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about Tameo

Tameo Impact Fund Solutions SA is a Switzerland-based start-up specializing in the provision of independent and expert services aiming to mainstream the impact investing industry. Tameo provides specialized fund managers and investors with market intelligence, fund research, impact reporting and analysis, and deal valuation, as well as other consulting services. Incorporated in December 2020, Tameo currently employs eight people.

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acknowledgments

We would like to thank all impact fund managers, 89 of them, for committing time to participate in our annual survey and for placing their trust in Tameo through the sharing of their fund data with us to prepare this study.

Credit goes to Gilles Bayon, Chief Technology Officer at Tameo, for the technical set up of the survey reporting and administration platforms.

We are also grateful to Danielle Carpenter from Eagle Eye who proofread and copyedited the study, as well as Yves Ninghetto and his team from LaFabrique for designing the report.

Legal disclaimer

This paper contains general information only. Tameo is not by means of this paper rendering professional advice or services. The content of this paper is meant for research purposes, with an aim to broaden and deepen the understanding of private asset impact funds with a focus on emerging and frontier markets. This paper refers to specific figures, outcomes and performances. Such references are made for research purposes only and are not intended as a solicitation or recommendation to buy or sell any specific investment product or services. Similarly, the information and opinions expressed in the text have been

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sponsorship contributions

This report would not have been possible without the leadership and sponsorship of the Swiss State Secretariat for Economic Affairs (SECO), Symbiotics and TCX Fund, supporting Tameo in conducting this study.

about the Swiss State Secretariat for Economic Affairs (SECO)

Centre of expertise for economic development: SECO Economic Cooperation and Development makes targeted use of SECO's economic expertise in order to further international cooperation. On this basis, it reaches key economic organizations, government agencies and central banks. SECO focuses on advanced developing countries that face specific development policy challenges. It bases its programs on national and international development strategies.

Approach: SECO's economic development cooperation aims to use Swiss expertise and innovative approaches to reduce poverty and overcome global challenges in its partner countries. To accomplish this, it promotes economic growth and sustainable prosperity. The 2030 Agenda for Sustainable Development is an important frame of reference in this context.

Objectives: SECO promotes reliable economic framework conditions and innovative private sector initiatives with the aim of giving people and companies access to opportunities and markets and contributing to the creation of decent income opportunities. It places particular emphasis on gender equality, climate protection and the efficient use of resources.

about Symbiotics

Symbiotics is the leading market access platform for impact investing, dedicated to financing micro- small and medium enterprises and low- and middle-income households in emerging and frontier markets. Since 2005, Symbiotics has structured and originated some 4,000 deals for over 490 companies in almost 90 emerging and frontier markets representing more than USD 6.5 billion. These investments have been purchased by more than 25 fund mandates and more than 50 third-party specialized fund managers, forming a growing ecosystem and marketplace for such transactions.

about TCX Fund

TCX Fund is a Netherlands-based development finance initiative backed by a wide range of development finance institutions and government agencies. The fund's mandate is to eliminate currency risk associated with impact lending. TCX, for that purpose, offers swaps and forwards, without any tenor restrictions, to hedge emerging and frontier market currencies globally. Since TCX started operations in 2007, it has supported USD 10+ billion equivalent of local currency loans in 70+ currencies. Of that, USD 3.5 billion were loans by 85 different impact funds, of which 25 were serviced by TCX directly and 60 through its principal intermediary MFX.

Co-sponsors

We would also like to thank the following companies for their generous financial support and key role in facilitating access to impactful capital in emerging and frontier markets:

- ACTIAM
- AlphaMundi Group
- Asia Africa Investment & Consulting (AAIC)
- BIM Investments
- BlueOrchard
- Camco Clean Energy
- Caspian Advisors
- Elevar Equity
- Grassroots Capital Management
- Impact Asset Management
- Incofin Investment Management
- INOKS Capital
- Microfinance Enhancement Facility (MEF)
- Nexus for Development
- Regional MSME Investment Fund for Sub-Saharan Africa (REGMIFA)
- Swiss Investment Fund for Emerging Markets (SIFEM)
- Triodos Investment Management
- Valcourt

foreword

Stakeholders often point to the lack of data transparency about impact investing strategies as one important obstacle that could harm the fast growth our market has witnessed over the last 15 years. This flourishing expansion indeed brought with it an industry-wide outlook for further accountability and transparency, as well as a common language.

On the one side, asset owners involved in impact investing increasingly require reporting mechanisms to better understand how fund managers put their money to work, whether they direct it towards impactful projects and whether it generates the added social and environmental value promised at the onset.

Impact fund managers, on the other side, seek greater comparability and more tangible data points on their funds' operational performance to position their portfolios within their niche and, above all, to demonstrate their ability to generate adequate impact results to their clients and prospects, in addition to maintaining risk-return factors aligned with expectations.

Regulations in many jurisdictions are also pushing for more accountability, while a plethora of certifications and stamps of approval are emerging to validate a product's impact discourse in response to concerns about impact- and greenwashing.

Tameo is proud to produce market studies such as this 2021 Private Asset Impact Fund (PAIF) report, informing on a record 175 impact funds with a cumulative balance sheet of USD 24 billion. Covering 62% of the whole market, this study both addresses the transparency bottlenecks in private market impact strategies and is a credible public good that demonstrates the distinct value proposition of our fund universe.

Although growth and returns were stagnant in 2020, it is comforting to see how impact investing strategies through funds have been resilient considering the COVID-19 pandemic and that fund managers incorporated 40 new impact investment products last year. This is a record figure, with a further 34 new funds created to date in 2021, which shows the timely response from impact fund managers to raise and deploy impactful capital to markets and a clientele in dire need of liquidity and support.

With over 500 active funds currently having built-in a development finance lens, our journey to cover the whole market will be a challenging yet exciting one. This second PAIF report, and the first under our new Tameo identity, is already an important milestone, putting forward the diversity and innovative approaches existing in the market for impact investors.

As our field continues its march towards greater standardization and transparency, we hope this report will provide enough validation on the importance of impact fund products to fulfil the 2030 Sustainable Development Goal agenda – and ultimately bring fresh capital to a key segment within impact investing.

Ramkumar Narayanan

Head of Research & Investments
Tameo Impact Fund Solutions

executive summary

This report is the outcome of a four-month-long survey conducted by Tameo on private asset impact funds (PAIFs) with a focus on developing countries. The surveyed market consists of all investment vehicles operated by specialized impact fund managers and that have more than 50% of their non-cash asset allocated both to private debt or private equity instruments and to emerging and frontier markets, with a development impact bias.

Such funds fall under the wider development finance investment space, which regroups both public sector and private sector investments. This paper addresses and analyses only investments by such entities that flow through investment vehicles, thus excluding direct impact investments by public and private actors.

The 2021 survey brings together the most comprehensive dataset to date on this investment fund universe. It also segments the analysis by each fund's primary asset class (fixed income, equity and mixed funds) and primary impact sector (climate & energy; food & agriculture; health & education; housing, water & communities; microfinance; SME development; and multi-sector funds). It also delves into those impact management and measurement approaches that are inherent to development finance investments. The report highlights microfinance fund data given their historical prominence within the PAIF landscape.

Key takeaways from the 2021 PAIF report include:

- A market size of nearly USD 40 billion
 - Tameo has identified 506 funds run by 259 fund managers. We estimate the cumulative size of this market at USD 38.4 billion overall.
- The 2021 study covers 62% of the overall impact fund market and 92% of the microfinance fund market

This survey compiles data on 175 funds affiliated to 89 managers that are based in 28 countries. In terms of assets under management, the survey covers about two-thirds of the private asset impact fund market, or USD 23.8 billion cumulatively. The sample size of microfinance funds adds up to USD 16.6 billion, representing 92% of its respective estimated total market size of USD 18.1 billion.

- In 2020, growth was flat; forecasts show a doubledigit rebound for 2021
 - Growth in 2020 was low, but still positive in terms of total assets, at 1.5%; but expectations are much higher for 2021 (12.3%) and this across all impact sectors and asset strategies.
- Assets are managed mostly out of Switzerland, at 35% Switzerland-based investment managers represent 35% of the assets under management (AUM) in the sample, followed by Netherlands-based investment managers (17%) and Germany-based companies (15%). In microfinance, the 10 largest investment managers account for 75% of the total assets of surveyed microfinance funds as at end 2020.
- Fund portfolios in impact-related activities are above the 80% mark, while cash levels have witnessed 21% growth year-on-year

The balance sheet structure of funds indicates that funds invest 81% of their assets in impact-related activities, while cash stands at 13%, having grown by 21% compared to 2019.

Private debt continues to top all instruments, led by the high number of fixed income funds comprising the sample

Private debt is the most used financial instrument, with USD 19.2 billion outstanding (91% senior debt; 9% subordinated debt) as of December 2020. Private equity stands at USD 3.8 billion (85% common equity; 15% preferred equity), with higher exposures outstanding per investee (USD 4.4 million) compared to private debt (USD 2.7 million).

Microfinance remains the most attended sector, attracting 52% of portfolio flows

Microfinance accounts for the majority of funds' investment portfolios, at USD 10.0 billion outstanding at year-end (52% of the total). It is followed by SME development (24%) and food & agriculture (8%). Climate & energy investees are those who attract the largest volumes on average (USD 4.9 million), and health & education the smallest (USD 1.4 million).

■ Funds largely direct their investments through financial institutions in domestic markets

Financial institutions absorb the highest volumes (USD 15.4 billion outstanding; 85% of the total direct portfolio), making them the prime investee type of impact funds. They are followed by SMEs (10%), whereas non-financial corporations (4%) and project finance (2%) remain uncommon within the PAIF universe.

The surveyed funds invest in over 120 countries, with Latin America & the Caribbean as the prime destination

Latin America & the Caribbean captures the largest share of direct investments, at 27% of the total portfolio outstanding, followed by Eastern Europe & Central Asia (26%) and South Asia (17%). The top five countries of investments are India (15%), Ecuador (4%), Mexico (4%), Georgia (4%) and Cambodia (4%).

Investment terms for lending strategies show a bias towards hard currencies and fixed coupon interest rates

PAIF debt investments are mostly denominated in hard currency (65% vs 35% in local currency, of which 30% remain unhedged), with a fixed coupon interest rate (65% vs 35% with a floating rate).

Funds invest in more than 60 developing market currencies but most use foreign exchange (FX) hedging to mitigate risk

In total, survey participants reported debt investments in 68 different currencies, among which 64 qualify as local currencies. The Indian rupee has surpassed the euro in volume terms. The prime reason for funds to lend in local currency is their willingness to improve the credit risk profile of investees. Close to 60% of funds have a mandatory hedging policy for local currency debt investments.

■ The COVID-19 pandemic brought record levels of loan provisioning and write-offs in 2020

Annual provisions and write-offs increased to 1.1% and 0.6% of average assets in 2020. In terms of country-risk levels, the bulk of funds' country exposure sits within a range of B3 to Baal on Moody's long-term sovereign risk rating scale, with the median rating at Ba2.

■ Fees and costs remain stable, with a continued decrease for microfinance funds since 2006

Management fees, which include all administration, investor relation and distribution costs, averaged 1.6% in 2020 for all funds. Operating expenses amounted to 2.3%. Over the past 13 years, both management fees and total expense ratio (TER) have been trending downward for microfinance funds, with the former decreasing from 1.9% to 1.4% and the latter from 2.2% to 2.0%.

Private institutional investors are the source of more than half of funds' investor money

PAIFs from the sample source 55% of their funding from institutional investors, followed by 26% from private retail and qualified individuals (high-net-worth individuals – HNWIs) and the rest (19%) from public funders. The latter category leads the way in the climate & energy and health & education segments.

Net returns have decreased across the board, but remained positive in most cases

Despite the economic effects of the COVID-19 pandemic, impact investing strategies brought positive financial returns for investors in 2020, at least in USD. At the median observation, unleveraged funds generated net returns of around 1.5% in USD, with important differences across the three asset strategies: 1.5% for fixed income; -0.5% for mixed; 5.5% for equity funds. In the same currency, leveraged funds returned 0.5% on their equity tranche and 3.3% for their noteholders.

Looking at funds through a development finance lens showcases clear environmental, social and governance (ESG) integration, Sustainable Development Goal (SDG) intent and inclusive finance principles

The surveyed funds target all SDGs, with some standing out as the prime ones (1, 5, 8, 10). Most surveyed funds make use of ESG integration during prospection and investment decisions. Quantitative impact results show a bias towards rural clients and women through a median outreach of about 150,000 end-clients in underserved markets.

the story behind Tameo and the PAIF report

Tameo was launched at end 2020 as a spin-off of the Symbiotics market research and impact measurement teams. The Private Asset Impact Fund report (PAIF report) today forms Tameo's flagship research initiative. It builds on previous fund-level studies conducted on the microfinance fund segment (i.e., the microfinance investment vehicle (MIV) surveys) by Symbiotics, in partnership with the Consultative Group to Assist the Poor (CGAP) at the launch phase (2007-2010) and then on a stand-alone basis (2011-2019).

During this 13-year span – and in parallel with the steady growth of microfinance funds – the impact investing market started witnessing the rise of funds targeting impact sectors beyond microfinance and using a more diverse range of instruments and approaches to address a multiplicity of sustainable development issues. Acknowledging this evolution, the former Symbiotics research team, now part of Tameo, started exploring return patterns for the whole impact fund segment, thanks to a research partnership with the Global Impact Investing Network (GIIN). The Financial Performance of Impact Investing Through Private Debt report, published in 2018 and reconducted in 2019, confirmed the need for more market transparency on the broader spectrum of private asset impact funds (PAIFs).

The PAIF report ultimately emerged from these research efforts, with Tameo and Symbiotics jointly conducting its first edition in 2020. Today, Tameo alone performs the survey, providing full independence to this research initiative. This formal separation from Symbiotics also offers greater opportunities for the visibility, growth and development of such research and benchmarking activities going forward.

Tameo is glad to start this exciting journey with all the participants in and readers of the PAIF report. Our vision is to drive transparency for impact funds and their managers, advisers and investors through the most comprehensive fund-level benchmarking report in the industry.

methodology and peer group definitions

Starting in May, we sent out the survey to all known investment funds with an impact bias, solely targeting emerging and frontier markets and using only private asset strategies (both private debt and equity). We collected data up to the month of September, with a record 175 impact funds feeding their data to Tameo, usually through their fund managers or investment managers.

The online survey questionnaire enables us to build a comprehensive market report aggregating data on close to 300 fund-level indicators, including their financial performance, asset structure, portfolio composition, risk metrics, investor base and impact performance.

