of the terms of financing, fair marketing practices and careful analysis of the sub-borrowers' solvency (D396). Almost all funds emphasise the importance of responsible finance, which they prioritise when selecting FIs (D501; D414; D134; D218; D268; D296; D396). One key aspect of responsible finance is client protection, which is also mentioned in the investment guidelines (D015). Funds are supposed to select only FIs that take these aspects into account. However, the guidelines are very vague in this regard and do not, for instance, define what the respectful treatment of clients actually means. In the investment proposals examined too, only three of the nine funds state explicitly whether the FIs subscribe to the principles of client protection. Thus in most cases, the investment proposals do not provide the investment committee with the information on client protection by an FI that they would require in order to consider this aspect when making their investment decision.[68]

So far only few FIs have been certified by the Smart Campaign. The Smart Campaign is a global campaign to protect microfinance clients which is supported by the KfW Development Bank, among others. It certifies FIs that have undertaken to abide by its principles[69] and meet its standards. However, so far this is the case with just over 20 of the roughly 440 MFIs refinanced by the structured funds. A similar certification system for banks and leasing companies has only been in place since 2019.[70]

The FIs looked at by the evaluation team have implemented processes to protect against over-indebtedness, but are lagging behind on other client protection principles. Some FIs have put in place processes to protect sub-borrowers against over-indebtedness. These include for instance limiting the loan size to 40 per cent of revenue (D370), and/or ensuring that savings are in place and that over-indebtedness is prevented by close monitoring (I079, I129, I092, I080, I071). In the funds' target regions, verifying the existence of revenues and savings is a particular challenge, and is very difficult to carry out in practice. Some FIs also permit the extension of multiple loans to one client, despite the fact that this is one of the main risks for over-indebtedness (I074). Generally speaking, loan officers and clients enjoy a close and trustful relationship (I093; I099; I074). However, clients do express concern about sanctions in the event of late repayment, even though these sanctions do not come into force until very late (I066, I082). In a market economy with a functioning financial system, sanctions in the event of repayment delays are the norm. However, for vulnerable groups in the target regions they may represent an incomparably heavy burden. Furthermore, strong competition on the market means that loan officers sell loans aggressively and proactively, which increases the risk that sub-borrowers decide to take out a loan despite their low income.

Box 5 Example of an FI financed by the MIFA fund

The FI is a tier 3 microfinance organisation in Kyrgyzstan that was established in 2007. In 2016, the fund manager's standardised rating method revealed that the FI's social performance was below the average for all the financed FIs. As a result the FI received support from the TA Facility to improve its client protection. The interventions included staff training on how to prevent over-indebtedness, analyse client information and price products responsibly, as well as suggested improvements for conducting and analysing client surveys. In April 2019, the plan of action that ensued resulted in the FI being certified by the Smart Campaign.

68 It is not possible to say how much dialogue and discussion of client protection processes takes place at investment committee meetings, and goes beyond information contained in the investment proposals.

69 http://smartcampaign.org/. The seven principles of the Smart Campaign are: 1. appropriate product design and delivery; 2. prevention of over-indebtedness; 3. transparency; 4. responsible pricing; 5. fair and respectful treatment of clients; 6. privacy of client data; 7. mechanisms for complaint resolution.

70 The UNEP FI Responsible Banking Principles were adopted in September 2019.

Interpreting the findings

The structured funds provide FIs with access to reliable finance, sometimes in local currency. This enables institutions to increase their investment volume and reach more sub-borrowers, including women and MSMEs. A further outcome, albeit in only a small number of cases, is improved access to financial products for sub-borrowers, for instance as a result of TA interventions. Since access was not made easier in most cases, only few clients are being reached that did not previously have access to formal financial services. When selecting FIs, the funds do generally comply with client protection principles such as the prevention of over-indebtedness. However, the monitoring of these principles should be improved – for instance through documentation and indicator-based reporting to the BMZ. There is also evidence that some FIs disregard client protection principles, for instance by allowing multiple simultaneous loans to a single client.

6.3 Summary in relation to the DAC criteria

Relevance: The investment risk of the countries in which the funds invest is largely considered risky, which suggests that these countries have relatively few financing options. However, most of them are middle-income countries; low-income countries and LDCs receive only little investment. FIs are selected that already have a business segment – in this case MSME financing – for the targeted sub-borrowers, as well as possessing a high degree of financial stability and thus easier access to financing than riskier FIs. The option of portfolio diversification is used to finance a small number of riskier FIs. The FIs reach the sub-borrowers on which the funds focus. However, since the FIs offer their financial products on market terms, only few of those sub-borrowers did not previously have access to official financial products.

The analysis shows that the TA is relevant for achieving development interventions, as there is strong demand for the interventions and the recipients confirm that the TA is beneficial and meets their needs. Particularly the interventions at sector level, which account for around 42 per cent of all interventions, are considered highly relevant.

Efficiency: The development objectives of the structured funds are pursued efficiently through the financing of intermediaries. The advantage of this approach is that the objectives of promoting the sustainability of FIs and developing inclusive financial systems can be jointly addressed by promoting under-financed groups. Thanks to their local presence and market knowledge, the FIs are able to efficiently select and monitor the sub-borrowers and their loans. The efficiency of the intermediary structure is limited by the possible substitution effect of the fund financing. Although the financing provided by the funds is earmarked in most cases, this cannot prevent the fund's capital substituting the capital of other investors in the targeted business segments. Nor can it prevent the capital of other donors from being shifted to business segments that do not serve the funds' objectives.

The TA is efficient because the FIs identify the needed interventions – either jointly with the fund managers or independently – and thereby ensure that they are demand-driven. Cost-sharing by the FIs also fosters the successful and sustainable implementation of the interventions and reduces the costs that the fund facility must meet. The implementation costs are also reduced by synergy effects, which are created by using the same methods or replicating the same interventions with different FIs.

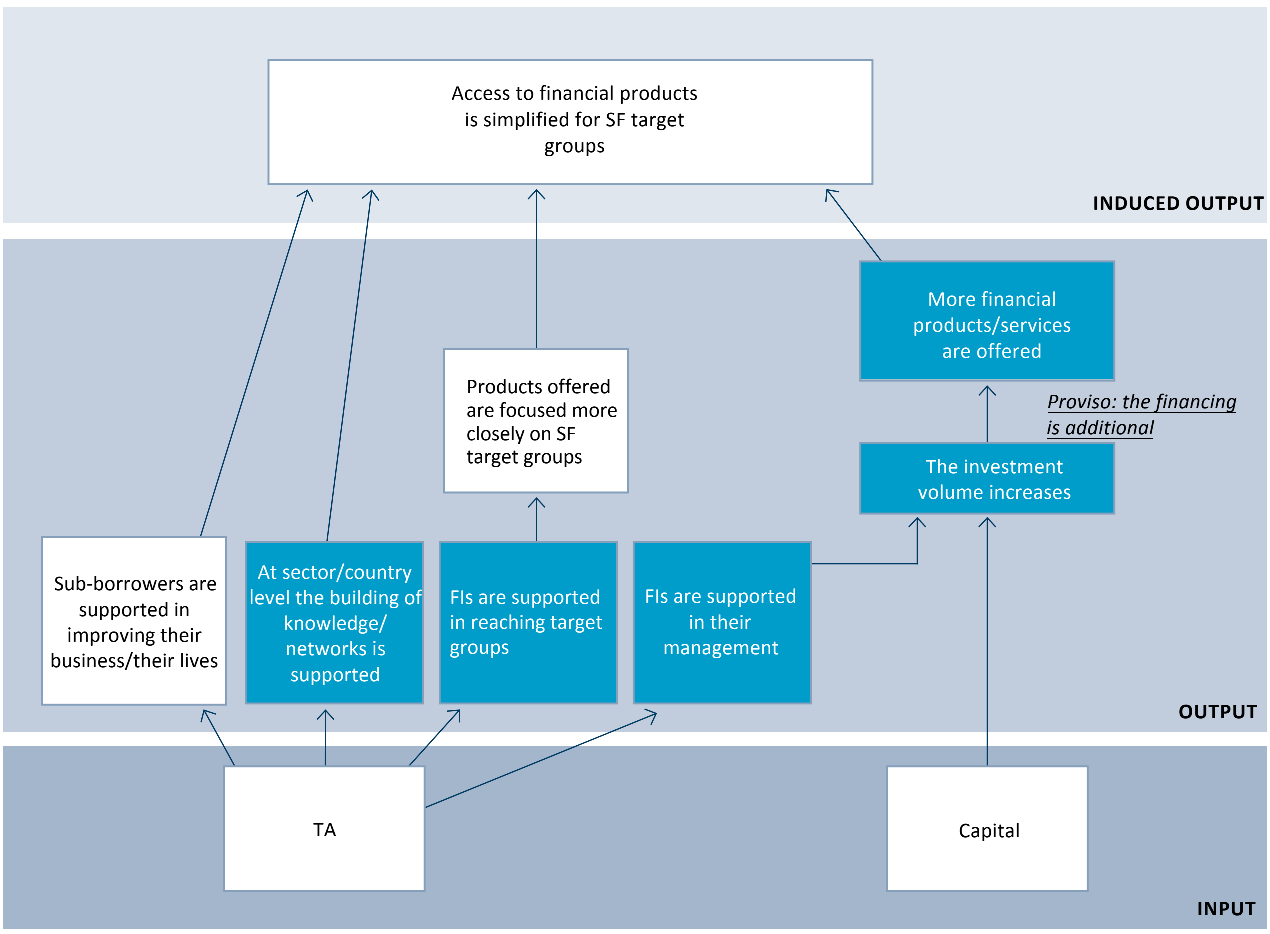
Impact: The structured funds increase the financial sustainability of financial institutions in developing countries and emerging economies by providing the FIs with reliable financing as well as expertise for TA. This enables FIs to diversify and professionalise their financing structure, and gain easier access to other financing opportunities.

As the FIs increase their investment volumes, they can reach more sub-borrowers from under-financed groups. This is achieved by selecting FIs for financing that already have a business segment – in this case MSME financing – for the targeted sub-borrowers.

Apart from increasing the volume of the business segments, the financing by the structured funds leads only in few cases to easier access to financial products for the targeted sub-borrowers. This means there is no relative expansion of the business segments, as it is not possible to prevent other sources of financing being shifted into other business segments, and because many MFIs already focus on the target groups and are unable to make any proportionate increase. Nor do the terms offered by the FIs lead to easier access, as they are market-based in order to avoid any distortion of the market. In some cases, however, the TA interventions do lead to simplified access when they aim to promote the target-group-orientation of the FIs by enabling them to develop new demand-driven financial products and by conducting training for sub-borrowers.