For comparability purposes, we have converted all indicators from the private asset impact funds (PAIFs) accounting currencies to US dollars (USD) using end of 2020 exchange rates. For the calculation of growth

indicators and historical datapoints on microfinance funds, we also use end of 2020 exchange rates applied to all previous years back to 2006 to remove the effects of currency movements against the USD.

In terms of survey inclusion criteria, all PAIFs composing the sample need to:

- Be a stand-alone investment vehicle (asset owners, funds of funds, holding companies and networks do not qualify);
- Have an impact bias inscribed at the core of their strategy, defined as having a clear intention to generate social or environmental impact alongside a financial return, and measuring it;
- 3. Invest more than 85% of their portfolio in private assets (debt or equity);
- 4. Invest more than 85% of their portfolio in emerging and frontier markets.

Table 1 - Inclusion criteria

INCLUDED	EXCLUDED	
Intention/mission to generate social, and/or environmental impact alongside a financial return	No clear intention/mission to generate social or environmental impact alongside a financial return	
Private assets	Listed assets	
Emerging and/or frontier markets	Developed markets	
Investment funds, investment compa- nies, structured finance vehicles, as well as dedicated non-governmental organizations (NGOs), cooperatives or foundations	Asset owners, government agencies, development finance institution (DFIs), funds of funds, holdings/networks	
	Intention/mission to generate social, and/or environmental impact alongside a financial return Private assets Emerging and/or frontier markets Investment funds, investment companies, structured finance vehicles, as well as dedicated non-governmental organizations (NGOs), cooperatives or	

We have segregated the statistics by peer groups to facilitate fund managers' market positioning exercises. The peer groups relate to fund asset class and primary impact sector of focus.

Peer group classification according to asset class:

- **Fixed income**: Investment vehicles of which the core activity, defined as more than 85% of their total non-cash assets, is to invest in debt instruments;
- Equity: Investment vehicles of which the core activity, defined as more than 65% of their total non-cash assets, is to invest in equity instruments;
- Mixed: Investment vehicles that invest in both debt and equity, with more than 15% and less than 65% of their total non-cash assets invested in equity investments.

We made this peer group classification in accordance with the Consultative Group to Assist the Poor (CGAP) Microfinance Investment Vehicle (MIV) Disclosure Guidelines; it could result in a different classification compared to the vehicle's mission statement.

Peer group classification according to primary impact sector of focus:

- We define the primary impact sector of the survey participant at the 50% mark in terms of its impact portfolio. For instance, if a fund has 65% of investments in climate & energy, while it spreads the rest of its impact portfolio across other sectors, we categorize the fund under the climate & energy peer group.
- We classify a fund as multi-sector only in cases where not a single sector accounts for 50% or more of its impact portfolio.

We have derived the breakdown by impact sectors from the Global Impact Investing Network's (GIIN) recognized definitions and adjusted them based on fund business models and the overall study sample size.

¹ Available at https://www.cgap.org/research/publication/microfinance-investment-vehicles-disclosure-guidelines.

Table 2 - Impact sector classification

GIIN CATEGORIES	TAMEO CATEGORIES	
Arts & culture	Climate & energy	
Education	Food & agriculture	
Energy	Health & education	
Financial services (excl. microfinance)	Housing, water & communities	
Food & agriculture	Microfinance	
Forestry & timber	SME development	
Healthcare	Multi-sector	
Housing		
Information & communication technologies (ICT)		
Infrastructure		
Manufacturing		
Microfinance		
Water, sanitation & hygiene (WASH)		

Definitions of impact sectors used to classify PAIFs and related Sustainable Development Goals (SDGs)

- Climate & energy: Energy financing with a sustainable bias includes strategies to reduce energy use and save energy in a more efficient manner as well as to use renewable energy and clean technologies for alternative production and consumption schemes, or a combination of both. This category can extend to forestry, land use and conservation, as well as insurance schemes to, for instance, address climate preservation. Overall, the multiplicity of models and businesses in this segment best address SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action).
- Food & agriculture: Agricultural value chain financing, whether production, trade, distribution or other models, focuses on businesses that increasingly adopt a sustainable approach to the extraction and harvesting of natural products from the planet,

- whether crops, cattle, fisheries or other plants and animals. With a sustainability intentionality attached to it, the businesses engaged in these sectors address SDG 2 (Zero Hunger), SDG 14 (Life below Water) and SDG 15 (Life on Land).
- Health & education: Financing hospitals and clinics, healthcare plans, services and insurance, as well as the production and distribution of health products contribute to SDG 3 (Good Health and Well-being). Providing student and school loans or financing innovative digital learning solutions or, more generally, knowledge transfer and management contribute to SDG 4 (Quality Education).
- Housing, water & communities: This category groups housing, infrastructure and utilities investments, and the industries that develop, support and construct them, with a bias towards sustainable innovation to, for instance, provide green buildings, transportation,

water or waste collection and treatment systems that are accessible and affordable for those at the base of the pyramid. They can be linked with SDG 6 (Clean Water and Sanitation), SDG 9 (Industry, Innovation and Infrastructure) and SDG 11 (Sustainable Cities and Communities).

■ Microfinance: This category refers to the provision of and access to financial services at the base of the pyramid in underserved economies. It primarily addresses a household finance need, either in terms of financial security (credit lines, savings, insurance, payments) or in terms of household consumption (loans and targeted savings programs). It also contributes to financing small household income streams (working capital loans for small entrepreneurial or employment activities). Microfinance models tend to focus on the poorest categories of clients, are positively biased towards women, and intend, by design, to reduce gaps in income, consumption and access to finance. They are typically linked to SDG 1 (No Poverty), SDG 5 (Gender Equality) and SDG 10 (Reduced Inequalities).

■ Small and medium enterprise (SME) development: Refers to the financing of small and medium enterprises, broadly defined as employing respectively 5 to 50 and 50 to 250 employees.² SME development is principally about employment and entrepreneurship as vehicles for growth and economic development. SMEs typically represent the vast majority of formalized companies in a given country, as well as both the largest share of employment and the largest contributions to its gross domestic product (GDP). They are thus the most valuable means to addresses normative, behavioral and practical changes when it comes to responsibly producing and consuming the goods and services put forth to the public. The funds in this sector are typically linked to SDG 8 (Decent Work and Economic Growth) and SDG 12 (Responsible Consumption and Production).

² The European Union defines a small enterprise as less than 50 employees, EUR 10 million in turnover or assets, and a medium enterprise as less than 250 employees, EUR 50 million in turnover or assets. Financing of SMEs might vary widely in size, for instance from EUR 10,000 to EUR 10 million. These metrics might differ significantly in emerging or frontier markets.

Figure 1 - Primary SDGs by impact sector





market size & study coverage

This chapter offers a market sizing estimate for the niche sector of impact investing strategies through funds. It provides a view on the current number of funds active in the market and their median sizes derived from the study sample. The chapter also compares this overall sizing estimate with the volumes captured in the study sample, both in terms of assets under management (AUM) and number of funds.

1.1 -	- market size estimate	1.
1.2 -	- sample size	19

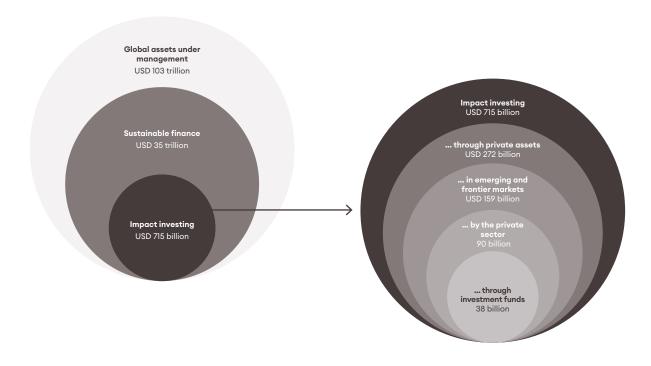
1.1 market size estimate

The private asset impact fund (PAIF) study analyzes a subsegment of the global impact fund space, which to be comprehensive would regroup funds focused both on developing and advanced economies and funds using both listed and private asset strategies. In this study, we deliberately focus only on emerging and frontier markets and only on private asset strategies, knowing that many other transparency and benchmarking initiatives exist on listed funds and advanced markets.

Based on the GIIN's Annual Impact Investor Survey 2020³, there is USD 715 billion of assets under management in impact investing. More than 60% (or USD 443 billion) are invested through listed asset strategies. The rest, about USD 272 billion, are invested through private asset strategies.

Of those, about 60% (or USD 159 billion) are invested in emerging and frontier markets. This is considered development finance, being both a subsection of sustainable finance, in the sense of integrating environmental, social and governance (ESG) norms into the investment value chain, and impact investing, in the sense of positively addressing the SDGs. What differentiates it from other sustainable finance and impact investing strategies are the private markets in which it operates and its North-South development cooperation bias, as it aims to achieve inclusive and sustainable growth for low-income households and small businesses in underserved and underdeveloped markets (see section 4.1 development finance narrative for more information).

Figure 2 - Investment universe



³ Global Impact Investing Network (GIIN) (2020). The Annual Impact Investor Survey 2020.

Development finance investments regroup both direct and indirect investments (through specialized investment funds) by: (1) public sector actors and policy investors, including multilateral banks, development finance institutions and government aid agencies; and (2) private sector investors. The GIIN estimates development finance investments by these private sector investors at USD 90 billion.

The universe that the 2021 PAIF report seeks to grasp regroups all investments that flow through funds managed by private companies (meaning investment managers) on behalf of either their private or public sector investor-clients.4 Tameo estimates this market segment to include, as of December 2020, a total of 259 investment managers, covering 506 private asset impact funds, with combined assets under management of USD 38.4 billion.5

In comparison, impact investing, and its development finance investments, form only a small fraction of global capital markets. They nevertheless enjoy very strong backwinds and attraction among asset management and wealth management operators. The gap and margin of progression towards becoming a significant portion of sustainable finance, let alone mainstream capital markets, offers impressive growth prospects. Estimates show that the broader sustainable finance landscape, which includes ESG integration strategies, stands at USD 35 trillion, according to the last biennial report from the Global Sustainable Investment Alliance. 6 ESG strategies have taken up an important share of the overall global asset and wealth management industry in recent years, currently at about 30% of its USD 103 trillion total at the end of 2020.7

The study excludes funds managed by public sector entities like development finance institutions (DFIs).

We perform the estimation of the target investment universe by applying the reported median fund sizes (by primary impact sector) as of December 2020 to the identified, non-participant funds.

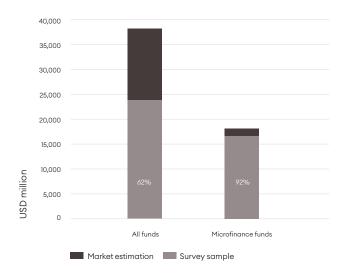
Global Sustainable Investment Alliance (2021). The Global Sustainable Investment Alliance (2021). The Global Asset Management 2021: The \$100 Trillion Machine. Global Sustainable Investment Alliance (2021). The Global Sustainable Investment Review 2020.

1.2 sample size

Within the universe of PAIFs sized at nearly USD 40 million, the second edition of this survey pools data from 175 funds run by 89 investment managers, which altogether represent USD 23.8 billion of assets under management, or close to two-thirds (62%) of the total space of private asset impact funds with an emerging market coverage.

When taking only microfinance funds into consideration – PAIFs with a primary impact sector classified as "microfinance" – their coverage ratio rises to 92% of the entire universe, estimated at USD 18.1 billion and a study sample size of USD 16.6 billion. The high coverage of the microfinance market aligns with past microfinance investment vehicle (MIV) survey numbers.

Figure 3 Sample size and representativeness





investment managers

This chapter delves into the investment manager landscape by first providing an overview of their business model, roles and position within the impact investing value chain. It then quantifies their market share within the study sample, first in terms of their headquarters and then at a company level. Finally, the chapter describes industry initiatives of which they are signatories and members.

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2.1 business model

PAIFs are stand-alone investment vehicles with a dedicated balance sheet; in most cases they are set up as a registered investment fund in a given jurisdiction, pooling money from multiple investors and investing it on their behalf in a diversified set of private assets, either debt or equity, or a mix of both. Their specific legal status, and the needs, rights and obligations that go with them, vary from one jurisdiction to another. The way they are managed and their governance setup also vary from one another.

A breakdown of their key functions will include: (1) fund management (holding the regulatory license for running the fund, overseeing other functions, and usually managing the risk and compliance requirements); (2) fund administration (running the administrative, accounting, legal, tax and audit functions); (3) fund distribution (selling the fund to investors and managing those relations); (4) investment management (portfolio construction and monitoring, either as a delegated discretionary portfolio manager or as an adviser to the fund manager); and (5) other sub-advisory functions (market research and access, sourcing and origination, investee due diligence, credit risk analysis, impact assessments, deal structuring, deal valuations, brokerage, etc.).

Historically, the same company assumed most roles, with the fund manager vertically integrating all investment value chain functions. But over the years, and especially more recently, as well as in more mature market segments, companies are gradually spreading these functions across specialized firms and actors. The fund governance and management will thus vary greatly based on the segmentation of the roles and functions along the investment value chain.

Whatever the setup, PAIFs sit at the center of the value chain, pooling investor money and injecting it with an impact bias at the base of the pyramid (BOP) in underserved emerging and frontier economies.

The base of the pyramid can be defined as low- and middle-income households and/or micro- small and medium sized businesses in low- and middle-income economies. The investees catering for the base of the pyramid can be categorized as: (1) financial institutions, (2) small and medium enterprises (SMEs), (3) corporations, or (4) projects and project finance transactions.



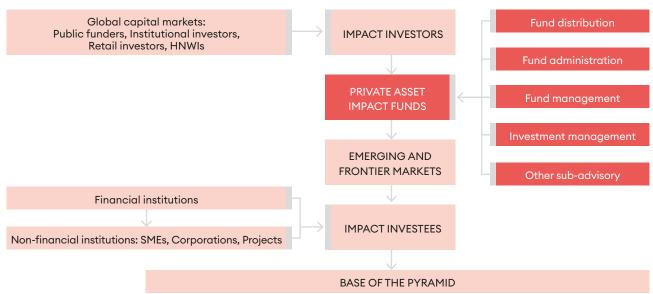


Table 3 - Defining the investment universe and value chain

DEFINING THE II	NVESTMENT UNIVERSE AND VALUE CHAIN
Public funders	Including multilateral banks, development financial institutions and other government and policy investors.
Institutional investors	Pension funds, financial institutions (such as insurance companies, banks and asset management companies), treasury departments of companies, funds of funds, NGOs and foundations.
Private investors	Typically defined in the private banking world as high net worth individuals (HNWIs), having investable assets in excess of a certain amount of money (e.g., USD 1 million).
Retail investors	Private investors with smaller amounts of available cash to invest than HNWIs. Funds targeting retail investors typically need to register for a public distribution license with their regulators.
Private asset impact funds (PAIFs)	Investment funds with more than 50% of non-cash assets allocated to impact investments through private instruments (debt and/or equity), targeting in majority emerging and frontier markets.
Emerging and frontier markets	Upper middle, lower middle and low-income countries, as defined by the World Bank.
Financial institutions	Any type of financial institutions (banks, non-bank financial institutions, credit cooperatives, savings houses, leasing schemes, insurance plans, etc.) addressing the BOP.
Small and medium enterprises (SMEs)	Businesses which employ between 5 and 50 employees (small), and between 50 and 250 employees (medium).
Corporations	Any larger company, outside of the SME sector with relation to both number of employees and asset size, which for the purpose and context of PAIFs may typically have financing needs in excess of USD 10 million.
Projects	A project finance transaction, usually for larger infrastructure or industrial financings, outside of the balance sheet of their sponsors, in the sense of relying solely on the project's cash flows for repayment, with the project's assets held as collateral.
Base of the pyramid (BOP)	Low- and middle-income households and/or MSMEs in underserved economies.
Low- and middle-income households	Households with a net disposable income that is average or below average, ranging from extremely poor to moderately poor and vulnerable non-poor levels, as defined by the World Bank.

2.2 market share & concentration

Our study sample includes 89 investment managers, a number that encompasses both fund managers covering the full PAIF value chain, as well as other more specialized entities offering only investment management services or a wider array of services. Together, they are located in 28 countries.

Their headquarters are mostly located in Switzerland (35% AUM, 46 funds), the Netherlands (17% AUM, 14 funds), Germany (15%, 8 funds) and the United States (8% AUM, 25 funds). Western European companies collectively manage 87% of AUM through 119 funds, ahead of those in North America, with a market share of 8% AUM (28 funds).

In terms of market concentration, the top 10 investment managers account for 64% of the total sample size, signaling a relatively concentrated market on its upper segment.

Yet, whatever the metric used (top 3, top 5 or top 10), investment manager concentration levels slightly decreased in 2020, indicating the emergence of new actors and potentially a slow path towards market maturation.

Concentration levels in the microfinance segment remain higher, with the top 10 players accounting for 75% of assets as of end 2020.

Figure 5
Top 10 PAIF investment management countries

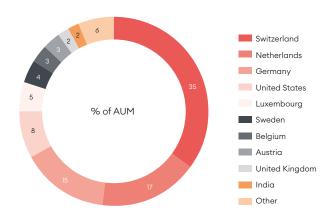
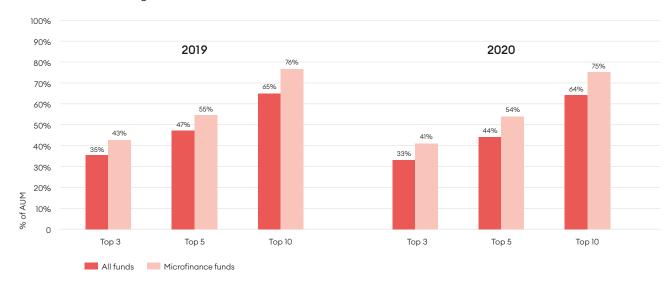


Figure 6
PAIF investment manager concentration levels



2.3 industry initiatives

Principles, guidelines and standards

As the industry has grown and evolved from financial inclusion to impact investing, multiple principles, reporting guidelines and standards are bringing more transparency and common reporting frameworks to the sector. According to our sample, participants adopted foremost the Principles for Responsible Investment (PRI; 23 companies), the International Finance Corporation's (IFC) Operating Principles for Impact Management (19 companies) and the Smart Campaign's Client Protection Principles (CPP; 16 companies). Other responses from

survey participants notably included the Principles for Investors in Inclusive Finance (PIIF), the United Nations Development Programme's SDG Impact Practice Standards for Private Equity Funds, the United Nations Environment Programme Finance Initiative's Principles for Positive Impact Finance, Responsible Finance Forum's Investor Guidelines for Responsible Investing in Digital Financial Services and the Key Principles to Protect Microfinance Institutions and their Clients in the COVID-19 Crisis.

Figure 7 - Principles, guidelines and standards



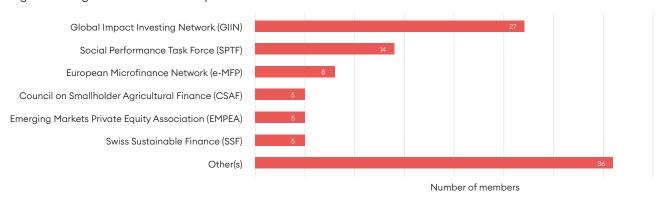
⁸ In July 2020, the Center for Financial Inclusion, which had housed the Smart Campaign since its inception, announced it would transfer the management of the Smart Campaign Client Protection Standards to the Social Performance Task Force and CERISE, and that the Smart Certification Program would wind down in April 2021. MFR became the first approved Certification Body under the new CERISE-SPTF framework in May 2021.

Organization memberships

Several organizations and networks now facilitate promotion, discussion and knowledge sharing between fund managers, institutional investors, non-governmental organizations (NGOs) and associations, as well as DFIs and other public entities.

The GIIN (27 companies), the Social Performance Task Force (SPTF; 14 companies), the European Microfinance Network (EMN; 8 companies), the Council on Smallholder Agricultural Finance (CSAF; 5 companies), the Emerging Markets Private Equity Association (EMPEA; 5 companies) and Swiss Sustainable Finance (SSF; 5 companies) appear to be the organizations with the highest membership and participation rate among survey respondents.

Figure 8 - Organization memberships





private asset impact funds - financial metrics

This chapter presents the aggregated metrics of our PAIF sample. For most indicators, we have disaggregated the information by main peer groups – including primary impact sector– and asset class. Where relevant, we have applied additional filters to contextualize the findings. In addition, we present past MIV survey results along with 2020 datapoints complementing the 15-year data track record for microfinance funds. The chapter starts by profiling the PAIFs within the overall sample, before delving into more operational results on market size and growth, as well as more specifically on balance sheets, investment instruments, investees, sectors, geography, investment terms, risks, investors and financial performance.

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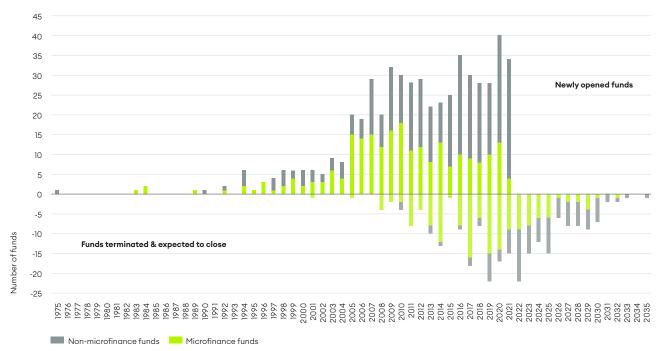
3.1 fund profile (key terms)

Inception & closing

Starting in the late 1990s, development finance emerged as a topic for private sector investments, notably through the launch of pioneering microfinance funds. This space has evolved, initially through private debt funds and eventually through private equity funds. It has also diversified beyond

microfinance, particularly in the last decade, as shown below. In 2020 specifically, 40 new funds were launched, with 13 of them focused on microfinance, 15 favoring a multi-sectoral approach and 4 targeting investments in climate & energy.





Open-ended funds, which do not have set end dates, account for 50% of funds and 76% of AUM. Closed-ended funds account for the rest, with defined termination dates; their median term is currently set for 2024. Whereas open-ended funds are predominantly fixed income

funds, closed-ended ones include both debt and equity strategies. Looking specifically at equity funds that are still active, their median vintage year was 2015, with a median investment period of 5 years, ending in 2020.

Table 4 - Primary asset class and vehicle term

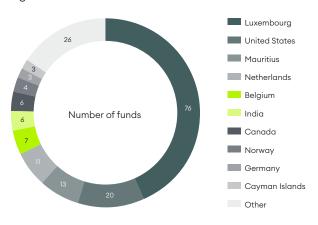
	Number of funds	Fixed income	Mixed	Equity
Open-ended	87	66	17	4
Closed-ended	88	35	17	36
Total	175	101	34	40

Incorporation

In the same way as for mainstream investment funds, certain jurisdictions provide better conditions for registering a PAIF. Various characteristics, including the different legal structures available, the taxation regime, the licensing requirements, and the rules applicable to foreign investors, have led to their selection.

In Europe, Luxembourg has historically been and remains the top place to incorporate a fund, followed by the Netherlands and Belgium. In North America, the United States is the preferred jurisdiction. Funds registered in Mauritius have a regional bias on African and Asian markets. Funds incorporated in Luxembourg, the Netherlands and the United States collectively represent 61% of the sample in number of funds, with an even higher market share in AUM terms (82%).

Figure 10 - Domicile



Primary asset class

The majority of PAIFs from the sample are Fixed Income funds, 101 out of 175 PAIFs. This has remained constant since these surveys started; Equity and Mixed funds have nevertheless grown over the years, currently at respectively 23% in headcount for the former and 19% for the latter.

For more information on the breakdown of invested volume by asset class, see section 3.4 Investment instruments.

Primary impact sector

With respect to the primary impact sectors, 53% (or 92 out of 175 funds) of impact funds focus on microfinance, followed by food & agriculture (10%), climate & energy (8%) and SME development (5%). Multi-sector funds are also quite important (18%), while health & education (3%) and housing, water & communities (3%) are still nascent. For more information on the breakdown of invested volume by impact sector, see section 3.5 impact sectors.

Table 5 - Primary impact sector and asset class

	Number of funds	Fixed income	Mixed	Equity
Climate & energy	14	4	4	6
Food & agriculture	17	12	3	2
Health & education	6	3	1	2
Housing, water & communities	5	5	0	0
Microfinance	92	60	18	14
SME development	9	3	4	2
Multi-sector	32	14	4	14
Total	175	101	34	40

Fund type

The sample is largely composed of investment funds but 7% take the form of non-governmental organizations (NGOs), cooperatives or foundations (12 out of 175). These non-profit legal statutes generally have a belowmarket rate of return philosophy.

Table 6 - Fund type

	Number of of funds
Cooperative	6
Foundation	5
Investment company	6
Investment fund	155
NGO	1
Structured finance instrument	2
Total	175

Blended finance

Blended finance is the use of catalytic capital from public sector and philanthropic sources to increase private sector investment in sustainable development. Blended finance investments, and the structures that channel them, are gaining increasing traction, according to Convergence, a blended finance platform based in Canada. Their latest figures show that blended finance has mobilized USD 161 billion in capital towards sustainable development in developing countries to date and that 38% of such transactions are structured through funds (the rest being through bonds, companies, projects, etc.).9

Some 25% of the PAIF sample mentioned receiving some form of public support. The most common types of blended finance used are the financing of technical assistance facilities and concessional (including firstloss) capital.

Among the 41 different public sponsors and funders mentioned, the most frequent ones were the German Development Bank (KfW; 14 funds), the European Investment Bank (EIB; 10 funds), the German Federal Ministry for Economic Cooperation and Development (BMZ; 9 funds), the Dutch Development Bank (FMO; 9 funds), the International Finance Corporation (IFC; 8 funds), the United States International Development Finance Corporation (DFC; 7 funds), the Belgian Investment Company for Developing Countries (BIO; 6 funds), the French Development Agency (AFD; 5 funds), and the Development Bank of Austria (OeEB; 5 funds).

Figure 11 - Types of public support

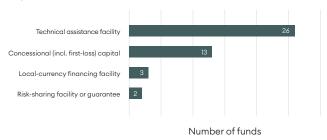
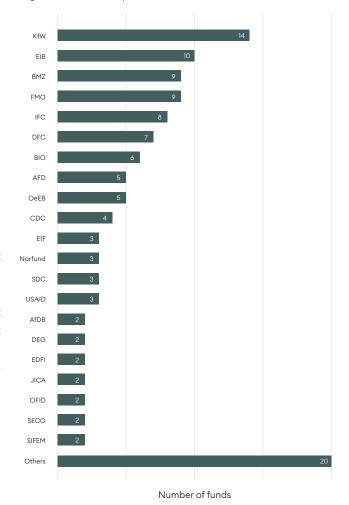


Figure 12 - Public sponsors and funders



⁹ Convergence (2021). "Blended Finance: Market Size". Retrieved from https://www.convergence.finance/blended-finance#market-size.

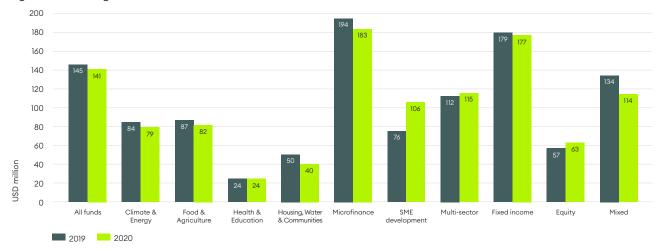
3.2 size & growth

Average assets

A private asset impact fund's average size amounts to USD 141 million. Fixed income funds (USD 177 million) are typically larger than mixed funds (USD 114 million) and equity funds (USD 63 million).

Fixed income funds logically, given their size, along with their reach for diversification in managing their risk, have broader outreach in number of regions, countries, sectors and investees. The average size also varies considerably when looking at the different primary impact sectors. Specifically, microfinance (USD 183 million), multi-sector (USD 115 million) and SME development (USD 106 million) funds are on average significantly larger than their counterparts. On the other end, health & education (USD 24 million) and housing, water & communities (USD 40 million) funds are by far the smallest ones.

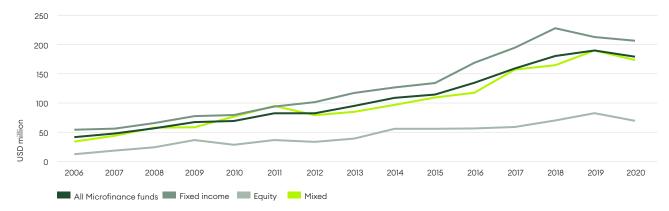
Figure 13 - Average size



Focusing on microfinance funds, we see that the average fund size has increased considerably since 2006, when

it stood at USD 40 million.