The findings of the contribution analysis to determine how the structured funds affect the FIs and sub-borrowers are summarised in a revised ToC. Figure 28 shows the evidence-based causal pathways in relation to the FIs and sub-borrowers.

Figure 28 Evidence-based causal pathways for the FIs and sub-borrowers



Source: own visualisation.

Development additionality: The structured funds achieve development additionality especially when they invest in regions, sectors, countries and FIs with a strong need for financing, and poor access to it. However, these investments may constrain the financial sustainability of the funds due to their higher risk. The funds respond to these conflicting objectives by first of all investing in regions with a strong need for financing, and in FIs that through their existing portfolio reach the sub-borrowers targeted by the funds. Secondly, of these FIs, mainly those that are already financially stable are financed. Despite the strong general demand for MSME financing, these FIs often already have access to direct financing through (D)FIs or in a few cases private investors. This to some extent limits the development additionality of the structured funds. Here the focus is on the financial sustainability of the funds rather than their development additionality. However, the high diversification of the funds' investment portfolios enables them to also invest in some less developed countries and riskier FIs.

Development additionality is also achieved through local currency financing, which some structured funds provide. These funds then assume the exchange rate risk, which in the case of hard currency loans remains with the FI or the sub-borrowers. Despite the strong demand, international donors rarely offer local currency financing.

7. CONCLUSIONS AND RECOMMENDATIONS

The structured funds financing approach aims to achieve three main development objectives:

1) to promote the development of stable and inclusive financial systems by financing FIs
2) to improve access to finance, especially for MSMEs, by enabling the supported FIs to grant a larger number of loans
3) to shape and expand the portfolio of FIs in favour of sub-borrowers with particularly high financing needs.

To achieve these goals, structured funds should mobilise capital from private investors.

Impact (achievement of development objectives)

This evaluation of structured funds shows that the financing approach contributes to the goals of a stable financial system and greater access to financing. However, easier access to credit for sub-borrowers who previously had no access to finance was rare. In the field of MSME financing, structured funds contribute to the stability and financial sustainability of FIs, and thus of partner-country financial systems. They achieve this by providing long-term financing, partly in local currency. They facilitate access to capital for sub-borrowers by increasing the volume of lending and providing TA. However, improvements in borrowing terms or easier access for groups that previously had no access to financing were rare.

In a trade-off between financial sustainability and development impact, the funds focus on financial sustainability when it comes to reaching the target groups. The achievement of the funds' development objectives is influenced significantly by the selection of FIs to be supported. While the funds finance FIs that reach the targeted sub-borrowers, they prioritise those that are low risk. This focus on financial sustainability also affects the achievement of development objectives: Promoting predominantly financially stable FIs helps to build a stable financial system and improve access to financing. However, the third objective of increasing the FIs' orientation towards particularly vulnerable groups is made more difficult by the funds' focus on financial sustainability, as this would require the issue of riskier loans.

Mobilisation

As of 2018, the examined structured funds had mobilised a total of more the 700 million US dollars in private capital in order to achieve the development objectives. However, the amount of private capital mobilised in riskier sectors was lower. To mobilise that amount, the BMZ invested approximately the same figure in budgetary resources. The funds are thus a suitable financing approach for providing additional capital to achieve the above-mentioned objectives. However, less private capital is mobilised in regions and sectors where there is a higher investment risk, where the financing needs of MSMEs are often not met.

Appropriateness of the approach for achieving development objectives

The stronger focus on financial sustainability distinguishes structured funds from other development finance approaches. Structured funds are a market-oriented financing approach that delivers loans on standard market terms. This has clear advantages for attracting private investors. On the other hand, as long as the premise of market conformity needs to be met this approach is unlikely to elicit a willingness to finance target groups that are more risky, even if they are highly relevant for achieving development objectives. For example, as described above, as part of the risk diversification strategy structured funds promote only a small number of riskier countries and FIs, and allow only limited control at the level of the sub-borrowers. The approach should therefore be seen as complementary to other approaches and instruments. To finance LDCs, and for interventions whose impact at target group level needs to be managed directly, other instruments can be considered. The traditional choice is grants. For financing that is to be provided on concessional terms that do not reflect market conditions, FC uses instruments such as development loans. In these loans, the official resources are used to reduce the costs for borrowers by offering more favourable terms, while in structured funds they are used as a risk buffer for private investment.

The structured funds were established partly in response to the financial crisis in 2018, in an environment characterised by severe liquidity shortages and an urgent need for stable and inclusive financial systems. Between then and the beginning of the coronavirus pandemic in early 2020, liquidity was available on the markets and microfinance institutions were already formalised in some of the regions examined in this evaluation. However, there is still a high demand for funding, especially in markets that tend to be less formalised. In many African countries in particular, there is still a very large financing gap for MSMEs that cannot be covered by purely private sector investment in the short to medium term. In addition to financing MSMEs, younger funds also address sectors such as education, the environment and climate change, and FIs are starting to include new financial products for these sectors in their portfolios as a result of the fund financing. In these sectors the financing approach can help to create markets.

The coronavirus pandemic has already aggravated the existing undercapitalisation; as early as March 2020 private investors withdrew 83 billion US dollars from developing and emerging countries. Even in previously liquid regions and markets, financing gaps arose within the first two months of the outbreak of the pandemic. This affects MSMEs in particular, as they often have fewer reserves than large companies.

Taking into account the recommendations listed below, structured funds are in principle suitable for meeting both financial and development needs. The recommendations indicate how the funds should be designed in order to make better use of their potential, particularly regarding development objectives.

Recommendations

Based on the findings and conclusions outlined above, the following recommendations of this DEval evaluation are addressed to the BMZ and the KfW Development Bank as its implementing organisation. DEval acknowledges that decisions at the fund companies require the agreement of all shareholders and cannot be made by the BMZ and KfW Development Bank alone. In these cases, however, the BMZ and/or KfW Development Bank should work towards implementing the respective recommendation.

The following recommendations do not always apply to each one of the 10 funds examined. This is the case for instance where a particular fund is already being implemented as proposed, or because the recommendation does not apply to the specific case of one of the 10 funds. Instead, the recommendations should be understood as guidelines for the general design of the financing approach, whether in the further development of existing funds or when setting up new funds.

Financial sustainability

The financial sustainability of the financing approach was assessed during the evaluation using a rating scale. This scale measures the financial sustainability of a fund through its ability to cover costs, its use of the official capital on a revolving basis and the efficiency of the risk-return structure (see Section 4.1 for a detailed description of the rating scale). When a fund is able to cover its costs and uses the official capital on a revolving basis, the evaluation team considers it to have achieved financial sustainability. Where an efficient risk-return structure is also in place, the evaluation team considers the financial sustainability requirement to have even been surpassed.

The majority of the funds can now be considered to have achieved financial sustainability. The majority of the funds break even within a few years of their establishment, and use the official capital on a revolving basis.

The size of a fund is a key precondition for it to become financially self-sustaining. This requires at least around 100 million US dollars. At the same time a fund needs to be able to diversify its risk adequately. If the diversification criteria are too restrictive with respect to potential investment countries, this can affect the development of a fund's business. This includes the use of additional C shares (junior tranche) for specific countries or regions. By providing for investment in selected countries, country windows restrict the scope for diversification on the assets side. The way the country windows have so far been designed on the liabilities side has meant that the yields and risk buffers for the junior tranches have had to be split, thus preventing an efficient distribution of risk. This not only causes additional costs, thus reducing the efficiency of the funds, but also increases the complexity of the structure. This is why the financial sustainability requirement can be considered to have been surpassed in only a few cases.

The structure of the funds enables them to issue small-scale loans and local currency loans, as well as to cooperate with private FIs. Most of the funds issue mainly small loans of less than 10 million US dollars. They also issue a few large loans in response to, among other things, the needs of large local FIs or project financing arrangements for renewable energy. Nearly all the funds offer local currency financing to a certain extent, though in many cases financing is provided in hard currency (US dollars, euros). Whether loans are issued in local or hard currency depends on the risk that the fund can bear and the needs of the financed FIs. For example, larger, more formalised FIs often have no need for local currency financing. At the same time, the findings of the evaluation indicate that the capacity of the funds to provide local currency financing should be strengthened (e.g. by introducing/increasing L shares).

Recommendation 1

The BMZ and the KfW Development Bank should ensure the additionality and efficient functioning of the funds and, once the funds have been established, their financial sustainability.

Implementation guidance for recommendation 1

Financial sustainability, additionality and efficient functioning can be ensured by setting up and managing a fund in such a way that it

- has a sufficiently high financing volume in the long term
- can invest in an appropriately large number of countries for diversification purposes
- does not have country windows on the liabilities side of the junior tranche for efficiency gains
- extends its loans in local currency according to the financial intermediaries' (FIs') needs and the risks involved
- extends part of its loans in small ticket sizes to the FIs.

In most cases the official capital is paid into the junior tranche of the funds with unlimited durations. With the exception of two funds, for this capital there exists neither an exit strategy that defines the timing and nature of the exit, nor fixed mechanisms for reviewing the continued need for the official capital at regular intervals. Thus in many cases it is not sufficiently clear what long-term options for exiting the funds are available to the official donors.

Recommendation 2

The BMZ and the KfW Development Bank should define the long-term options for official donors to exit the funds as part of an exit strategy.

Implementation guidance for recommendation 2

The exit strategy should

- define the timing and nature of the exit of the official donors, or
- define processes to review the relevance of the official capital for the funds at regular intervals.

Development orientation

The development orientation of the structured funds is highly consistent with the objectives of the 16 BMZ strategies that are linked to the funds either thematically or geographically[71]. The funds aim to create access to finance for sub-borrowers who have thus far had insufficient access to finance, and to support the stability of the partner-country financial systems. They are thus designed to help implement the BMZ sector strategy for financial systems development in particular. However, there is relatively little interaction between the objectives and activities of the structured funds, and the bilateral portfolio/country division, with respect to private sector and financial systems development. So far the BMZ has thus made barely any proactive use of potential synergies between funds, and the bilateral portfolio/country division. Implementation of the BMZ 2030 reform process and the intended prioritisation of reform-minded partner countries and core areas (also within the framework of regional projects) mean that the BMZ will need to discuss the future orientation of new funds in line with these priorities. The coronavirus pandemic might also necessitate a change of direction in order to provide greater support to countries and sectors that are particularly hard hit.

At the same time, the structure and regional setup of the funds allows them to meet financing needs in partner countries that are not covered by other approaches of bilateral FC. As well as the possibility of offering small loan sizes and local currency financing, this also includes the financing of private FIs. In this way the funds make a development contribution to building stable and inclusive financial systems and to creating financing opportunities for groups with previously limited access to sources of finance. They can thereby demonstrate a high degree of additionality to other financing approaches. Moreover, their structure enables them to ensure continuity in times of crisis, such as the current coronavirus pandemic, by meeting financing needs in markets that are considered risky.

Setting the strategic direction of a fund when it is created is crucial for its development orientation, as the BMZ's options for exercising political management are limited thereafter. Once a fund has been set up, strategic adjustments usually require complex coordination processes and a change in the issue document to ensure the agreement of all investors. There are three main points at which the BMZ is able to exercise political management: when the fund is being set up, when financial resources are being increased, and when comments are made in reports. However, a lack of capacities within BMZ and the way the responsibilities for the funds are organised within the Ministry prevent better political management.

Recommendation 3

The BMZ should ensure more effective management of the development impact of the funds.

Implementation guidance for recommendation 3

More effective management of the development impact should

- include long-term capacity building for structured funds within the BMZ to enable strategic management, especially when the funds are set up and through reporting, and
- use synergies in the field of financial market development. To this end
    - the responsibilities for the funds should lie within the BMZ division with a sectoral or regional focus to account for the regional nature of the funds
    - there should be increased exchange with the activities of the sector divisions and the bilateral financial market development programmes (especially for larger funds), for example when country programme strategies are designed.

In operational decision-making for the funds an important role is played by the members of the official bodies, in particular a fund's Board of Directors and the Investment Committee. These bodies ensure

[71] See list of strategies in Annex 9.5.

compliance with a fund's strategy, including its development objectives, for instance by deciding on which FIs to select for support. The responsibilities of each of the bodies are clearly defined and demarcated. However, a few individuals are members of both the Board of Directors of a fund and the Board of Directors of an FI financed by the fund, which can lead to a conflict of interests in the selection of FIs to be supported. Although each of the funds has a defined process for managing such conflicts, the regulations governing exclusion from voting in risky cases are not uniform.

Recommendation 4

The KfW Development Bank should work towards ensuring that in the event of conflicts of interest of mandate holders, who are represented both in the official bodies of funds and the boards of the financed FIs, abstention from relevant votes is stipulated in the regulations (in this case the Conflict of Interest Policy).

Implementation guidance for recommendation 4

In order to ensure a more effective pursuit of development objectives, the management of conflicts of interest should provide for

- notifying the Board of Directors of the conflict of interest
- abstention by persons who are represented both on the board of the fund and on the board of a financed FI, in cases where a vote could involve a conflict of interest, such as votes to fund that particular FI.

The financing approach helps to harmonise different donor approaches within the funds, and through the finance provided strengthens local actors. Harmonisation is achieved primarily by defining standard investment guidelines and through the dialogue platforms created by the funds. At the same time, the competition for suitable FIs in the target countries that sometimes prevails between the funds and the (D)FIs invested in them constrains harmonisation. Where possible, interests that collide should be addressed when a fund is being established.

Mobilisation of private capital

Structured funds are a suitable financing approach for mobilising private capital for development. The waterfall structure of the funds enables them to involve investors with different risk-return profiles. However, the funds are not yet fully exploiting their potential for mobilising private capital. Some funds reach a natural limit for mobilising private investors once their risk buffer is used up. In these cases it is not possible to increase the share of private investment without increasing the financing volume from official capital and (D)FIs. Furthermore, in a few funds there is no need to mobilise private capital since the required financing volume is provided entirely by official donors and (D)FIs.

Recommendation 5

The KfW Development Bank should work towards ensuring that the structured funds develop mechanisms which will enable them to make better use of their potential to mobilise private capital in the future.

Implementation guidance for recommendation 5

The mechanisms should include a regular review of the risk buffer and risk appetite of private investors by the Board of Directors. Depending on the circumstances, there are three options for adjustment:

- If the risk buffer is almost exhausted, the possibility of reducing the share of the risk buffer should be considered, taking into account the risk appetite of private investors.
- If there is sufficient financing by official donors and (D)FIs, a reduction of the mezzanine tranche should be considered.
- If private investors have a stronger risk appetite, the possibility of enabling private investment in riskier tranches should be considered.

A large number of different types of investor with different investment strategies, plus the complexity of the fund structure, make it more difficult to mobilise private capital. Many different types of investor are involved in the funds that have various motives for investment, investment strategies and risk profiles. There is no indication that the mobilisation of private investors follows a clear strategy. Moreover the structure of the funds, which usually comprises various tranches and notes, increases the complexity of the financing approach and makes it less attractive for institutional investors. This is why there is a trend towards a less complex structure with only two tranches (junior and senior tranches)[72] or towards only different note categories, to serve the investment needs of private investors.

Recommendation 6

The KfW Development Bank should work towards developing and regularly updating a clear acquisition strategy for each fund for private, particularly institutional, investors.

Implementation guidance for recommendation 6

To facilitate the mobilisation of private capital, an acquisition strategy should be developed based on the following two points:

- identify selected target investor types
- identify the requirements of these selected investor types.

The fund managers should be responsible for designing the respective acquisition strategies.

Effects on the target groups

Analysing the effects of the four evaluated MSME funds on their target groups highlights the funds' need to balance the conflicting priorities of development impact and financial sustainability. The funds select FIs that reach the targeted sub-borrowers through an existing business segment (in this case MSME financing), yet are also financially stable. Similarly, the funds invest in countries that are largely considered risky, yet mainly belong to the middle-income group. This selection of FIs and countries reduces the probability of losses, thus safeguarding the financial sustainability of the funds. At the same time, however, it limits the funds' additionality because these countries/FIs tend to also have other financing options. The option of portfolio diversification does enable the funds to invest in riskier LDCs and FIs with higher financing requirements, yet they only do so to a minor extent. With regard to development objectives the funds provide the financed FIs with reliable access to financing and promote the stability of financial systems in partner countries.

The funds reach the targeted sub-borrowers because an existing business segment for this target group is a criterion for selection of the FIs to be financed. Through the fund financing, the financed FIs increase their investment volume and expand their portfolios in absolute terms, so that more sub-borrowers can be reached. Beyond that, however, the FIs do not make it any easier for the envisaged target groups to access financing. Usually, for example, the FIs neither modify their lending terms for the envisaged target groups (with the exception of local currency financing), nor do they increase the share of target-group-related business segments, e.g. for microenterprises or sub-borrowers without collateral, relative to their portfolio as a whole.

In accordance with the strategy of the funds, the FIs' lending terms are market-based in order to avoid any distortion of the market. This means that the terms offered by the FIs do not differ from those of FIs not financed by the funds. Only few sub-borrowers are reached that did not previously have access to official financial products.

[72] Implemented for example in the Eco-Business Fund and the newly-launched LAGreen

Recommendation 7

The BMZ and KfW Development Bank should works towards using and monitoring the selection of FIs more effectively as the key point of leverage for ensuring development impact of the funds.

Implementation guidance for recommendation 7

When defining the eligibility or selection criteria for the institutions to be financed, an assessment should be made of the extent to which the risk profile allows for

- earmarking a minimum percentage of the portfolio for investment in riskier, possibly younger FIs with a high potential for reaching the target group
- sectors with high development potential to be addressed, especially where the funds help establish a market (e.g. by financing FIs that issue financial products for the education, environment and climate change sectors).

Recommendation 8

The BMZ and the KfW Development Bank should work towards making lending to FIs conditional on the expansion of thematic areas that are key to development – in line with the BMZ 2030 strategy.

Implementation guidance for recommendation 8

To strengthen development impact at sub-borrower level,

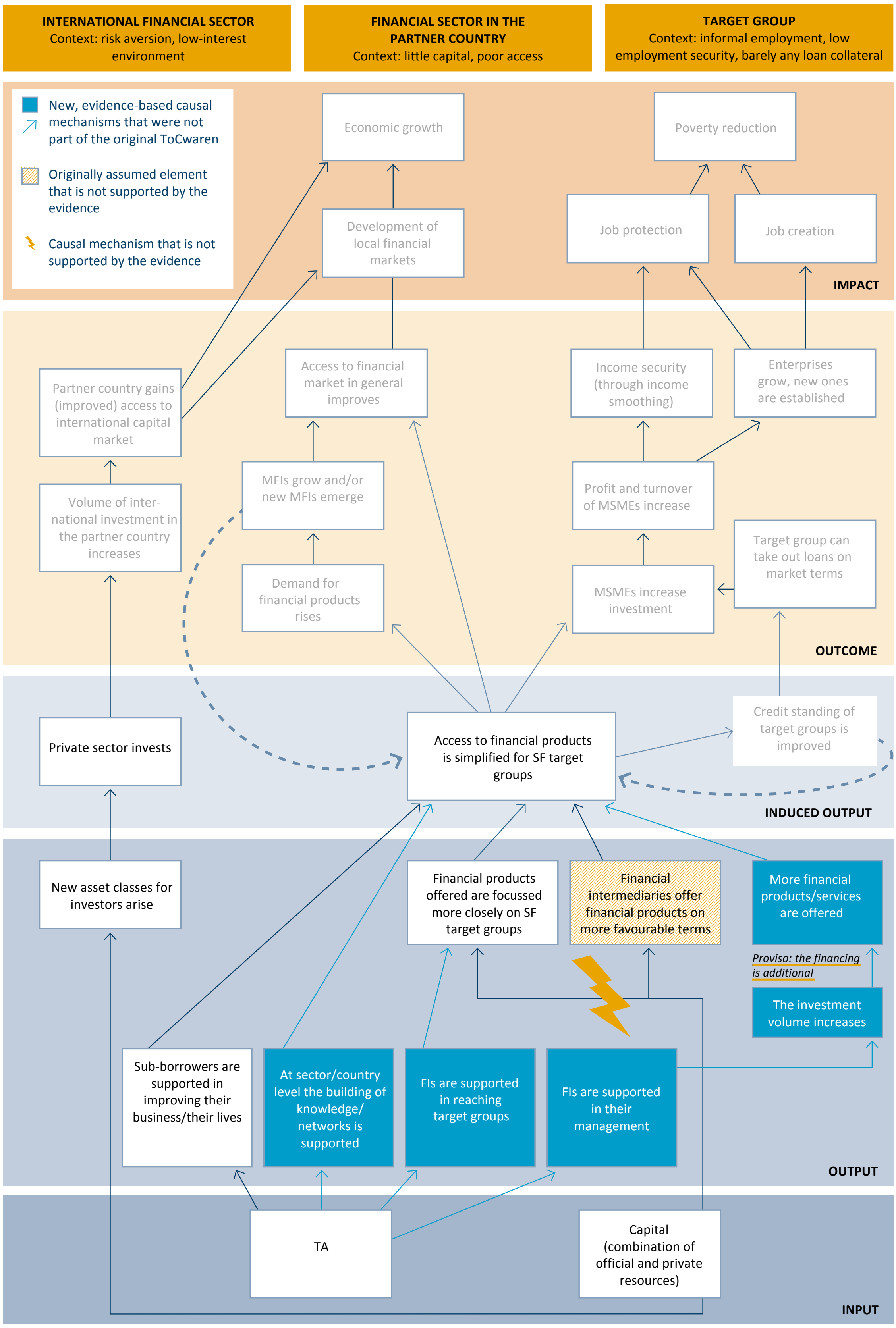
- financing should be made conditional upon the expansion of business segments, financial products or sectors relevant to the target group
- appropriate indicators should be included in the reporting to measure and ensure that target groups are reached
- the question should be addressed of whether further issues that are key to development policy, such as climate change, can be integrated into existing funds.