Figure 14 - Historical average size of microfinance funds



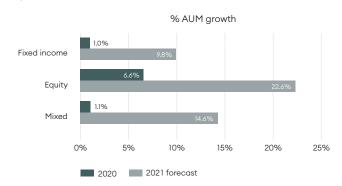
Market growth

The total assets of PAIFs remained stable (+1.5% growth) on average in 2020, calculated on a constant sample of 151 funds. Yet, participants expect a considerable 12.3% surge in total assets in 2021, thereby showing some solid signs of recovery from the economic impact of the COVID-19 pandemic (see section 3.12 financial performance).

The year 2020 saw an increase in equity (+6.6%) fund assets, particularly compared to mixed (+1.1%) and fixed income funds (+1.0%). For 2021, equity funds are also those that expect the largest increase (+22.6%), followed by mixed (+14.6%) and fixed income funds (+9.8%).

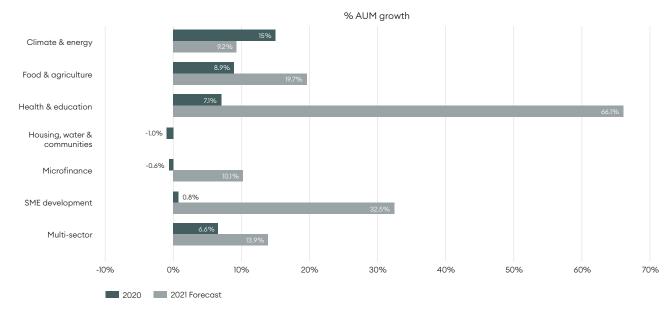
At a sectoral level, climate & energy funds are those that grew the most in 2020 (+15.0%), followed by food & agriculture (+8.9%) and health & education (+7.1%) funds. Housing, water & communities (-1.0%) and microfinance (-0.6%) funds witnessed slight size decreases in 2020. Regarding assets as of end 2021, funds expect significant

Figure 15 - Growth by primary asset class



increases in all sectors, with health & education (+66.1%, starting from a lower base in terms of size), SME development (+32.5%) and food & agriculture (+19.7%) funds forecasting the largest boost.

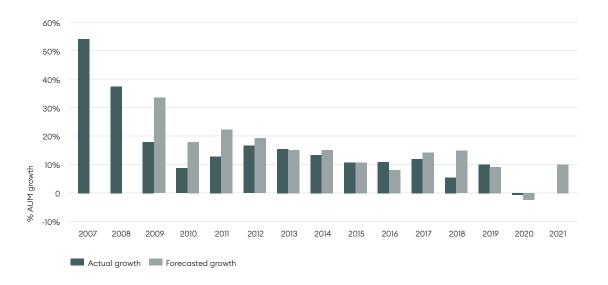
Figure 16 - Growth by primary impact sector



Since 2006, the size of microfinance funds has increased more than seven-fold, representing a compound annual growth rate of 15.4%, a number partly driven by rapid growth in the early years when the industry was still nascent. Microfinance funds witnessed their

first negative growth in 2020, translating the economic consequences of the COVID-19 pandemic on the sector. The forecasts for 2021 are, however, much more optimistic (+10.1%), recovering the growth pace observed in previous years.

Figure 17 - Historical growth of microfinance funds



3.3 balance sheet structure

Asset composition

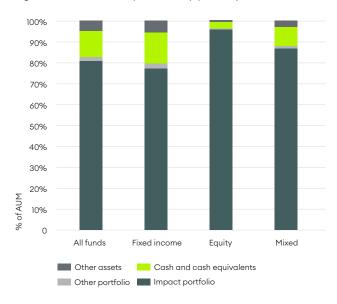
On average, PAIFs invested 81% of total assets in impactrelated activities. Cash stands at 13%, whereas nonimpact portfolios (which include sovereign bonds, for instance) and other assets (such as accrued interest and receivables) remain low (2% and 5% respectively).

In 2020, cash balances witnessed a year-over-year increase of 21%, taking a constant sample of funds (the cash ratio stood at 10% of the portfolio in 2019). This can be directly linked to global economic paralysis at the outbreak of the COVID-19 pandemic, constraining PAIF investment activities.

Overall, cash levels are higher for fixed income (15%) and mixed funds (10%), as explained by their higher liquidity management needs, either for portfolio replenishing or investor redemptions.

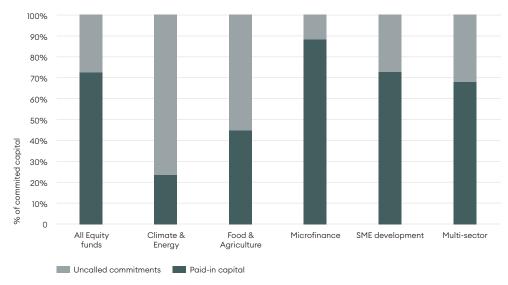
On the contrary, equity funds that are closed-ended by nature and use capital calls and distribution policies to manage their liquidity tend to exhibit less cash (3%). For these equity funds, the average size of their committed capital amounts to USD 83 million, more than two-thirds

Figure 18 - Asset composition by primary asset class



(72%) of which are called (paid-in). Higher levels of uncalled commitments are available for funds in the climate & energy as well as food & agriculture sectors, at 76% and 55% of total committed capital respectively.

Figure 19 - Paid-in capital and uncalled commitments by primary impact sector



The asset composition appears to be quite similar across the different impact sectors. However, we have observed larger cash levels in food & agriculture (22%) and housing, water & communities (18%). On the other end, funds in the SME development and climate & energy sectors have the highest portion of assets invested in impact (85% and 84% respectively).

Over a ten-year period, microfinance funds have seen their cash levels drop from 18% in 2009 (which was an all-time growth year, resulting in +89% cash levels compared to 2008) down to 12% at the end of 2020. Overall, this signals a better market outreach and absorption capacity for microfinance funds over the years. Nonetheless, cash kept growing by 14% in 2020, after a 10-year record growth of 31% in 2019.

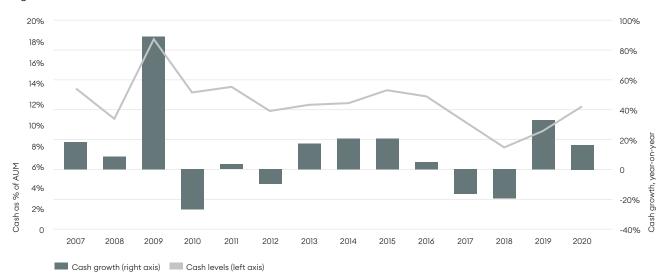


Figure 20 - Historical cash levels of microfinance funds

Equity & liabilities composition

Of the 168 funds in the sample that have reported on their equity and liability composition, 53 funds finance part of their capital structure through borrowings from investors, in addition to raising equity. We categorize them as leveraged funds in this study.

These leveraged funds have average balance sheets of USD 135 million, with notes and other debt securities issued representing 34%. Their average debt-to-equity ratio amounts to 0.84.

Leveraged funds are found in all sectors but proportionally more so in housing, water & communities (75%), health & education (60%) and climate & energy (42%) when compared to unleveraged funds within their respective sectors. In addition, the leveraged funds in the sample are almost exclusively fixed income (38) and mixed (12) funds, with only 3 equity funds using some debt mechanisms to finance their overall capital.

Table 7 - Leveraging strategy

Peer groups (number of funds)	Leveraged	Unleveraged	Total
All funds	53	115	168
% AuM	30%	70%	100%
Climate & energy	5	7	12
Food & agriculture	4	13	17
Health & education	3	2	5
Housing, water & communities	3	1	4
Microfinance	30	61	91
SME development	4	5	9
Multi-sector	4	26	30
Fixed income	38	61	99
Equity	3	33	36
Mixed	12	21	33

Interestingly, leveraged funds in the SME development segment appear to have a lower debt-to-equity (D/E) ratio (0.2) than the average of other sectors. Funds focused on housing, water & communities are the most leveraged, with debt funding representing 2.0x their equity base, followed by health & education funds (1.5). Larger funds in these sectors have a blended finance structure, with DFI support offering high levels of protection for private

investors, in multiple tranches of subordination. The historical debt-to-equity ratio of microfinance funds decreased from 1.0 in 2009 to 0.4 in 2016. It has increased continuously since then, up to 0.9 in 2020. This implies that leveraged microfinance funds still finance most of their capital structure through equity, although the trend is reversing.

Figure 21 - D/E ratio of leveraged funds by primary impact sector

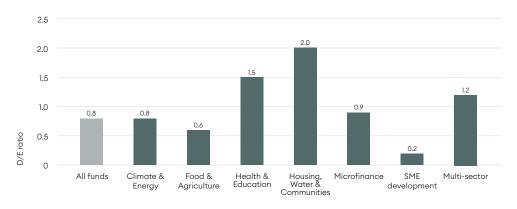
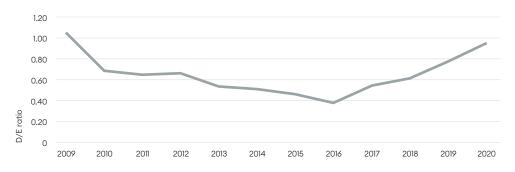


Figure 22 - Historical D/E ratio of leveraged microfinance funds



3.4 investment instruments

At an impact portfolio level, private debt is the most used financial instrument, with USD 15.2 billion, representing 80% of the impact portfolio outstanding. It is principally composed of senior debt investments, although subordinated debt investments have recently gained importance (10% year-over-year growth in total volumes, on a moving sample), now representing 9% of private debt volumes outstanding at end 2020.

With regards to private equity, which stands at USD 3.7 billion – accounting for 20% of volumes outstanding – it is mostly common equity (85%) rather than preferred equity (15%).

PAIFs naturally only invested some minor volumes in listed debt and listed equity (together 0.4%) on average, their focus being on private market transactions.

Figure 23 – Outstanding volume by investment instrument

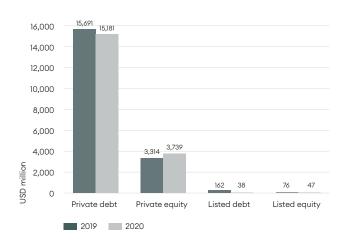


Figure 24 - Seniority level of private debt

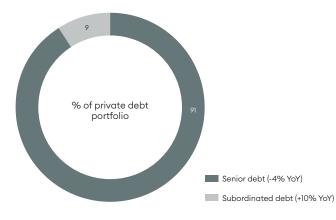
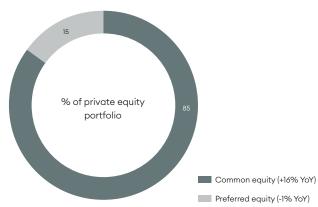


Figure 25 - Preferred and common shareholding



Whereas there are PAIFs in every sector using private debt instruments, not all PAIF sectors have experience with private equity. Those with a primary focus on housing, water & communities have no private equity investments

in their books, for instance. Impact sectors with the most common use of private equity are SME development funds (41% of their portfolio) and multi-sector funds (39%).

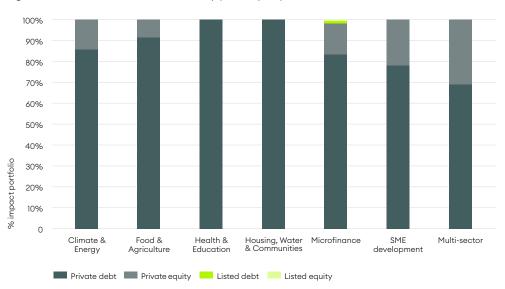


Figure 26 - Investment instruments by primary impact sector

The average exposure per investee varies considerably depending on the financial instrument used. Private equity investments typically have higher exposures (USD 4.4 million) compared to private debt (USD 2.7 million). Equity funds are smaller in size, with a low number of investees on average compared to fixed income and mixed funds which, by design, diversify their investments

across multiple investees, sectors and countries. In terms of other instruments, we see that riskier subordinated debt investments have the smallest exposure outstanding (USD 1.6 million), whereas investments in listed assets, although rare within this sphere, are on average larger than for private assets, for both debt (4.8 million) and equity instruments (5.9 million).

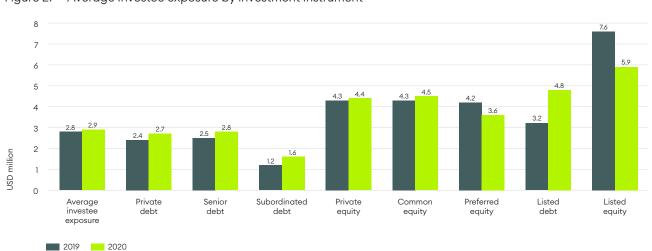


Figure 27 - Average investee exposure by investment instrument

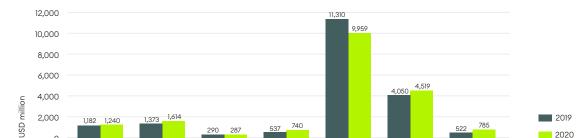
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Climate &

3.5 impact sectors

According to our sample, microfinance is still by far the principal impact sector for private asset impact funds, at USD 10.0 billion, representing 52% of the impact portfolio outstanding as of end 2020, and with 124 PAIFs having some exposure in it. The absolute decrease in volume terms compared to 2019 is principally linked to microfinance funds' negative portfolio growth as well as their enhanced ability and evolved reporting strategy to classify their investees according to their sectoral outreach, rather than a shift in their profile.

2020



740

Microfinance

SME

development

Other

Housing, Water & Communities

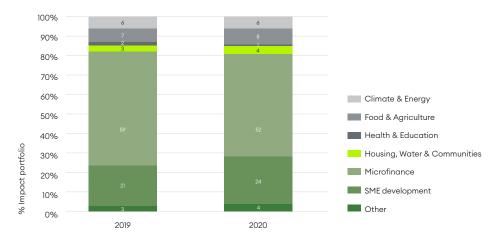
Figure 28 - Outstanding volume by impact sector



Food &

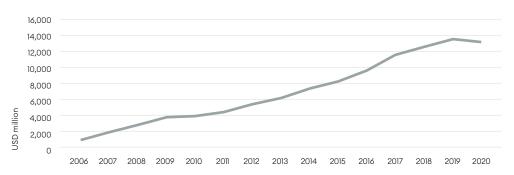
Aariculture

Health &



Looking back at historical datapoints from microfinance fund portfolios, we see that their cumulative portfolio (mainly microfinance but also including their smaller exposures in other impact sectors) has increased from USD 937 million in 2006 to about USD 13.4 billion at the end of 2020. The SME development sector (USD 4.5 billion, 24%) ranks second in volumes, rising in the past decade as the logical next adjacent market "beyond microfinance", with 75 funds investing in it, but only 9 of them doing so as their prime sector of investment. Food & agriculture (USD 1.6 billion, 8%) completes the podium, with 17 dedicated funds focusing on this sector and 73 funds having some investments in it. Microfinance funds and multi-sector funds in fact represent key vehicles of funding for these two sectors.