The TA provided by the funds is highly effective. The findings show that the TA provided by the funds is highly demand-oriented and useful. Although other investors also offer TA, some 40% of the funds' interventions address the sector level, which other providers cover either to a lesser extent or not at all. The evaluation team therefore assumes that the interventions are additional, although the average financial volume is low. In the some cases the total lack or only minimal use made of all financing channels, particularly the contributions by the funds, restricts the sustainable design of the TA.

New Theory of Change

Based on the findings of this evaluation, the evaluation team revised the ToC formulated at the beginning of the evaluation and aligned the Theory of Change for structured funds with the evidence.

Figure 29 New Theory of Change



Source: own visualisation.

Note: The sections in the upper part of the figure are greyed out to show that these causal mechanisms were not part of the data collection.

Outlook

The evaluated funds are already displaying trends which, in light of the evaluation findings, are moving in interesting directions.

This further development concerns first of all the sectoral orientation of the funds. While funds have so far operated with a strong focus on the microfinance and MSME support sectors (five out of ten funds in this evaluation alone), younger funds are also operating in other sectors, such as the REFFA in the education sector and the EBF in environment and biodiversity. These sectors not only have a high financing requirement, but are also a particular priority for development policy. In sectors such as these, funds can play an even greater role in creating markets than is already the case in sectors such as microfinance. This can also be attributed to the fact that in such sectors conventional investors face particularly high obstacles to investment, at which point structured funds offer appropriate incentives. Particularly in sectors where there is not yet any demand for financial products relevant to development, at the beginning of the financing and for a limited period funds might foster demand for certain financial products. To identify such sectors, an approach may be helpful that calculates the level of concessionality as the difference between the concessional price and the market price, and relates this difference to the project costs (see for instance IFC).[73] This method allows products, sectors and markets to be compared with respect to concessionality. Another solution that comes to mind is to examine whether interest below the current market level in such new markets might temporarily create incentives for certain financial products, for instance in climate finance.

In light of the coronavirus pandemic, however, financing in the microfinance and MSME sectors is gaining renewed importance. Since the beginning of the coronavirus pandemic in early 2020, liquidity shortages have also become evident even in formalised markets that previously displayed high liquidity. The global measures to contain the virus already led to a collapse in economic activity within just a few months of the outbreak. Fitch Ratings forecasts a global recession and a 1.9 per cent drop in GDP in 2020 (FitchRatings, 2020). The reduction in overall economic demand resulting from the measures is hitting MSMEs particularly hard, as they often have fewer reserves than large companies. If they are then unable to repay their loans, their cash flow problems are passed on to the FIs, whose portfolio risk shoots up. Given their relatively high share of official capital, in this situation structured funds can guarantee stability and use the risk buffer to offer private investors incentives to invest in markets considered risky even in times of crisis.

There is also scope for further development among financial products used and FIs financed. Of the evaluated funds, SANAD is the first to provide not only debt, but also equity. This involves investing amongst other things in greenfield projects and in early stages of business model development. This is especially important for developing and establishing the local financial market. Moreover, equity creates more options for influencing institutions with respect to development objectives. The newly-established AfricaGrow Fund, for instance, also covers equity financing.

Trends are also emerging regarding which institutions the funds will approach as FIs. So far this has mainly included banks, microfinance banks and non-bank actors. A few funds already support leasing companies, and it is conceivable that the scope could be widened to include other actors such as cooperatives. Equally, typical FIs that invest in innovative sectors or are interested in introducing products of particular value for development should also be included here.

Finally, scope for further development is also becoming evident in the structure of the funds. Some of the evaluated funds have already reduced their complexity by offering investment in just two share categories from the start, or by at least reducing the mezzanine tranche. Furthermore, talks are already under way as

[73] See https://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/solutions/products+and+services/blended-finance/5_what+is+concessionality+and+how+is+it+calculated?wcmitemid=72f67569-49cb-4233-927d-ac441a35767b&WCM_Page.ResetAll=TRUE&CACHE=NONE&CONTENTCACHE=NONE&CONNECTORCACHE=NONE&SRV=Page;7 February 2020.

to how additional C shares for particular countries or regions might be reduced at least on the liabilities side of the funds.

The long-term goal of the funds is to manage without official capital and become gradually more self-sustaining through financing from institutional investors. How quickly this goal can be reached depends very much on the region in which the funds invest. Corresponding recommendations are made above, though further steps such as the introduction of ESG ratings for the funds are conceivable. At least for funds operating in the environment and climate change sector, this could facilitate investment decision-making by private investors. All in all, there are clearly many options for further developing the funds that should be considered as work continues. These will also need to be aligned with the envisaged prioritisation of partner countries and core areas as part of the BMZ 2030 reform process.

8. REFERENCES

Aghion, P. et al. (2005), "The effect of financial development on convergence: Theory and evidence", Quarterly Journal of Economics, Vol. 120(1), pp. 173-222.

Allen, F. and D. Gale (1999), "Bubbles, Crises, and Policy", Oxford Review of Economic Policy, Vol. 15(3), pp. 9-18.

Astbury, B. and F. L. Leeuw (2010), "Unpacking Black Boxes: Mechanisms and Theory Building in Evaluation", American Journal of Evaluation, Vol. 31(3), pp. 363-381.

Attridge, S. and L. Engen (2019), Blended Finance in the Poorest Countries, ODI Report.

Baldwin, R. and R. Forslid (2000), "Trade Liberalization and Endogenous Growth", Journal of International Economics, Vol. 50, pp. 497-517.

Basile, I. and 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, Blended Finance Taskforce, London.

BMZ (2017a), Mobilisierung privater Investoren, Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, http://www.bmz.de/de/themen/entwicklungsfinanzierung/innovativefinanzierung/private_investoren/index.html (accessed 27 January 2020).

BMZ (2017b), Entwicklungsministerium vereinbart Reformpartnerschaften mit drei afrikanischen Ländern, Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, http://www.bmz.de/de/presse/aktuelleMeldungen/2017/juni/170612_pm_072_Entwicklungsministerium-vereinbart-Reformpartnerschaften-mit-drei-afrikanischen-Laendern/index.jsp (accessed 27 January 2020).

BMZ (2020), BMZ 2030 – Gemeinsam weiter Zukunft denken, Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (BMZ).

Bohnet, M. (2017), Politische Ökonomie der deutschen Entwicklungszusammenarbeit: Bestimmungsgründe, Akteure und Allokationsmuster, Discussion paper, Deutsches Institut für Entwicklungspolitik gGmbH, Bonn.

Boot, A. et al. (2020), The Coronavirus and Financial Stability, Leibniz Institute for Financial Research SAFE.

BSR (2017), Innovative Finance to Expand Access to Healthcare, Business for Social Responsibility (BSR).

BVI (2018), Verwaltetes Vermögen der Deutschen Investmentbranche, Bundesverband Investment und Asset Management.

Calderón, C. and M. Kubota (2009), Does financial openness lead to deeper domestic financial markets?, World Bank, Washington, D.C., York.

Caprio, G. and P. Honohan (1999), "Restoring Banking Stability: Beyond Supervised Capital Requirements", Journal of Economic Perspectives, Vol. 13, pp. 43-64.

Carnegie Consults (2017), The development impact of local currency solutions - An evaluation of 10 years TCX, Carnegie Consult, Amsterdam.

Chen, H. T. (2015), Practical Program Evaluation: Theory-Driven Evaluation and the Integrated Evaluation Perspective, SAGE, Los Angeles, London, New Delhi, Singapore, Washington D.C.

Chinn, M. D. and H. Ito (2006), "What matters for financial development? Capital controls, institutions and interactions", Journal of Development Economics, Vol. 81, pp. 163-192.

Claessens, S. et al. (2001), "How does foreign entry affect domestic banking markets?", Journal of Banking and Finance, Vol. 25, pp. 891-911.

Clark, R. et al. (2018), "Bridging funding gaps for climate and sustainable development: Pitfalls, progress and potential of private finance", Land Use Policy, No. 71, pp. 335-346.

Colla, C. (2016), "Mobilisation of Private Capital. What Contribution Can Development Banks Make", Perspectives on Development Finance, No. 4/2016, KfW Entwicklungsbank, Frankfurt am Main.

Colla, C. (2017), Lokalwährungsfinanzierung: Essenzieller Baustein der Entwicklungsfinanzierung, KfW Entwicklungsbank.

Convergence (2019a), Scaling Blended Finance for the SDGs, Convergence.

C**onvergence (2019b)**, Blended Finance, https://www.convergence.finance/blended-finance (accessed 27 January 2020).

Convergence (2019c), The State of Blended Finance 2019, Convergence.

Convergence (2020), Blended Finance in Sub-Saharan Africa, Convergence.

Country Economy (2020), Moody's, https://countryeconomy.com/ratings/moodys (accessed 17 March 2020).

Dalberg (2018), The Economics of Agri-SME Lending in East Africa, Dalberg, Council on Smallholder Agricultural Finance (CSAF), Global Development Incubator (GDI).

DANIDA (2016), Private Capital for Sustainable Development. Concepts, Issues and Options for Engagement in Impact Investing and Innovative Finance, Evaluation Study, No. 2016/2, Danish International Development Agency, Copenhagen.

DFI Working Group (2018), DFI Working Group on Blended Concessional Finance for Private Sector Projects.

EBF (2018), Investing in Impact on the Ground.

EFSE (2018), Impact Report 2018.

EUIFI (no date), EUIFI Evaluation Report Results.

Eurodad (2013), A Dangerous Blend? The EU's Agenda to 'Blend' Public Development Finance with Private Finance, European Network on Debt and Development, Brussels.

FitchRatings (2020), Deep Global Recession in 2020 as Coronavirus Crisis Escalates. https://www.fitchratings.com/research/sovereigns/deep-global-recession-in-2020-as-coronavirus-crisis-escalates-02-04-2020 (accessed 22 May 2020).

Flick, U. et al. (eds.) (1995), Handbuch qualitative Sozialforschung: Grundlagen, Konzepte, Methoden und Anwendungen, Beltz/Psychologie-Verlags-Union, Weinheim, 2nd edition.

Funnell, S. C. and P. J. Rogers (2011), Purposeful program theory: Effective use of theories of change and logic models, John Wiley & Sons, Hoboken, NJ.

George, A. L. and A. Bennett (2005), Case Studies and Theory Development in the Social Sciences, MIT Press, Cambridge, MA.

GGF (2018), Greetings - GGF Impact Report 2018, http://ir2018.ggf.lu/#/ (accessed 12 March 2020).

Goertz, G. (2017), Multimethod Research, Causal Mechanisms, and Case Studies - An Integrated Approach, University Press Group Ltd., Princeton, New Jersey.

Haber, S. H. et al. (2003), The Politics of Property Rights: Political Instability, Credible Commitments, and Economic Growth in Mexico, Cambridge University Press, Cambridge, UK.

Hammersley, M. (1989), The dilemma of qualitative method: Herbert Blumer and the Chicago School, Routledge, London, New York.

HSBC (2019), Sustainable Financing and Investing Survey 2019. Markets alert to the environment and society.

IFC (2017), MSME Finance Gap. Assessment of the Shortfalls and Opportunities in Financing Micro, Small and Medium Enterprises in Emerging Markets, International Finance Corporation, Washington, D.C.

IMF (2019), Fiscal Policy and Development: Human, Social, and Physical Investment for the SDGs.

Institute of International Finance (2020), Capital Flows Report Sudden Stop in Emerging Markets. https://www.iif.com/Portals/0/Files/content/2_IIF2020_April_CFR.pdf (accessed 22 May 2020).

Johnson, R. B. et al. (2007), Toward a definition of mixed methods research, Journal of mixed methods research, Vol. 1(2), pp. 112-133.

KfW (2008), Ex post evaluation – South East Europe: European Fund for Southeast Europe, Ex post evaluation report, KfW Entwicklungsbank, Frankfurt am Main.

KfW (2014), Ex post evaluation – Balkans and Caucasus, Ex post evaluation report, KfW Entwicklungsbank, Frankfurt am Main.

KfW (2016), Ex post evaluation - Microfinance Enhancement Facility, Ex post evaluation report, KfW Entwicklungsbank, Frankfurt am Main.

KfW (2017), KfW's agricultural financing in Africa, https://www.kfw.de/KfW-Group/Newsroom/Press-Material/Themen-kompakt/Agrarfinanzierung/.

Kose, M. A. et al. (2009), "Financial Globalization: A Reappraisal", IMF Staff Papers, Vol. 56(1), pp. 8-62.

Kuckartz, U. (2014), Qualitative Inhaltsanalyse – Methoden, Praxis, Computerunterstützung, Grundlagentexte Methoden, Beltz Juventa, Weinheim/Basel, 2nd edition.

Latzko, D. A. (1999), "Economies of Scale in Mutual Fund Administration", Journal of Financial Research, Vol. 22(3), pp. 331–339.

Levine, R. (1996), "Foreign banks, financial development and economic growth", in Barfield, C. E. (ed.), International financial markets: Harmonization versus competition, AEI Press, Washington, D.C.

Levine, R. (2005), "Finance and Growth: Theory and Evidence". Handbook of Economic Growth, pp. 865-934.

LICADHO (2019), Collateral Damage: Land Loss and Abuses in Cambodia's Microfinance Sector, Cambodian League for the Promotion and Defense of Human Rights, Phnom Phen.

Machamer, P. et al. (2000), "Thinking about Mechanisms", Philosophy of Science, Vol. 67(1), pp. 1–25.

Mader, P. (2013), "Rise and Fall of Microfinance in India: The Andhra Pradesh Crisis in Perspective", Strategic Change, Vol. 22(1-2), pp. 47-66.

Maitrot, M. R. L. and M. Nino-Zarazua (2015), What do we know about the impact of microfinance on poverty? A Systematic Review, United Nations University, World Institute for Development Economics Research.

Malhotra, D. K. et al. (2007), "Determinants of Cost Efficiencies in the Mutual Fund Industry", Review of Financial Economics, Vol. 16(4), pp. 323-334.

Mayne, J. (2011), "Contribution analysis: Addressing cause and effect", in Forss, K., M. ; Marra and R. Schwartz (eds.), Evaluating the Complex, Transaction Publishers, New Brunswick, NJ, pp. 53-96.

Mayne, J. (2012), "Contribution analysis: Coming of age?", Evaluation, Vol. 18(3), pp. 270-280.

Microfinance Opportunities (no date), Over-Indebtedness in Cambodia: Findings from a Financial Diaries Study, Microfinance Opportunities.

MicroRate (2013), Microfinance Institution Tier Definitions. http://www.microrate.com/media/downloads/2013/04/MicroRate-White-paper-Microfinance-Institution-Tier-Definitions.pdf (accessed 27 January 2020).

Morck, R. et al. (2000), "Inherited wealth, corporate control, and economic growth: The Canadian disease", in Morck, R. (ed.), Concentrated Corporate Ownership, University of Chicago Press, Chicago.

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

Mustapha, S. et al. (2014), "Topic Guide: Blended Finance for Infrastructure and Low-Carbon Development", Evidence on Demand.

Neusser, K. and M. Kugler (1998), "Manufacturing growth and financial development: Evidence from OECD countries", Review of Economics and Statistics, Vol. 80, pp. 636–646.

OECD (2015), Infrastructure Financing Instruments and Incentives, OECD, Paris, p. 74.

OECD (2018a), Making Blended Finance Work for the Sustainable Development Goals, OECD, Paris, p. 176.

OECD (2018b), DAC methodologies for measuring the amounts mobilised from the private sector by official development finance interventions, OECD, Paris.

OECD/UNCDF (2019), Blended Finance in the Least Developed Countries 2019, OECD Publishing, Paris, doi:10.1787/1c142aae-en.

Pawson, R. and N. Tilley (1997), Realistic evaluation, Sage, London.

Pereira, J. (2017), Blended Finance. What it is, how it works and how it is used, Research Report, Oxfam, Eurodad, Oxford.

Punton, M. and K. Welle (2015a), Applying Process Tracing in Five Steps, Practice Paper, No. 10 Annex, Centre for Development Impact (CDI), Institute of Development Studies, Brighton.

Punton, M. and K. Welle (2015b), Straws-in-the-wind, Hoops and Smoking Guns: What can Process Tracing Offer to Impact Evaluation?, Practice Paper, No. 10, Centre for Development Impact (CDI), Institute of Development Studies, Brighton.

Rajan, R. G. and L. Zingales (2003), Saving Capitalism from the Capitalists, Random House, New York.

Rea, J. D. et al. (1999), "Operating Expense Ratios, Assets, and Economies of Scale in Equity Mutual Funds", Perspective, Investment Company Institute, Vol. 5(5), pp. 1-15.

RFF (2011), Advancing Responsible Finance for Greater Development Impact: A Stock-Taking of Strategies and Approaches among Development Agencies and Development Finance Institutions, Responsible Finance Forum.

Richter, Karl H. (2018), Impact Management for Everyone, UNDP SDG Impact Finance (UNSIF).

Rohlfing, I. (2012), Case Studies and Causal Inference: An Integrative Framework, Palgrave Macmillan.

R**ousseau, P. L. (1998)**, "The permanent effects of innovation on financial depth: Theory and US historical evidence from unobservable components models", Journal of Monetary Economics, Vol. 42, pp. 387-425.

Schneider, M. and A. Tornell (2004), "Balance sheets, bailout guarantees, and financial crises", Review of Economic Studies, Vol. 71, pp. 883-913.

SDSN (2019), SDG Costing & Financing for Low-Income Developing Countries.

Shadish, W. R. et al. (2002), Experimental and quasi-experimental designs for generalized causal inference, Houghton Mifflin, Boston.

Stern, E. et al. (2012), Broadening the Range of Designs and Methods for Impact Evaluations. Report of a Study Commissioned by the Department for International Development, Working Paper, No. 38, Department for International Development, London/Glasgow.

Stiglitz, J. E. (2000), "Capital market liberalization, economic growth, and instability", World Development, Vol. 28(6), pp. 1075-1086.

Stultz, R. (1999), "Globalization, corporate finance and the cost of capital", Journal of Applied Corporate Finance, Vol. 12(3), pp. 8-25.

Symbiotics (2019), MIV Survey – Market Data & Peer Group Analysis, Symbiotics.

TCX (2018), We've only just begun – TCX 2019 – 2022, Amsterdam,

Tornell, A. and F. Westermann (2005), Boom-Bust Cycles and Financial Liberalization, The MIT Press, Cambridge, MA.

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

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

UNCTAD (2014), World Investment Report 2014: Investing in the SDGs: An Action Plan, United Nations Conference on Trade and Development, Geneva.

UN-OHRLLS (2020), Criteria for Identification and Graduation of LDCs, UN Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States. http://unohrlls.org/about-ldcs/criteria-for-ldcs/ (accessed 27 January 2020).

Wagemann, C. and M. Siewert (2018), "Qualitative Comparative Analysis", in Wagemann, C., A. Goerres and M. Siewert (eds.), Handbuch Methoden der Politikwissenschaft, Springer VS, Wiesbaden.

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, Geneva.

Wetzel, L. (2018), "Types and Tokens", in Zalta, E. N. (ed.), The Stanford Encyclopedia of Philosophy, Metaphysics Research Lab, Stanford University, Fall 2018.