Figure 30 - Historical outstanding portfolio of microfinance funds

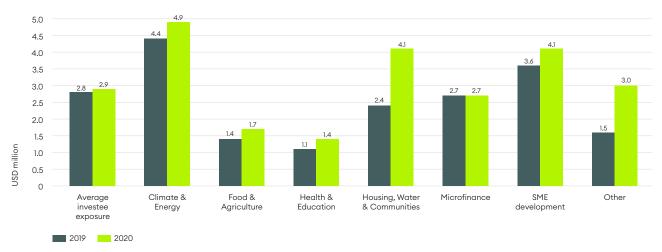


The climate & energy sector (USD 1.2 billion, 6%) has seen an important rise in the number of new dedicated funds in past years. Overall, 50 PAIFs have some exposure in climate & energy, without necessarily dedicating the majority of their portfolios to this sector. The health & education sector, with the biggest domestic public sector involvement by nature, has witnessed the lowest investments from PAIFs to date. It still represents USD 287 million of outstanding volume coming from 50 funds, with 6 PAIFs having their prime focus on this segment.

In terms of exposure per investee, health & education investees are those that receive the smallest volume on average (USD 1.4 million), followed by food & agriculture

investees (USD 1.7 million). This is explained by the fact that funds in these sectors: (1) invest a significant share of their portfolio directly in SMEs (rather than through local financing intermediaries, as is the case for other funds), which have smaller funding needs, and (2) are smaller in size and predominantly follow debt strategies requiring high diversification, both triggering smaller ticket sizes. In contrast, climate & energy, SME development and housing, water & communities investees exhibit the largest funding volume on average. Many of the funds active in these sectors are larger in size and invest predominantly through large financial institutions that require larger funding volumes.

Figure 31 - Average investee exposure by impact sector



3.6 investee types

On average, a PAIF invests in 38 investees. Fixed income and mixed funds that are larger in size (see section 3.2 size & growth), have higher investee outreach by design compared to equity funds. On average, they invest in 50, 29 and 12 investees, respectively. Sector peer groups show that microfinance and multi-sector funds have the largest number of investees, at 44 per fund.

These investees can take various forms. By definition, most of the invested volume in this study is allocated to "direct" investees, as we have deliberately not surveyed pure funds of funds. Within this direct category, we see that financial institutions still attract the majority of funding, with USD 15.4 billion and 85% of the PAIF impact portfolio outstanding. SMEs attract 10% (USD 1.8 billion), whereas corporations and projects remain uncommon within the PAIF universe (4% and 2%, respectively).

Figure 32 - Outstanding volume by investee type

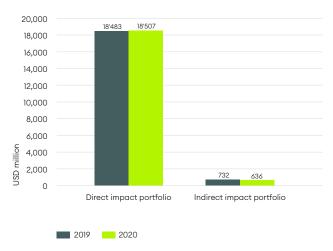


Table 8 - Number of investees

Peer group	Average number of investees
All funds	38
Climate & energy	12
Food & agriculture	31
Health & education	10
Housing, water & communities	17
Microfinance	44
SME development	21
Multi-sector	44
Fixed income	50
Equity	12
Mixed	29

Depending on the sector, PAIFs favor different investee types. By definition, microfinance funds focus almost exclusively on financial institutions. Funds focusing on housing, water & communities have followed a similar approach up to now.

Food & agriculture funds, on the other hand, principally target SMEs, which represent 77% of their portfolio. Health & education funds also witness some SME investments (32%), particularly for the financing of healthcare businesses, although financial institutions principally address this sector. Regarding SME development funds, there are two different approaches, with PAIFs focusing either on SME finance institutions (6 out of 9) or direct investments into SMEs (3 out of 9), resulting in an aggregate 42% portfolio in SMEs. Finally, climate & energy and multi-sector funds are the only ones to make use of project finance (14% and 7% of their portfolio, respectively).

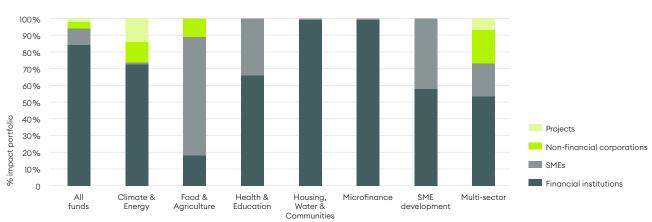


Figure 33 - Investee types by primary impact sector

Corporations and projects attract higher volumes on average (USD 3.5 million and USD 3.4 million outstanding per investee), followed by financial institutions (USD 3.1

million). Logically, SMEs attract the smallest amounts, with an average of USD 1.7 million per direct fund investee.

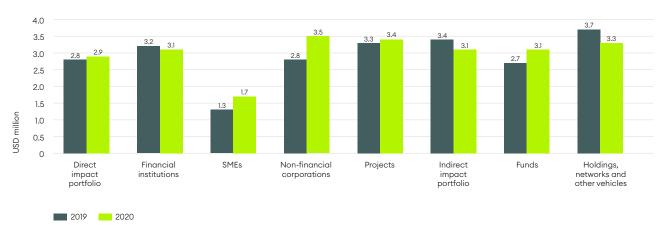
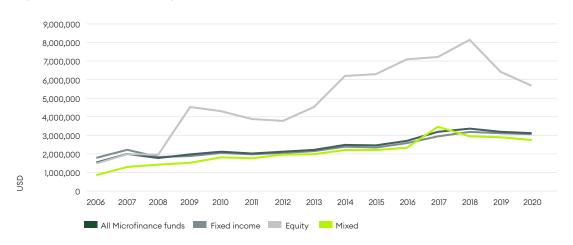


Figure 34 - Average investee exposure by investee type

Focusing on microfinance funds, their average direct investee exposure increased from USD 1.5 million to USD 3.1 million between 2006 and 2020, regardless of the asset class. This reflects the fast growth of borrowing

microfinance institutions (MFIs) and the integration in microfinance fund portfolios of larger financial institutions downscaling towards the BOP clientele, both with larger financing needs.¹⁰

Figure 35 - Historical average investee exposure of microfinance funds



¹⁰ Symbiotics (2018). Banking for Impact.

3.7 geography of investments

Regions

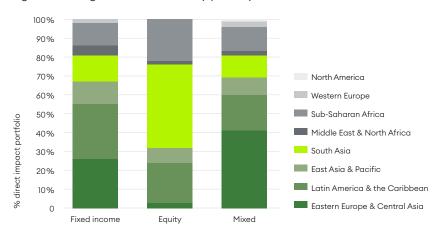
Latin America & the Caribbean again captured the largest share of direct outstanding investments as of end 2020, at 27% of total volume, followed by Eastern Europe & Central Asia (26 %) and South Asia (17%). The Middle East & North Africa (4%) is still at a nascent phase regarding funding from PAIFs, whereas sub-Saharan Africa, whose share stands at 13% of total volume, has seen a considerable increase over the last decade,

particularly outside of microfinance. In line with the scope of the survey, little volume is allocated to Western Europe and North America, as we have excluded funds focused on developed markets from the study. Interestingly, equity funds are most inclined towards South Asia (44% of their portfolio), with investments in sub-Saharan Africa (22%) being more common than for other strategies, whereas the first region for mixed funds is Eastern Europe & Central Asia (41%).

Figure 36 - Outstanding volume by region



Figure 37 - Regional breakdown by primary asset class



The regional breakdown differs considerably according to the primary impact sector. The prime regions for climate & energy funding remain Latin America & the Caribbean (28%) and South Asia (27%). Health & education funds principally target sub-Saharan Africa (67%), where the needs for such basic services are the highest. Sub-Saharan Africa is also the leading region for food & agriculture funds (40%), in front of Eastern Europe &

Central Asia (23%). Housing, water & communities funds, on the other hand, principally focus on South Asia (33%) and East Asia & Pacific (26%), together representing more than half of their portfolio. SME development and multisector funds have similar regional breakdowns, with Latin America & the Caribbean (31%), sub-Saharan Africa (25% and 27%) and South Asia (25% and 26%) attracting most of their investments.

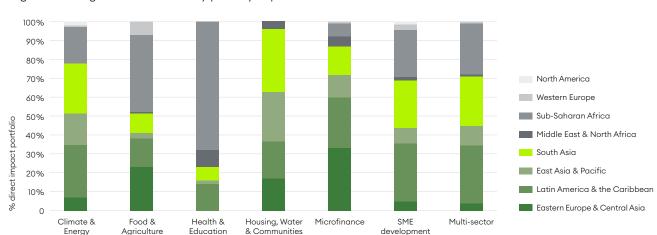


Figure 38 - Regional breakdown by primary impact sector

Finally, microfinance funds still channel more than half of their funding to Eastern Europe & Central Asia (33%) and Latin America & the Caribbean (27%). However, since 2006, the regions seeing the highest growth are the Middle East & North Africa (+59% compound annual growth rate – CAGR), starting from a very low base, South Asia (+32%), East Asia & Pacific (+27%) and sub-Saharan Africa (+20%). In 2020, microfinance fund investment

growth was low or negative across all regions, with sub-Saharan Africa (-14%) and Latin America & the Caribbean (-6%) witnessing the largest decrease, and the other regions settling between -3% and +3%. Trends are similar when looking at a constant fund sample for all sectors combined, ranging from -10% for Sub-Saharan Africa and -6% for Latin America to +5% for South Asia.

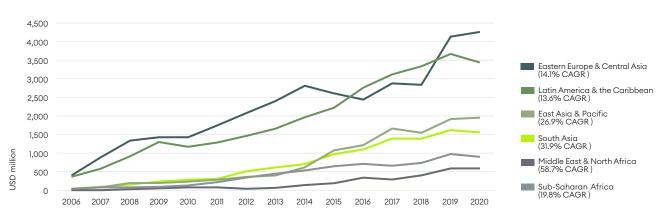


Figure 39 - Historical growth of microfinance fund portfolios by region

For all PAIFs, apart from some minor investments in North America, the average exposure volume per investee is the lowest in sub-Saharan Africa (USD 2.0 million). On the contrary, the portfolio outstanding per investee is the highest in Eastern Europe & Central Asia and South Asia (USD 3.7 million and USD 3.6 million, respectively).

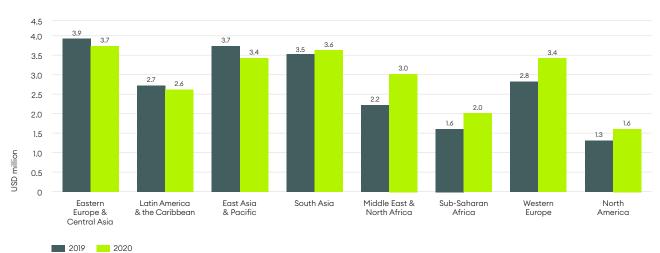


Figure 40 - Average investee exposure by region

Countries

At a country level, the top 10 ranking is as follows: India (USD 2.6 billion, representing 15% of total volume), Ecuador (4%), Mexico (4%), Georgia (4%), Cambodia (4%), the Russian Federation (3%), Costa Rica (3%), Armenia (2%), Peru (2%) and Kenya (2%).

The top 10 countries for fixed income funds closely follow the observations for all PAIFs, at least for the first five countries. Equity funds, with many single-country or regionally focused mandates, include Bolivia, Indonesia, South Africa, Côte d'Ivoire, Brazil and Myanmar within their top 10. India remains nonetheless in first place by a large margin (49%). The Russian Federation leads the portfolio for mixed funds, with four other countries from Eastern Europe & Central Asia in the top 10.

The rank varies even more when segmenting the analysis by principal impact sector. One of the few similarities is that India is in first position for all sectors, except for health & education funds where it is fourth. The latter funds in fact target Kenya as their first country of investment. Ecuador also pops up frequently among the top exposures. Vietnam and Bangladesh appear second and third in climate & energy, while they are both absent from the top 10 exposures of all other sectors. Similarly, Côte d'Ivoire and Kazakhstan are second and third for food & agriculture funds but much less predominant for the rest of the market.

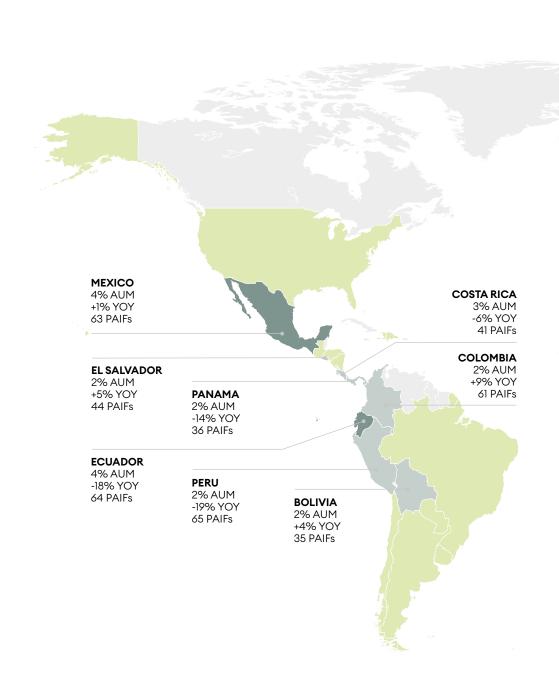
Table 9 - Top 10 country exposures by primary asset class

Top 10	Fixed income	Equity	Mixed
1	India	India	Russian Federation
2	Ecuador	Bolivia	India
3	Georgia	Mexico	Cambodia
4	Cambodia	Kenya	Czech Republic
5	Mexico	Peru	Ecuador
6	Costa Rica	Indonesia	Kazakhstan
7	Armenia	South Africa	Mexico
8	Peru	Côte d'Ivoire	Belarus
9	El Salvador	Brazil	Uzbekistan
10	Uzbekistan	Myanmar	Uganda