White, H. (2009), Theory-Based Impact Evaluation: Principles and Practice, 3ie Working Papers.

White, H. and D. Phillips (2012), Addressing Attribution of Cause and Effect in Small n Impact Evaluations: Towards an Integrated Framework, Working Paper, No. 15.

Winckler Andersen, O., et al. (2019), Blended Finance Evaluation: Governance and Methodological Challenges, OECD Development Co-operation Working Papers, No. 51, OECD Publishing, Paris.

Wolff, P. (2019), Die Finanzierung der Agenda 2030 verfehlt ihre Ziele, Deutsches Institut für Entwicklungspolitik, Bonn.

Weltbank (2013), IFC jobs study: assessing private sector contributions to job creation and poverty reduction, IFC, Washington, DC.

Weltbank (2020), The International Finance Corporation's Blended Finance Operations: Findings from a Cluster of Project Performance Assessment Reports, World Bank, Washington, DC.

Xu, Z. (2000), "Financial development, investment, and growth", Economic Inquiry, Vol. 38, pp. 331-344.

9. ANNEXES

9.1 Debt funds of German FC

Table 8 Debt funds of German FC

	Fund	Country of domicile
1	Africa Agriculture and Trade Investment Fund (AATIF)	LUX
2	Regional Education Finance Fund for Africa (REFFA)	LUX
3	Green for Growth Fund Southeast Europe (GGF)	LUX
4	Eco-Business Fund	LUX
5	Municipal Infrastructure Development Fund (MIDF)	LUX
6	Microfinance Enhancement Facility (MEF)	LUX
7	Microfinance Initiative for Asia (MIFA) Debt Fund.	LUX
8	European Fund for Southeast Europe (EFSE)	LUX
9	SANAD Fund for MSME (SANAD)	LUX
10	Regional MSME Investment Fund for Sub-Saharan Africa (REGMIFA)	LUX
11	Global Climate Partnership Fund (GCPF)	LUX
12	Rural Impulse Fund	LUX
13	Fairtrade Access Fund	LUX
14	Africa Local Currency Bond Fund (ALCB)	MUS
15	Lending for African Farming Company LAFCO	MUS
16	Higher Education Finance Fund, L.P. (HEFF)	USA
17	Wholesale Microfinance Facility (Ghana) Ltd.	GHA
18	JAIDA S.A.	MAR

9.2 Findings of the contribution analysis

Table 9 lists the respective assumptions and risks that underlie a causal link. The column on the right summarises the evidence regarding the causal link (includes the evidence on all assumptions and risks for the link), the elements, and the individual assumptions and risks.

The symbols have the following meanings:

?: no evidence; - : not corroborated by evidence; + : corroborated by evidence; +/- : evidence mixed; (+) : corroborated by weak evidence

Table 9 Summary of the evidence on assumptions, risks and elements of the ToC

Output level 1			
Causal link	**TA ->**	**FIs are supported in their management. FIs are supported in reaching target groups.**	**+**
Elements	**FIs are supported in their management.**		**+**
	FIs are supported in reaching target groups.		**+**
Assumptions	The FIs (interventions) with development potential are selected.		+/-
	The recommendations of the TA are implemented.		+
Risks	The FIs are selected not primarily on the basis of development criteria, but in order to reduce the risk of a payment default.		(+)
	The recommendations of the TA are not implemented by the FIs.		(+)
Output level 2			
Causal link	**FIs are supported in their management. -> FIs offer financial products on more favourable terms.**		**+**
Assumption	As a result of the management support the FIs have access to additional financing.		+
	The TA enables the FIs to take out/continue with a loan from the structured fund, as a result of which they have additional capital.		(+)
Causal link	**Capital ->**	**FIs offer financial products on more favourable terms.** **Financial products offered are focused more closely on target groups of the structured fund.**	**(+)**

Assumptions	The investment volume of the FIs increases as a result of the additional capital.	+
	When selecting and monitoring the FIs the fund applies development criteria that go beyond the customary due diligence process.	+/-
	The fund selects FIs and countries mainly on the basis of their development potential	+/-
Risks	The FIs do not use the capital provided by the structured fund to increase their investment volume.	-
	Losses arise as a result of poor fund management and not as a result of riskier investments.	(+)
	The additional financing raises the financial intermediaries' transaction costs.	(+)
Causal link	**Capital -> FIs offer financial products on more favourable terms.**	**(+)**
Element	**FIs offer financial products on more favourable terms.**	-
Assumptions	FIs have access to better financing terms.	+/-
	Difficult financing terms or a lack of financial resources prevent the FIs from offering their clients better terms.	+
	Through its signalling effect, the capital provided leads to investment by other investors.	(+)
	The investment volume of the FIs increases as a result of the additional capital.	+
Risks	The financings reach FIs that do not have any difficulty in obtaining financing.	+
	Savings resulting from improved financing terms and additional capital are used by the FIs for other purposes, such as to increase profit.	-
	The additional financing raises the financial intermediaries' transaction costs.	(+)
Causal link	**Capital -> Financial products offered are focused more closely on the target groups of the structured fund.**	**(+)**
Element	**Financial products offered are focused more closely on the target groups of the structured fund.**	**+/-**
Assumptions	The financed FIs reach the funds' target groups.	+/-
	One obstacle in focusing on the target groups is the lack of financing and/or poor financing terms.	?
Risks	FIs are not interested in adapting their financial products to better suit the target groups.	+/-

Induced output level		
Causal link	**FIs offer financial products on more favourable terms -> access to financial products is simplified.**	
Assumption	Poor terms (such as high interest rates) make it more difficult for the fund's target groups to access financial products.	?
Risk	The more favourable terms lead to other FIs being crowded out, as a result of which the overall supply shrinks, or the terms deteriorate in the long term due to the lack of competition.	*
Causal link	**Financial products are focused more closely on the target groups -> access to financial products is simplified.**	
Assumptions	There is a lack of target-group-orientation, making it more difficult for the target groups to access financial products.	+
Risk	Factors other than the lack of target-group-focus prevent the target group from obtaining financial products.	+
Element	**Access to financial products is simplified.**	-

* There is little evidence of more favourable terms, hence the risk is not relevant.

9.3 Objectives of the funds

Table 10 Fund objectives

Fund	Sector	Target group	Mission
EFSE	MSEs	MSEs, low-income private households with limited access to financial services	• Promote economic development and prosperity through sustainable, additional development finance. • Generate income and create jobs by supporting MSEs. • Satisfy the basic need for appropriate housing through housing modernisation measures. • Strengthen local financial markets.
SANAD	MSMEs	MSMEs	• Protect and create jobs, especially for young people. • Reduce poverty by supporting the self-employed. • Create inclusive financial systems. • Increase access to finance for housing, promote agriculture and financial innovation.
MEF	Microfinance	SEs and MFIs	• Promote growth, create jobs and reduce poverty through microfinance in emerging markets.
AATIF	Agriculture	Commercial agricultural enterprises, cooperatives and small farmers	• Promote investment along the entire agricultural value chain. • Food and nutrition security • Create jobs. • Increase local income.
MIFA	Microfinance	MSEs	Effects on private households: • Improve lives by reducing health risks. • Reduce workloads. • Increase income.
GGF	Renewable energy (RE)	MSMEs and private households	Promote energy efficiency and strengthen RE; raise awareness of RE and TA.

Fund	Sector	Target group	Mission
REFFA	Education	Private education providers	• Address the growing demand for primary, secondary and post-secondary education. • Overcome obstacles such as high student-teacher ratio. • poor educational infrastructure • lack of practical experience among teachers • outdated curricula • graduate skills sets that do not match labour-market requirements
EBF	Nature conservation	Enterprises and private households	• Preserve biodiversity, manage natural resources sustainably, mitigate climate change and adapt to its impacts. • Sectors: agriculture and agricultural processing, fishery and aquaculture, forestry, tourism
REGMIFA	Microfinance	MSMEs	• Strategy: Eliminate obstacles for MSMEs (limited access to financial services) in order to unlock the potential of local capital markets. • Overarching objectives: Promote economic development and prosperity, create jobs, generate income and reduce poverty.
MIDF	Infrastructure	Municipal utility companies as well as small and medium-sized municipalities	• Develop and maintain public infrastructure. • Finance infrastructure projects in cooperation with local banks.

Source: KfW Development Bank reports to the BMZ, by fund

9.4 Selection of the funds and countries for the analysis

Table 11 Fulfilment of the selection criteria for the causal analysis (as at end of 2018)

Funds	TAF exists	Portfolio development is key performance indicator for the fund (e.g. credit default rate)	Focus on local currency financing	KfW indicators define characteristics of the target group*	MSME development is primary development objective	The maximum loan size sets a focus on MSME promotion*	Income or job creation is an objective of the fund.	TOTAL
European Fund for Southeast Europe (EFSE)	✓	✓	✓		✓		✓	5
SANAD Fund for MSME (SANAD)	✓	✓	✓		✓	✓	✓✓	7
Microfinance Enhancement Facility (MEF)		✓		✓	✓	✓		4
Africa Agriculture and Trade Investment Fund (AATIF)	✓	✓		✓			✓	4
Regional MSME Investment Fund for Sub-Saharan Africa (REGMIFA)	✓	✓	✓	✓	✓	✓	✓	7
Microfinance Initiative for Asia (MIFA) Debt Fund.	✓	✓	✓	✓	✓		✓	6
Green for Growth Fund Southeast Europe (GGF)	✓	✓	✓		✓			4
Eco-Business Fund	✓				✓			2
Regional Education Finance Fund for Africa (REFFA)	✓	✓		✓				3
Municipal Infrastructure Development Fund (MIDF)	✓	✓						2

*N.B.: *Defined characteristics of the target group and maximum loan size are included as indicators in the KfW results matrix.*

✓✓ indicates that jobs are not just a formulated objective of the fund, but also an explicit objectives indicator of the KfW results matrix.