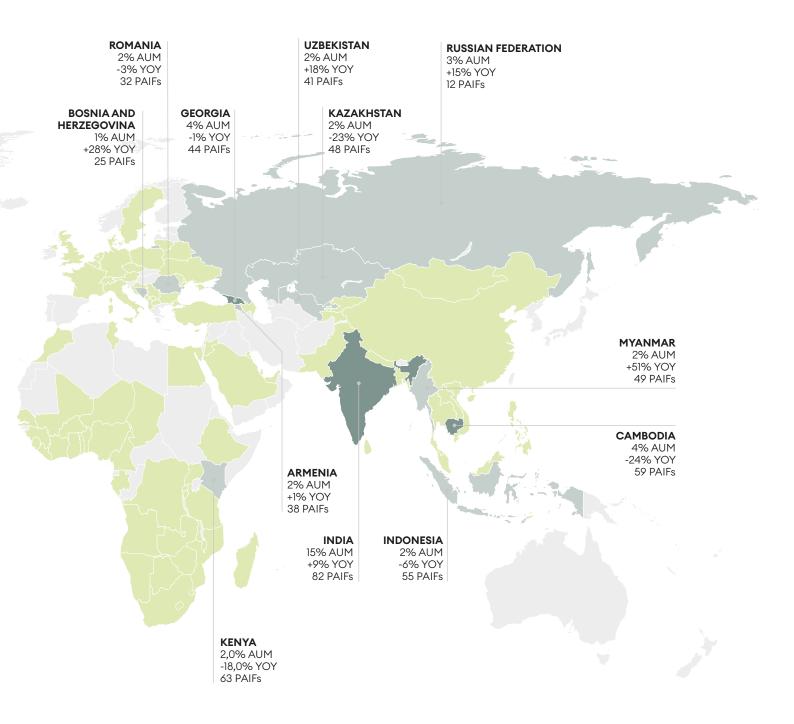
Table 10 – Top 10 country exposures by primary impact sector

Top 10	Climate & energy	Food & agriculture	Health & education	Microfinance	SME development	Multi-sector
1	India	India	Kenya	India	India	India
2	Vietnam	Côte d'Ivoire	Ghana	Georgia	Mexico	Kenya
3	Bangladesh	Kazakhstan	Tunisia	Russian Federation	Kenya	Mexico
4	Ecuador	Ukraine	India	Ecuador	Ghana	Ecuador
5	Georgia	Ghana	Colombia	Cambodia	Brazil	Côte d'Ivoire
6	Sri Lanka	Mauritius	Botswana	Mexico	Hong Kong SAR, China	Cambodia
7	Peru	Zambia	Uganda	Armenia	Argentina	Indonesia
8	El Salvador	Cyprus	Nigeria	Costa Rica	Ecuador	Argentina
9	Panama	Tanzania	Burkina Faso	Uzbekistan	Rwanda	Brazil
10	Cambodia	Ecuador	Zambia	Peru	Peru	Bolivia

Figure 41 - World map of country exposures







3.8 investment terms

PRIVATE DEBT PORTFOLIO

As seen in section 3.4 investment instruments, PAIFs make the majority of their impact investments through private debt. Private debt includes term loans, both shorter term and longer term, both senior and subordinated, and both secured and unsecured. They can also take the form of other fixed income instruments, such as promissory notes, deposits, certificates, guarantees, letters of credit, etc. Their interest rates may be fixed or floating and their currency denomination may be in hard currency (mostly USD) or in local currency.

Currency strategy

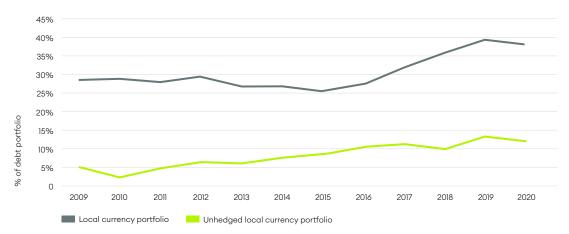
A PAIF can lend money to investees in either hard or local currency. The choice and responsibility to hedge the currency is with the investee in the first case and with the fund in the second case.

In our sample, most of the debt investments by fixed income and mixed funds are in hard currency (65% vs 35% in local currency).

Among loans made in local currency, 30% remain unhedged against the accounting currency of the fund. The absence of currency hedging costs leads to higher gross yields on the debt portfolio for PAIFs using this strategy, the drawback being the volatility induced by currency fluctuations on the loan's principal amount and the risk that the currency depreciation will overwhelm any return in the end.

Historical data from microfinance funds shows that this trends towards unhedged local currency investing is increasing. Hard currency debt investments have been common practice over the years in the microfinance space, even though the proportion of local currency loans has been growing, especially since 2015, which is an encouraging sign for investees in terms of managing their foreign exchange (FX) risk exposure. Today, 38% of debt exposure is in local currency and 12% is unhedged (up from 5% in 2009). This equates to 31% of unhedged, local currency debt exposure for microfinance funds.

Figure 42 - Historical local currency portfolio of microfinance funds



In terms of impact sectors beyond microfinance, health & education funds seem to offer the highest proportion of local currency lending, followed by PAIFs in housing, water & communities, at 98% and 66% of local currency

loans respectively. The unhedged portion of the debt portfolio is the highest for housing, water & communities (45%), ahead of microfinance and multi-sector funds, both at the 12% mark.

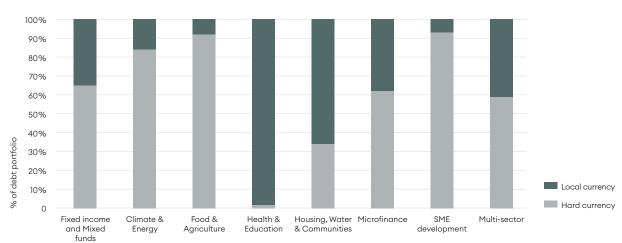
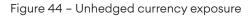
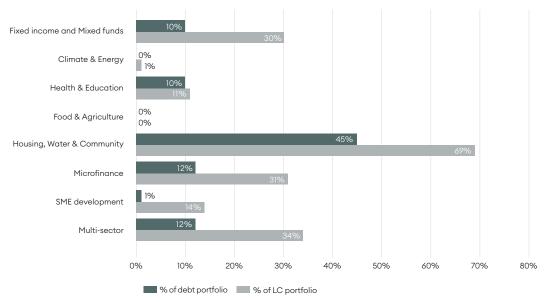


Figure 43 - Currency type of debt portfolio







focus on local currency debt investments

a special topic sponsored by TCX

The following section offers an in-depth look into the specificities of local currency debt investments, with a prime focus on fund foreign exchange (FX) hedging strategies and approaches. We developed the new survey indicators in partnership with the Currency Exchange Fund (TCX).¹

Today, a higher proportion of impact funds' debt portfolios remain in hard currencies, namely the US dollar (52.7%) and the euro (10.6%), which are the most traded currencies in the world.

However, as shown previously, the use of local currency for debt investments in emerging and frontier markets is increasing. At the scale of the survey, these investments are denominated in an incredible diversity of local currencies, with many that have become the dominant currency of investment in their respective markets.

Currency breakdown of funds' debt portfolios

The Indian rupee (10.8%) for instance, which is ranked second in terms of volume, has already surpassed the euro. The other currencies making up the top 10 are the Mexican peso (1.9%), the Indonesian rupiah (1.6%), the Colombian peso (1.6%), the Georgian Iari (1.6%), the West African CFA franc (1.5%), the Peruvian sol (1.4%), and the Myanmar kyat (1.3%).

In total, survey participants reported investments in 68 different currencies, among which 64 qualify as local currencies (the other two mentioned hard currencies are the British pound sterling and the Swiss franc, whose usage is minor).

The markets generally perceive developing economy currencies to be more volatile. The higher required rates of return from investors highlight this risk perception, as does their propensity to eliminate this FX risk through currency hedging solutions, such as those proposed by TCX and MFX.

Among the top 40 local currencies used, the Indian rupee is the most systematically hedged (89%). In contrast, unhedged investments are much more frequent for the Sri Lankan rupee (100% unhedged), the Mongolian tugrik (97%), the Paraguayan guaraní (82%), the Armenian dram (69%), the Costa Rican colón (68%), the Ukrainian hryvnia (62%) and the Kyrgyzstani som (61%) and the Chinese yuan renminbi (50%).

¹ As for the rest of the report, Tameo had full control of the data collection, analysis and writing processes. TCX shall not be liable for any errors or omissions in data treatment and interpretation.

Table 11 - Currency breakdown of impact debt portfolio (top 40 currencies)

Ranking	Currency	Total exposure (USD)	% hedged	% unhedged
1	USD	6'486'878'219	68%	32%
2	INR	1'326'294'195	89%	11%
3	EUR	1'308'803'174	37%	63%
4	MXN	237'752'446	82%	18%
5	IDR	202'519'661	71%	29%
6	COP	199'129'942	66%	34%
7	GEL	195'034'530	61%	39%
8	XOF	185'738'891	62%	38%
9	PEN	175'824'933	75%	25%
10	MMK	155'784'708	83%	17%
11	UZS	130'283'706	65%	35%
12	ZAR	125'595'155	52%	48%
13	ТНВ	124'027'672	83%	17%
14	AMD	106'011'480	31%	69%
15	KZT	92'085'784	86%	14%
16	RON	91'335'078	86%	14%
17	CNH	90'243'604	52%	48%
18	CRC	85'322'205	32%	68%
19	UAH	70'410'705	38%	62%
20	BWP	62'269'377	87%	13%
21	HNL	58'924'509	68%	32%
22	KGS	58'699'656	39%	61%
23	TJS	55'313'699	52%	48%
24	KES	49'776'383	64%	36%
25	GHS	45'551'909	78%	22%
26	CNY	41'693'278	50%	50%
27	NGN	40'819'744	79%	21%
28	GTQ	40'224'556	59%	41%
29	TND	37'674 871	75%	25%
30	ZMW	32'909'378	83%	17%
31	UGX	30'805'158	73%	27%
32	PHP	30'496'908	68%	32%
33	TZS	29'377'516	72%	28%
34	JOD	28'516'175	55%	45%
35	MNT	26'585'323	3%	97%
36	LKR	23'356'552	0%	100%
37	PYG	22'895'075	18%	82%
38	MDL	22'836'420	74%	26%
39	MAD	22'567'414	50%	50%
40	BRL	19'071'987	69%	31%

FX hedging practices

Most funds from the sample (58% of respondents) are structured with a mandatory hedging policy for local currency debt investments. Such policies notably imply the necessity for the local currency portfolio to be fully or mostly hedged at all times.

The remaining 42% of debt and mixed fund products tend to provide their managers with higher flexibility when dealing with the question of FX hedging within their portfolios, allowing for some leeway to test changes in the hedging strategy over the lifetime of the fund, sometimes opportunistically in their exercise as portfolio and risk managers. Some funds launched in the past years are positioned on the opposite end of the spectrum, making it mandatory not to hedge their local currency debt investments.

For more than two-thirds of funds using hedging solutions (69%), they apply hedging to both the principal and the interest, hence representing full protection against currency exchange risks. Some funds (17%, or 11 out of 64 respondents) decide to hedge only the principal, keeping some risk (and thus potential higher reward) on the interest, or at least do so on a case-by-case basis (8%). Finally, a couple of funds (6%) hedge on a portfolio rather than on a transactional basis.

The insurance given by the hedging solutions comes at a certain price, reducing the gap in net interest income between hedged local currency and hard currency debt investments. About half of funds (55%) perceive that the final returns are comparable (implying that credit margins are similar), while more than a third (37%) believe that returns are generally higher when using hard currency. Only 8% of funds mentioned that it was, on most occasions, financially attractive to invest in hedged, local currency compared to hard currency.

Figure 45 - Mandatory hedging policy

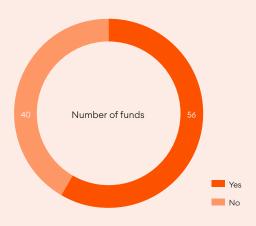


Figure 46 - Scope of hedging strategy

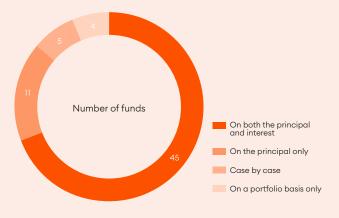
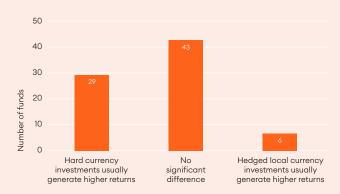


Figure 47 - Returns of hedging local currency investments



Rationale for selecting local currency or hard currency investment strategies

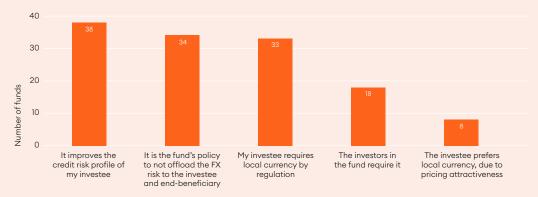
So, what are the incentives pushing fund managers to increase their use of local currency? Most mentioned (48% of funds) is the willingness to improve the credit risk profile of investees, as the FX risk is not passed on to the latter if the debt is contracted in local currency. The resulting higher credit risk rating of the borrower can indeed favor some investments that would not be considered attractive from a risk-return perspective if the loan was sanctioned in hard currency.

From an impact perspective, it might appear safer to not offload the FX risk to the investee and eventually have the moral burden of possibly contributing to this risk being

passed on to the end-beneficiaries (43%). Also, in some countries with strict foreign exchange controls, investees are not allowed to take debts in hard currencies, which can represent a frequent obstacle (41%).

Survey respondents also mentioned the growing requirement of the fund's investors to follow a local currency investment strategy as a recurrent reason (23%). Either the impact narrative or the perspective of higher returns (particularly in the case of unhedged investments) might incentivize these investors. Among the less common motivations, investees operating in markets with stable financial systems might prefer local currencies due to pricing attractiveness (10%).





Considering these explanations, it appears important to understand investment managers' reasons for lending in hard currencies to investees earning in local currencies. The principal one is that investees might be looking for hard currencies, as they are able to find cheap hedging solutions in their domestic markets (45% of funds). Second, interest rates in several countries are quite high and investees, focusing more on pricing difference and less on risk, may perceive hard currency as a cheaper option (27%). Depending on the sector of operation, borrowing companies can also be large enough or have

assets or revenues in a hard currency that would warrant them taking on some unhedged, hard currency liabilities within their capital structure for currency mismatch mitigation (24%). Finally, a few investment managers simply consider hard currency investments as a more straightforward product (23%). Among the other burdens are the perception that it might still not be possible to hedge certain exotic currencies, despite TCX and MFX covering virtually any currency, and the fund investors' aversion to FX risk.

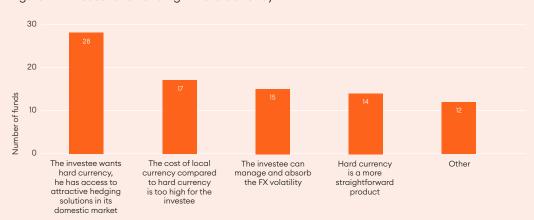


Figure 49 - Reasons for lending in hard currency

Local currency lending specificities

Considering this complex landscape, multi-currency credit facilities could appear attractive to investees. Such agreements allow the borrowing company to receive, at its discretion, the funding in more than one currency. Almost two-thirds of respondents (60%) offer such a possibility, half of whom (34%) do so frequently.

An alternative, more flexible option for the investee is to allow the latter to switch currencies during the lifetime of the loan. However, this remains rare in the space, with only two funds offering this possibility on a frequent basis and slightly more than a third of them (39%) doing so sometimes.

Discounts on credit margins on local currency loans relative to credit margins on hard currency loans do not seem to be common either, with one-third of funds offering frequent (10%) or regular (22%) discounts.

Another solution making local investments potentially less risky is the use of floating rates, meaning combining a reference market rate and a fixed spread. This seems to be widespread practice in the market, with about three-quarters of funds making use of it often (22%) or occasionally (51%). For the remaining quarter, the investee still perceives the interest rate volatility brought by the floater as too risky and hence as an increased risk at a fund level. A couple of funds also mentioned a lack of internal tools to properly manage the floater.

Only a few funds (4%) never accept voluntary loan prepayments by the investees. This option allows the latter to pay their debts before the due date, notably when they benefit from positive macroeconomic terms leading to interest rate drops in their domestic markets. Still, for the investment managers that hedge their local currency transactions, more than two-thirds (69%) will charge hedge breakage cost to the investee as compensation for the anticipated payment.

Table 12 - Local currency loan specificities

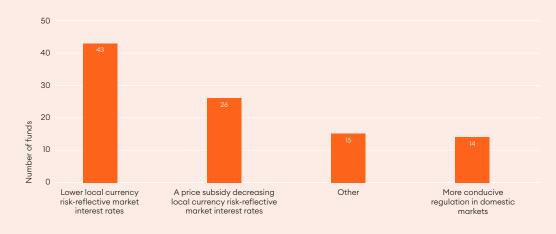
Instrument use (number of funds)	Always	Often	Sometimes	Never
Multi-currency credit facilities	-	31	24	36
Currency switch during the lifetime of the loan	-	2	35	53
Discount on credit margins on LC loans relative to HC loans	-	8	18	57
Floating rates for local currency investments	-	20	45	24
Voluntary loan prepayments	15	13	60	4

The path to more local currency lending

When questioned on the external developments that would make them more likely to increase their volume of local currency transactions, the respondents clearly identified the high local currency risk-reflective market interest rates as the prime burden (54%). They would be

ready to increase their use of local currencies where a price subsidy lowers such rates (33%). Respondents also noted more conducive regulations in domestic markets (18%), as well as a higher investor appetite and more competition between providers of hedging solutions as potentially positive factors.

Figure 50 - External developments likely to increase local currency transactions



Interest rate type

A majority of PAIF loans (65%) have a fixed interest rate, which means that the same interest rate is paid out on each interest payment date. However, there is a growing trend among fund managers to negotiate floating rates with their counterparts (35% of total debt portfolio today). A floating interest rate means that the rate is re-fixed on each payment date, based on a given money market rate increased by a credit premium.

Floating rates are logically more in use when interest rate markets are volatile, although borrowers will prefer fixed rates, especially for long-term borrowing, to prevent unknown movement in money markets. Floating rates are currently more prevalent for climate & energy and SME development funds, at around two-thirds and half of the debt portfolio respectively.

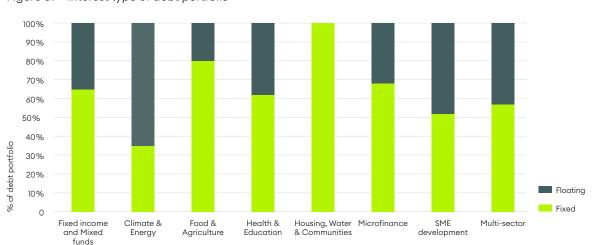


Figure 51 - Interest type of debt portfolio

Portfolio yield

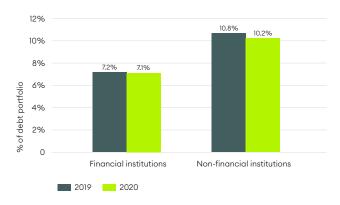
The portfolio yield¹² varies across debt portfolios based on their target impact sector, investee type, currency strategy, etc. Portfolio yields will logically be higher for unhedged FX strategies, for longer term loan maturities, for direct investments in SMEs, corporations or projects.

For the sample of all fixed income and mixed funds, portfolio yields amount to 7.4% on a weighted average basis and 7.7% on a simple average basis. Breaking this down by investee type, sector and currency hedging strategy offers further insights.

¹² We computed portfolio yields by dividing the interest income from the debt portfolio by the average debt portfolio of the PAIF over two years. Portfolio yields are gross of risk provisioning, currency fluctuations, cash drag costs, as well as fund expenses, and thus do not necessarily reflect an accurate net return to investors in the end.

As presented in the business model (section 2.1 business model), investees can be classified in two groups: financial institutions vs non-financial institutions (SMEs, corporations or projects). Investments through financial institutions offer more diversification on the end-borrower side, the consequence being lower risk and lower funding costs on average. This translates into lower yields for PAIFs investing mainly through financial institutions (7.1%) when compared to those that partner mostly with non-financial institutions (10.2%). The risk premium associated with the latter is currently priced at 3.1%.

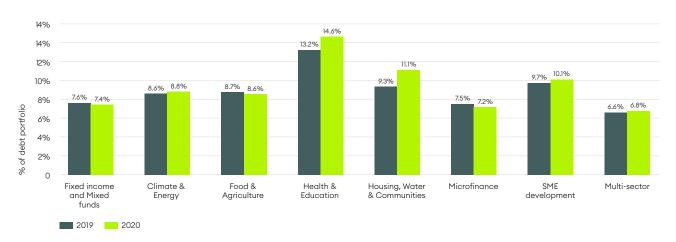
Figure 52 - Yield of debt portfolio by investee type



PAIFs in health & education (14.6%) as well as housing, water & communities (11.1%), both of which channel their capital mainly through financial institutions (see section 3.6 investee types), generate among the highest yields with SME development (10.1%). In the former case, it most likely represents the fact that education and healthcare projects typically will need longer maturities given their underlying business needs. In the second case, it reflects the fact that most funds in this segment currently take an unhedged currency risk approach, inducing higher yields.

For microfinance funds, historical datapoints on yield levels show a steady downward trend after the global financial crisis from 2008 to 2011 (and thereafter), roughly from a historical peak at 10% down to a stable average around 6.5% to 7.5% over the past decade.





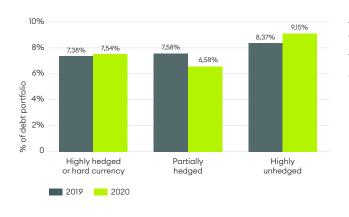
Declining money market rates and slightly lower credit premiums explain this yield shift and then stability, affecting the way microfinance funds priced their loans at the turn of the past decade. Interbank rates fell from 5% to under 1% between 2008 and 2011, then grew back to 3% between 2016 and 2018, and then dropped back again. In parallel, competition in the microfinance funds sector, triggered by large capital inflows and rapid growth, created an upmarket move for microfinance fixed income funds (as seen in section 3.4 investment instruments) through larger loans to larger MFIs usually

associated with lower interest rates. Both phenomena explain the yield decline from 10% prior to the financial crisis to around 7% today. The relative stability of the yield in the past decade is also a signal of the lower volatility and higher maturity of both microfinance markets and microfinance funds, adapting their portfolio to their investor narrative and yield expectation, and benefiting from breadth and depth in their markets, triggering sufficient choice in the investment universe and adequate portfolio diversification.

10% % of average debt portfolio 8% 6% 4% 2% 0 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Figure 54 - Historical debt portfolio yield of microfinance funds





As mentioned earlier, there is a causality effect between the hedging strategy and the yield levels, with the latter varying significantly between highly hedged funds (7.5%) and highly unhedged funds (9.2%).¹³

¹³ Highly hedged funds: those with an unhedged proportion of their local currency portfolio of 5% or less.

Partially hedged funds: those with an unhedged proportion of their local currency portfolio of more than 5% and less than 85%.

Highly unhedged funds: those with an unhedged proportion of their local currency portfolio of more than 85%.

Maturity

The average maturity of private debt investments at disbursement in our sample ranged from 6 months to 92 months. Funds investing through financial institutions have the longest maturities at disbursement (41 months),

whereas funds investing into SMEs, corporations or projects, such as most of those in food & agriculture, have shorter maturities on average (24 months). The longest maturities are within funds investing in health & education (56 months) and climate & energy (53 months).

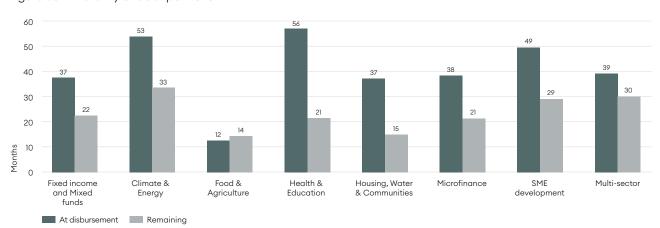


Figure 56 - Maturity of debt portfolio

Considering all fixed income and mixed funds, the remaining maturity stands at 22 months on average. In the microfinance space, remaining maturity dropped sharply in the early years to stabilize at around 21 to 23

months since 2010. Similar to yields, this is a reflection of the maturity of microfinance markets and fund practices, in particular in portfolio diversification and risk management policies.

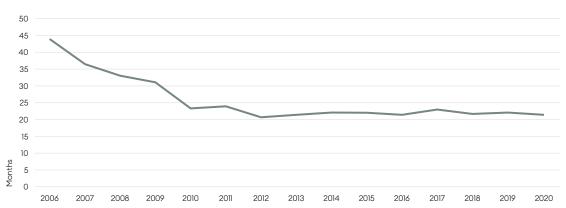


Figure 57 - Historical remaining maturity of microfinance funds

PRIVATE EQUITY PORTFOLIO

Dividend income

In 2020, equity and mixed funds had dividend yields (dividend income divided by the equity portfolio) amounting to 2.1%. Multi-sector funds received larger dividends on average (4.6%) than other sectors.

Equity portfolio valuation - price-to-book (P/B) ratio

Valuation of investees in private equity portfolios measured in terms of P/B ratios were the highest in East Asia & Pacific and South Asia at the end of 2020, at 2.2 and 2.0, respectively, whereas they were the lowest in Eastern Europe & Central Asia and sub-Saharan Africa, at 1.0 and 1.1 respectively. Compared to 2019, valuations across most regions in 2020 dropped at the median observation, certainly linked to the financial distress witnessed by investees during the COVID-19 pandemic.

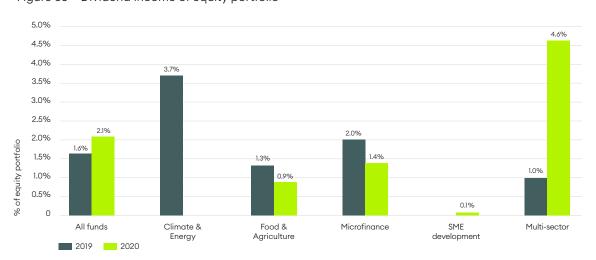
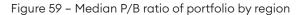
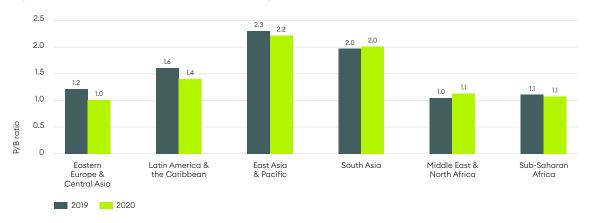


Figure 58 - Dividend income of equity portfolio

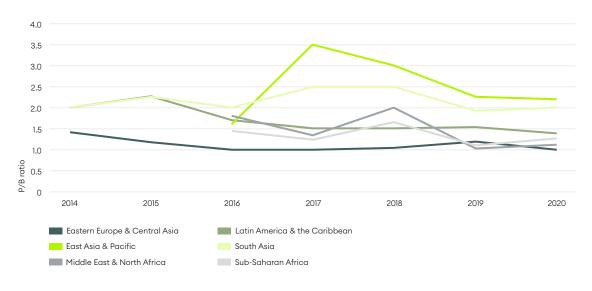




Focusing on microfinance equity and mixed funds, the portfolio investees that have gained in terms of higher valuation over 2020 include those in sub-Saharan Africa (+16%) and the Middle East & North Africa (+9%). The valuation for investees based in Latin America & the Caribbean has maintained its decreasing trend since

2015, when it stood at 2.3 (representing a -9% CAGR over the period). Meanwhile, investees in Eastern Europe & Central Asia have returned to the 1.0x levels observed in 2016-2017, following the economic downturn the region witnessed back in 2015.

Figure 60 - Historical average P/B ratio of microfinance fund portfolio by region



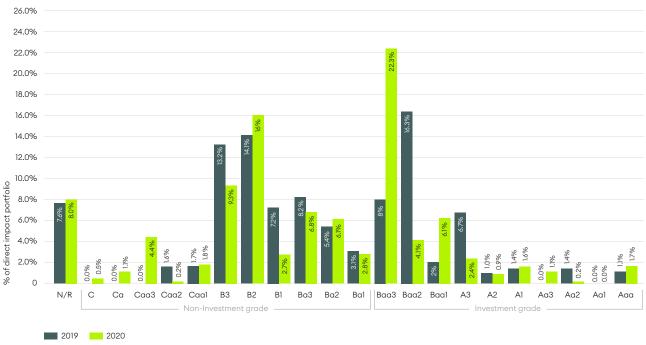
3.9 risk analysis

Country risk

The funds in our report invest predominantly in emerging and frontier markets. These countries are largely perceived as riskier than more advanced economies. Nevertheless, they are remarkably diverse, showing little homogeneity from a sovereign risk perspective. By mapping the country portfolio of the PAIF sample to Moody's long-term sovereign risk ratings for foreign

currency denominated issues, the bulk of the AUM sits within a range from B3 to Baal. Only 40% of funds' outstanding investments are considered investment-grade. This is particularly true for funds highly biased towards sub-Saharan Africa, such as those currently in the health & education or climate & energy sectors. In contrast, housing, water & communities funds are invested mostly in investment-grade markets.