Table 12 Criteria for selecting countries for the causal analysis

Category	Selection criterion	Objective	Ranking
Fund-specific criteria	Number and types of refinanced FIs	Typicity with respect to types of FIs; most likely with respect to number of FIs (> 4)	1
	Portfolio shares of the fund in the country	Typicity (as high as possible)	
Criteria for financial sector development	Bank branches per 100,000 inhabitants (WB data, 2014)	Most likely (as low as possible, but no outliers at fund level)	2
	Domestic lending by the financial sector (% of GDP) (WB data, 2014)	Most likely (as low as possible, but no outliers at fund level)	
	Coverage by credit institutions (% of adults) (ease of *doing business* index)	Most likely (as low as possible, but no outliers at fund level)	
	Percentage of MSMEs (5-99 employees) with outstanding loans or credit line (G20 Financial Inclusion Indicators, most current year, 2011-2017, usually 2013)	Most likely (as low as possible, but no outliers at fund level)	
Socio-economic criteria	Human Development Index (HDI)	Typicity at fund level	3
	Income group according to World Bank	Typicity and diversity across funds	
	Unemployment rate (WB data)	Most likely (as high as possible, but no outliers at fund level)	

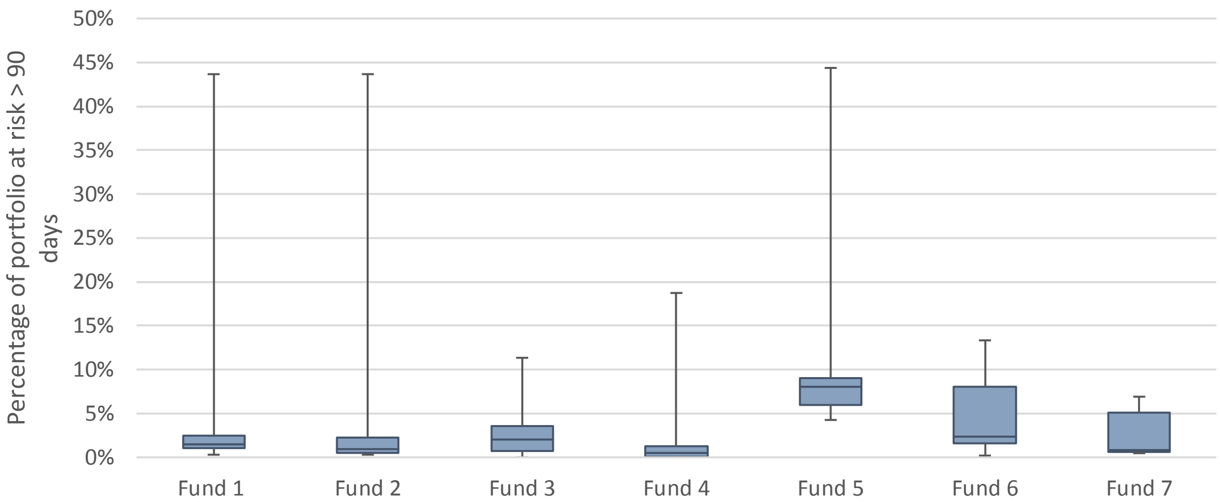
9.5 Selected BMZ strategies

Table 13 BMZ strategies linked thematically or geographically to SFs

Nr.	BMZ strategies linked thematically or geographically to SFs
1.	Africa and Europe – A new partnership for development, peace and a better future. Cornerstones of a Marshall Plan with Africa
2.	Agricultural finance
3.	BMZ Education Strategy – Creating equitable opportunities for quality education
4.	BMZ Position Paper – Financial systems development for green finance
5.	The world needs forests. Germany's forest action plan for sustainable development
6.	Development policy 2030. New challenges – new solutions. BMZ Strategy Paper
7.	Promoting sustainable agriculture. A development policy strategy
8.	Focus on Europe. Overcoming crises and divides, driving forward regional and European integration
9.	G20 Africa Partnership
10.	Good Financial Governance in German Development Cooperation. Promoting good governance in public finance. BMZ Sector Strategy Paper
11.	Developing markets, creating wealth, reducing poverty, taking responsibility – The private sector as a partner of development policy. Policy paper on cooperation with the private sector
12.	Marine Conservation and Sustainable Fisheries. Ten-point Plan of Action
13.	Human Rights in German Development Policy. Strategy
14.	Shaping the future with shared values and interests – The BMZ's new Latin America policy
15.	Sector strategy on private sector promotion
16.	Sector strategy on financial systems development

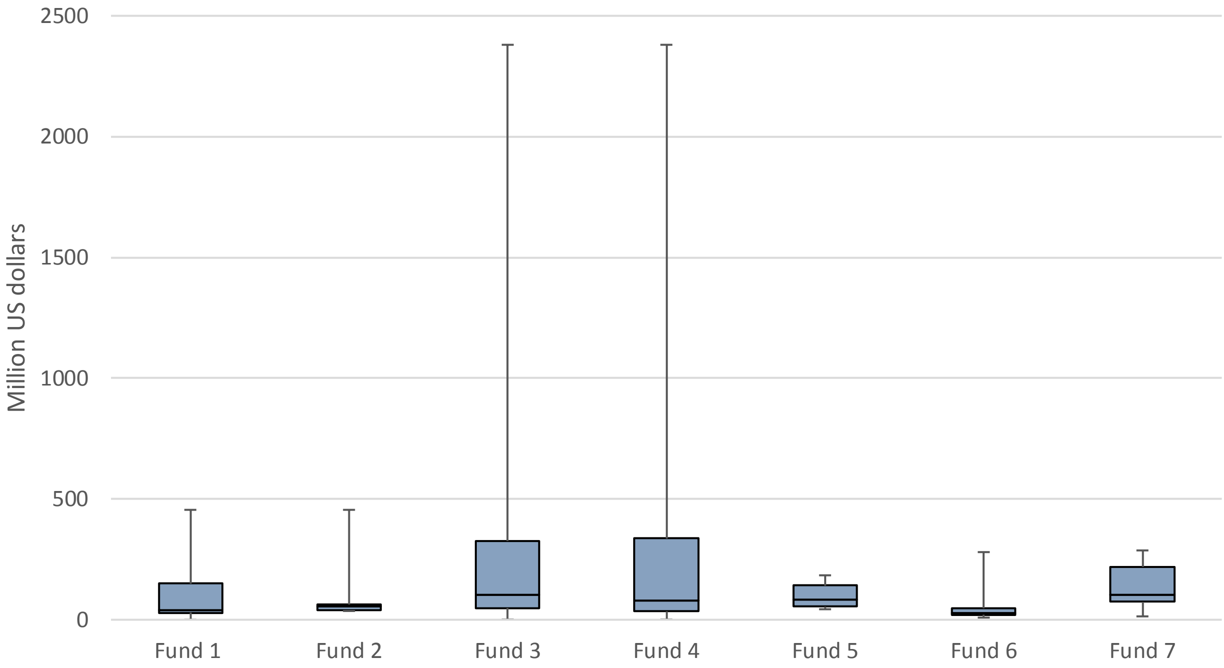
9.6 Diversification of the funds

Figure 30 Portfolio quality of the FIs for each fund (*PAR* > 90 days)



Source: MIX Market

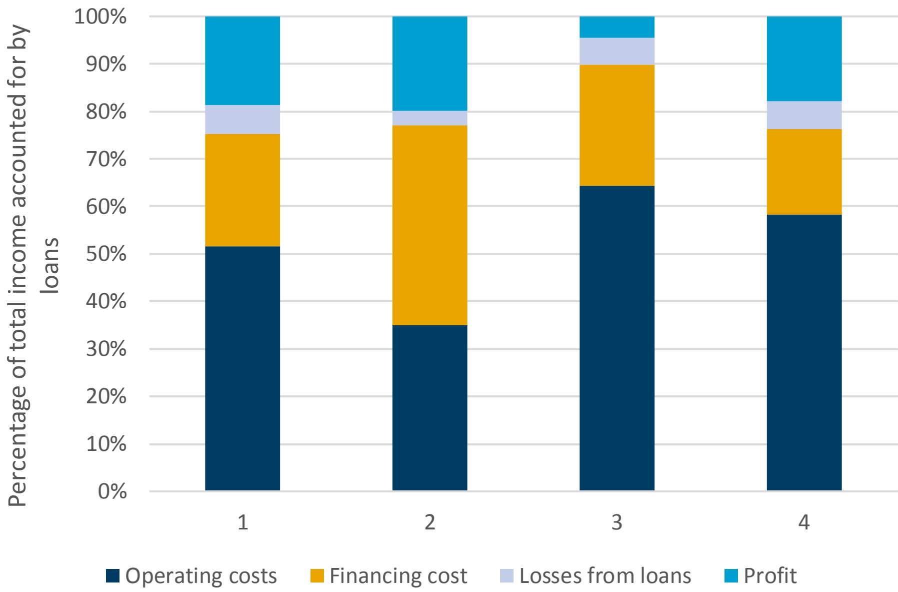
Figure 31 Assets of the FIs for each fund



Source: MIX Market

9.7 Composition of income from FI loans

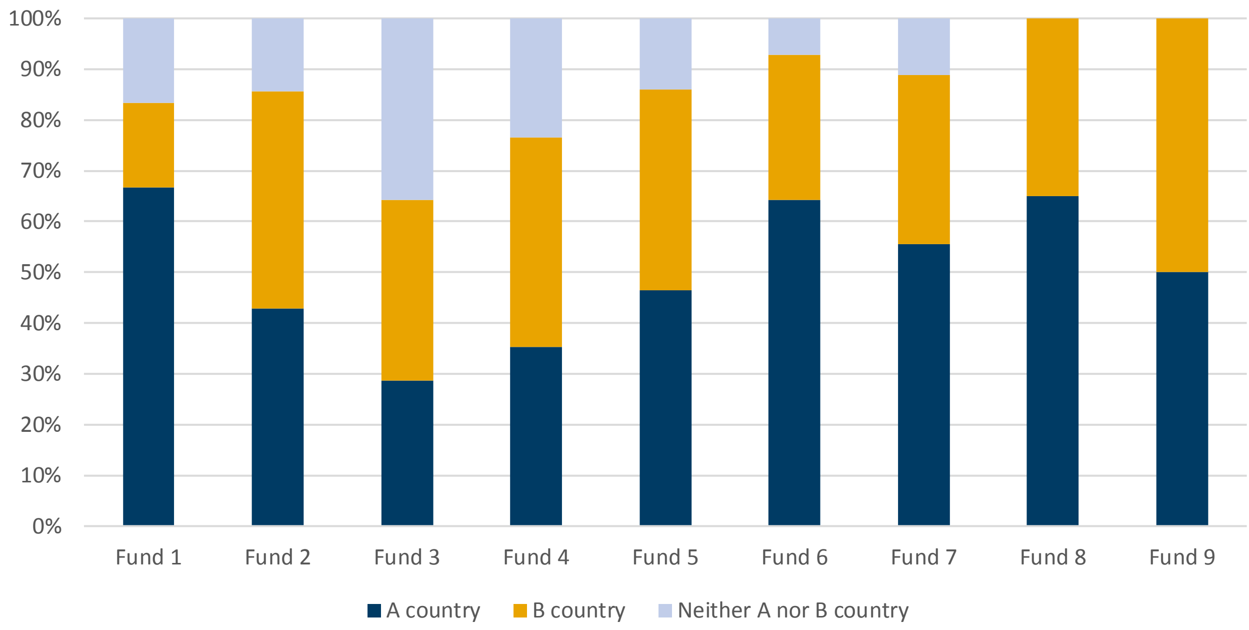
Figure 32 Composition of income from loans, broken down by costs and profit



Source: MIX Market, including only the four case study funds.

9.8 BMZ partner countries

Figure 33 Distribution of BMZ partner countries (A/B) for each fund



Source: BMZ.

9.9 Regression findings and indicators

Table 14 Indicators of regression

Name of indicator	Definition	Source
Country-specific indicators		
Low-income countries	Countries with a GNI per capita below 1,026 US dollars (July 2019)	World Bank*
Lower middle-income countries	Countries with a GNI per capita between 1,026 and 3,996 US dollars	World Bank
Upper middle-income countries	Countries with a GNI per capita between 3,996 and 12,375 US dollars	World Bank
High-income countries	Countries with a GNI per capita above 12,375 US dollars	World Bank
Least developed countries	47 countries with the lowest values for the following indicators: Gross National Income per capita, the Human Assets Index (HAI) and the Economic Vulnerability Index (EVI) .	(UN-OHRLLs, 2020)
BMZ A country	Partner countries of the BMZ with a bilateral country programme	BMZ**
Moody's country rating	This indicator rates a country's ability to repay. Moody's ratings range from AAA (top rating) to C (bottom rating). Ratings between AAA and Baa3 are classified as *investment grade*. Ratings between Ba1 and C are considered speculative or *non-investment grade*.	Moody's***

Name of indicator	Definition	Source
Ease of doing business score	The ease of doing business score is a World Bank index published annually that rates business friendliness and the regulatory environment in national economies.	World Bank
FI indicators		
Assets	Total value of resources managed by the FI	MIX Market
***Gross Loan Portfolio* (GLP)**	All outstanding principal amounts for all outstanding customer loans. This includes current, overdue and renegotiated loans, but not loans already written off.	MIX Market
Percentage of female sub-borrowers	Loans issued to women over the last years as a percentage of total loans	MIX Market
***Debt Equity Ratio* (DER)**	Ratio of all liabilities to equity	MIX Market
***Capital Adequacy Ratio* (CAR)**	Ratio of equity to assets	MIX Market
***Portfolio at Risk* 30/90 (PAR30/90)**	Loans overdue by more than 30 days as a percentage of the *gross loan portfolio*	MIX Market
***Return on Assets* (ROA)**	Net income (after tax) as a percentage of average assets	MIX Market
Return on Equity (ROE)	Net income (after tax) as a percentage of average equity	MIX Market
***Yield on gross portfolio*, nominal**	Income from loans as a percentage of average *gross loan portfolio*	MIX Market
Assets	Total value of resources managed by the FI	MIX Market

* *http://blogs.worldbank.org/opendata/new-country-classifications-income-level-2019-2020*
** *https://www.bmz.de/de/laender_regionen/laenderliste/index.html*
*** *https://www.moodys.com/sites/products/productattachments/ap075378_1_1408_ki.pdf*

Table 15 Logistic regression for country selection

	(1)	(2)	(3)	(4)	(5)
High-income countries	0				
	(.)				
Low-income countries	3.139***				
	(5.00)				
Lower middle-income countries	3.421***				
	(5.76)				
Upper middle-income countries	2.811***				
	(4.89)				
Least developed countries		0.237			
		(0.69)			
BMZ A country			2.411***		
			06:22		
Moody's rating				0.0242	
				01:08	
Ease of doing business score					-0.00531
					(-0.48)
Constant	-2.944***	-0.411*	-1.171***	-0.913**	-0.0117
	(-5.74)	(-2.41)	(-6.47)	(-2.60)	(-0.02)
N	218	189	218	216	188

t-statistic in parentheses
** p<0.05, ** p<0.01, *** p<0.001*

Table 16 Logistic regression for country selection, controlling for the region

	(1)	(2)	(3)	(4)	(5)
Least developed countries	-0.165	-1.807**			
	(-0.36)	(-2.61)			
High-income countries		0			
		(.)			
Low-income countries		6.117***			
		(5.34)			
Lower middle-income countries		5.588***			
		(5.86)			
Upper middle-income countries		3.568***			
		(4.59)			
BMZ A country			2.475***		
			(5.80)		
Moody's rating				0.00292	
				(0.11)	
Ease of doing business score					0.00908
					(0.59)
Region	YES	YES	YES	YES	YES
Constant	-0.969*	-4.721***	-1.799***	-1.363*	-1.567
	(-2.26)	(-4.91)	(-3.99)	(-2.54)	(-1.41)
N	187	187	215	213	186

t-statistic in parentheses
** p<0.05, ** p<0.01, *** p<0.001*

Table 17 Logistic regression for FI selection

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Assets	-2.11e-10								
	(-0.22)								
Percentage of women		2.518*							
		(2.42)							
DER			-0.0031						
			(-0.59)						
CAR				-0.586					
				(-1.12)					
PAR30					-1.841				
					(-0.72)				
ROA						0.287			
						(0.19)			
ROE							-0.0200		
							(-0.12)		
Yield								0.557	
								(0.62)	
Assets (ln)[74]									0.343***
									(4.39)
Country	YES	YES	YES	YES	YES	YES	YES	YES	YES
Constant	0.412	-1.759	0.416	0.544	0.463	0.398	0.408	0.235	-5.361***
	(0.64)	(-1.66)	(0.64)	(0.83)	(0.71)	(0.62)	(0.63)	(0.34)	(-3.66)
N	573	245	429	568	327	357	357	325	572

t-statistic in parentheses
** p<0.05, ** p<0.01, *** p<0.001*

[74] Since the distribution for this indicator is highly positively skewed, the natural logarithm was used as independent variable for the analyses.

Table 18 Findings of the DiD analysis

	Assets (ln)	*Gross loan portfolio* (ln)	Yield on portfolio (ln)	Women as a percentage of sub-borrowers (%)
Time	1.733***	1.884***	-0.150**	0.0103
	(11.50)	(11.45)	(-2.61)	(0.42)
Fund financing	1.633***	1.661***	0.106	0.00281
	(8.73)	(7.87)	(1.45)	(0.07)
Interaction between time and fund financing	-0.132	0.0187	-0.0653	-0.0352
	(-0.44)	(0.06)	(-0.43)	(-0.61)
Constant	14.79***	14.40***	-1.288***	0.664***
	(164.46)	(146.01)	(-36.14)	(42.84)
N	1124	1031	796	713

t-statistic in parentheses
** p<0.05, ** p<0.01, *** p<0.001*

9.10 Fund websites

Table 19 Fund websites

Fund	Website
EBF	https://www.ecobusiness.fund/en/
EFSE	https://www.efse.lu/
GGF	https://www.ggf.lu/
SANAD	https://www.sanad.lu/
MIFA	No website
REFFA	https://www.reffa.org/
AATIF	https://www.aatif.lu/home.html
MEF	http://mef-fund.com/
MIDF	No website
REGMIFA	https://www.regmifa.com/

9.11 Interviewees

Table 20 Interviewees

Fund managers

Number of interviewees	Institution
7	BlueOrchard
1	Deutsche Bank
1	Innpact
17	Finance in Motion
1	ResponsAbility
4	Symbiotics

Fund bodies

Number of interviewees	Institution
1	IFC
1	CIRAD
1	EIB
1	BMZ

Investors

Number of interviewees	Institution
9	BMZ
24	KfW
6	European Commission
1	IADB
2	OeEB

Pilot case study Tunisia

Number of interviewees	Institution
6	Enda Tamweel
4	Client of Enda Tamweel

Case Egypt

Number of interviewees	Institution
1	Global Leasing Company
1	Sandah

Case study Cambodia

Number of interviewees	Institution
5	HKL
6	LOLC
1	Kredit (MFI)
1	Credit bureau Cambodia
4	Client of HKL
4	Client of LOLC

Case study Nigeria

Number of interviewees	Institution
5	Advans LaFayette
2	IFC
1	Fina Trust
1	GIZ
1	Boctrust
1	Purple Money
1	Pan-Atlantic University, Nigeria
6	Client of Advans

Case study Serbia

Number of interviewees	Institution
3	AgroInvest
3	Opportunity Bank (OBS)
1	Association of Serbian Banks
1	Chamber of Commerce and Industry Serbia
1	OBB (MFI)
1	Sefini (MFI)
1	Consultant
1	National Bank of Serbia
1	Regional Agency for Development Serbia
1	GIZ Serbia
1	OBS Branch
1	USAID
1	BMZ
3	Client of OBS

9.12 Timeline

Time frame	Tasks
07/2018	Reference group meeting to discuss concept note
08/2018 – 11/2018	Inception report prepared
11/2018	Reference group meeting to discuss inception report
11/2018	Pilot case study in Tunisia carried out
12/2018 – 05/2019	Data collected in Germany
05/2019	Case study in Cambodia carried out
06/2019	Case study in Nigeria carried out
07/2019	Case study in Serbia carried out
08/2019 – 11/2019	Synthesis of the findings
11/2019	Reference group meeting to discuss the findings
12/2019 – 03/2020	Evaluation report written
03/2020	Reference group meeting to discuss the conclusions and recommendations
06/2020	Final report submitted to BMZ
06/2020	Completion of evaluation after layout and print

9.13 The team

Last name	First name	Position
Orth	Magdalena	Senior Evaluator, Team Leader
Habbel	Valerie	Evaluator
Richter	Johanna	Evaluator
Roggemann	Hanne	Evaluator
Bornemann	Amelie	Project Administrator (until December 2019)
Maicher	Rebecca	Project Administrator (since January 2020)
Bühler	Joshua	Student Assistant
Hügle	Joscha	Intern
Langenberg	Joscha	Intern
Neu	Aurelia	Intern
Wirtz	David Paul	Intern
Responsible		
Harten	Sven	Head of Department