Figure 61 - Country risk (measured using Moody's long-term credit rating)



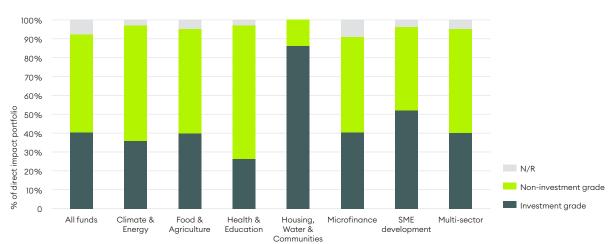


Figure 62 - Country investment and non-investment grades

Assigning a sovereign risk rating to the PAIF market based on country exposures shows that the median portfolio sovereign risk is Ba2 on Moody's scale.¹⁴

The rating varies according to PAIF peer group, as presented in the following table.

Table 13 - Median sovereign rating

All funds	Climate & Energy	Food & Agriculture	Health & Education	
Ba2	ВаЗ	ВаЗ	B2	
Housing, Water & Communities	Microfinance	SME development	Multi-sector	
ВааЗ	Ba2	ВааЗ	Ba2	
Fixed income	Equity	Mixed		
Ba3	Baa3	Baa3		

¹⁴ We assign a rating for all PAIFs and the respective peer groups by looking at where the 50% mark falls in Moody's rating scale when summing PAIF country percentages in each grade, without considering unrated countries.

While this table offers a view of the position of PAIFs in each impact sector in terms of their sovereign risk ratings given their current country allocation, it does not infer the actual riskiness of a given impact sector. Nevertheless, it helps understand the overall aggregate sovereign risk ratings of such portfolios. Also, sovereign

risk is not necessarily correlated to investee credit risk. Loan-loss reserves in the survey show rather disparate levels by impact sectors, ranging from 0.5% of the debt portfolio for SME development funds to 17.4% in health & education.

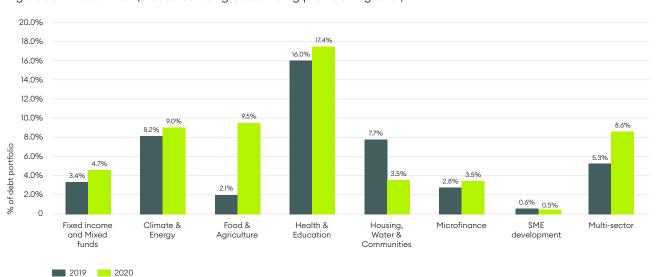
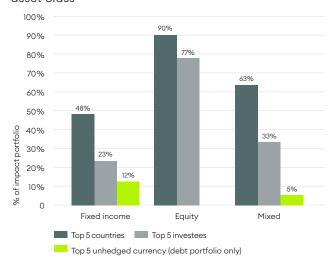


Figure 63 - Default risk (measured using outstanding provisioning level)

Portfolio concentrations

Concentration indicators related to the top five countries and top five investees are much higher for equity funds than for fixed income funds. For all PAIFs, these values average 56% and 30%, respectively.

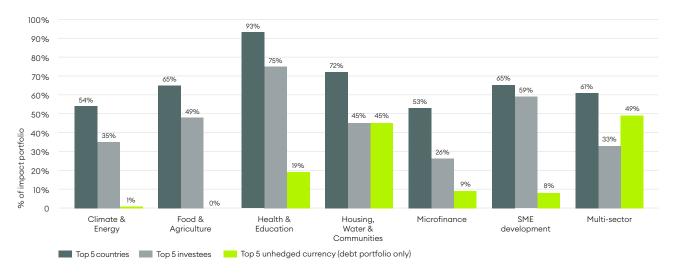
Figure 64 – Concentration indicators by primary asset class



Breaking this down by impact sector, health & education and housing, water & communities funds have the highest portfolio concentration levels, while microfinance and climate & energy funds have the lowest. The smallest

average fund size (as described in section 3.2 size & growth) for the former sectors partly explains the higher concentration levels observed.

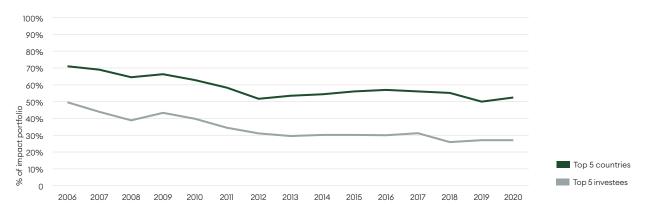
Figure 65 - Concentration indicators by primary impact sector



The rapid growth in size and outreach of microfinance funds over the years has enabled a higher diversification

of their portfolio for the top five countries and top five investees.

Figure 66 - Historical concentration indicators of microfinance funds



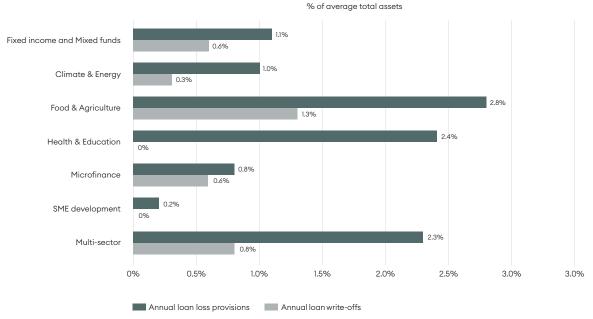
Loan-loss provisions and write-offs

Loan-loss reserves outstanding as a percentage of the credit portfolio of fixed income and mixed funds increased to 4.7% as of end 2020, compared to 3.4% one year before.

Annual loan-loss provisions and loan write-offs during 2020 amounted to 1.1% and 0.6% of average assets. We observe large differences across the different sectors and investee types. Food & agriculture (2.8%)

and health & education (2.4%) funds recorded more net loan-loss provisions compared to funds investing in SME development (0.2%) and microfinance (0.8%) sectors. The food & agriculture sector was also the one with the highest write-off levels in 2020 (1.3%), followed by multi-sector (0.8%) and microfinance funds (0.6%). Provisions and write-offs in 2020 were more prevalent for funds partnering with SMEs, corporations or projects (2.9% and 1.3%, respectively) than for those investing primarily through financial institutions (1.0% and 0.6%).

Figure 67 – Annual loan loss provisioning and write-offs by primary impact sector



2.85% 3.0% 2.5% % of average total assets 2.0% 1.34% 1.5% 1.05% 0.98% 10% 0.63% 0.59% 0.5% 0.33% 0.23% Financial institutions Non-financial institutions Annual loan loss provisions (2019) Annual loan loss provisions (2020) Annual Ioan write-offs (2019) Annual Ioan write-offs (2020)

Figure 68 - Annual loan loss provisioning and write-offs by investee type

Looking at historical patterns for microfinance funds and proxying the change in loan-loss reserves outstanding from one year to the other, we see that 2020, marked by the COVID-19 pandemic, was the year with the highest increase in provisioning, well in front of 2010 and 2018.

The latter years were respectively linked to specific country-level microfinance crises following the global financial crisis and then a challenging environment across emerging markets. Write-off levels in 2020 also surpassed those of 2010.



Figure 69 - Historical annual loan loss provisions and write-offs of microfinance funds

¹⁵ Emerging market stocks and government bonds dropped by 14.6% and 5.2% respectively in 2018.

3.10 fees & costs

Management fees incurred by PAIFs will vary depending on the type of product sold to investors, with retail investment products generally costing more to administer compared to institutional share classes that cost marginally less due to their larger subscription volumes per investor.

For the purposes of this study, we calculated management fees and overall operating expenses at the fund level, without disaggregating between retail or institutional investment products.¹⁶

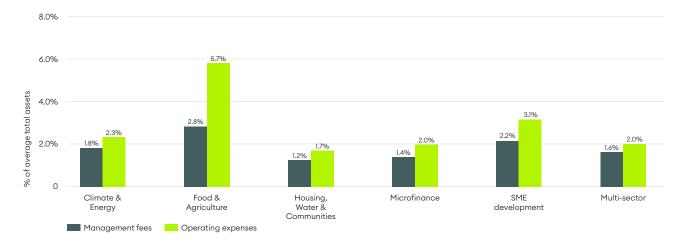
Management fees, which include all management, investor relation and distribution costs, averaged 1.6% in 2020 for all PAIFs. Their total expense ratio (TER), which includes management fees, as well as accounting, audit, custodian, transfer agent and legal fees, and marketing and general administration costs, amounts to 2.3% of average assets.

Performance fees, which we added to the above to derive the total costs for an investor, are generally associated with private equity practices but do, nonetheless, exist in some other instances. These fees average 0.9% and can be linked to the median level of carried interest and hurdle rates observed for equity funds of 20% and 8%, respectively.

Figure 70 - Fees and costs



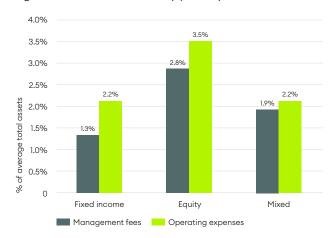
Figure 71 - Fees and costs by primary impact sector



¹⁶ We calculate proxy ratios of management fees and operating expenses by dividing the yearly amount of management fees and operating expenses incurred by the PAIF as a percentage of its average assets over two years.

These overall costs vary by impact sector and, naturally, by asset class, with equity funds generally charging fees on the level of committed capital rather than actual asset size of the vehicle. In terms of impact sector, housing, water & communities and microfinance funds witness the lowest costs (TER of 1.7% and 2.0%, respectively) while funds focused on food & agriculture (5.7%) and SME development (3.1%) sit on the higher end.

Figure 72 - Fees and costs by primary asset class

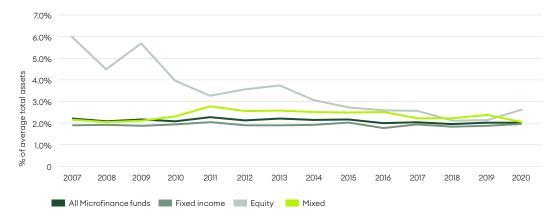


Costs for microfinance funds

Since 2007, both management fees and TER have been trending downward for microfinance funds, with the former decreasing by close to 55 basis points, from an initial level of 1.9% to 1.4% today, and the latter by 20

basis points, from 2.2% a decade ago to 2.0% today. The relatively linear drop, followed by a stabilization of cost levels in the past couple of years (especially for fixed income funds), reflects the growth, maturity and rivalry among microfinance funds.

Figure 73 - Historical TER of microfinance funds



3.11 investor composition

Geography

Retail and professional investors who fund the capital structure of PAIFs are mostly located in Western Europe and North America, the prime geographies where funds target investors. Some of these countries possess more conducive regulations than others when it comes to the distribution of impact products.

According to survey responses, when available, PAIFs mostly market their products to professional investors in the United States, Switzerland, Germany, the Netherlands and Belgium. Distribution to retails investors remains scarce in the space, with only 17 participant funds being licensed to target this clientele. Focusing on retail investors, the principal markets seem to be the United States, Germany, the Netherlands and France.

Liquidity

In contrast to traditional investment products that offer high liquidity for investors, private assets are illiquid products, some even more than others. Closed-ended funds and equity funds are by definition the most illiquid, with investors committing to patient capital across multiple years.

Open-ended fund structures in the impact space offer different frequencies for investors to enter (subscription) and exit (redemption) funds. Monthly subscriptions are the norm according to our study sample (54% of observations), followed by quarterly subscriptions (21%). These periodicities also seem to be common practice in terms of redemption (33% and 41% of funds, respectively), associated with a median notice period of 60 days.

Some funds do offer daily or weekly subscription and redemption possibilities (also with shorter redemption notice periods), bringing such funds closer to the liquid mutual fund markets.

Table 14 - Subscription and redemption frequencies for open-ended funds¹⁷

	Subscription (% of funds)	Redemption (% of funds)
Daily	11%	7%
Weekly	2%	2%
Bimonthly	4%	0%
Monthly	54%	33%
Quarterly	21%	41%
Triannual	0%	2%
Semestrial	0%	6%
Annually	9%	9%

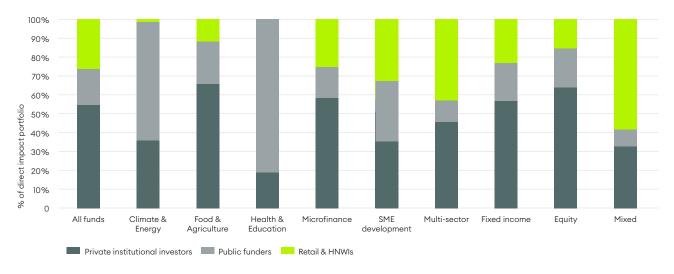
¹⁷ These percentages are relative to the number of responses and may not fully reflect the market's liquidity.

Investor breakdown

In terms of volume, PAIFs from the sample source 55% of their funding from institutional investors, followed by 26% from private retail and qualified individuals (high-networth individuals – HNWIs) and the rest (19%) from public funders. Collectively, the funds source USD 11.6 billion through private institutional investors, USD 5.5 billion through retail and HNWIs and USD 4.0 billion through public funders.

Breaking this down by primary impact sector, we observe that health & education and climate & energy vehicles generate more public funding (81% and 63%, respectively). Private institutional investors represent the bulk of food & agriculture and microfinance funds' capital base, at 66% and 58%, respectively. These investors are also the prime source of financing for equity funds, whereas mixed funds source 58% of their money from retail and HNWIs.





¹⁸ For definitions of the different types of investors, refer to section 2.1 business model.

For microfinance funds, private institutional investors have constantly been the major source of funding since 2006. Their share of the pie has kept increasing, especially since 2015, with public sector funding witnessing the opposite trend, dropping from one-third of total funding in 2006 to accounting for 17% of microfinance funds' capital at the end of 2020. In terms of investor growth

within the microfinance fund sector, retail and HNWIs have witnessed the strongest growth, with a CAGR of 20% since 2006, albeit starting from a lower base in terms of allocated volumes. In 2020, the volumes raised from private institutional investors (+3%) as well as retail and HNWIs (-3%) remained rather stable, whereas those raised from public funders decreased significantly (-15%).

Figure 75 - Historical investor composition of microfinance funds

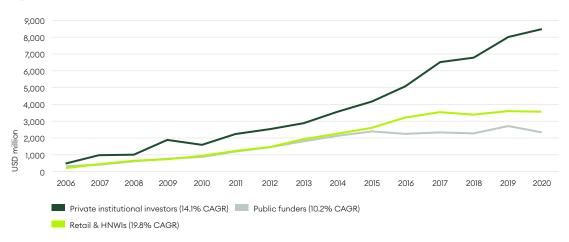


Table 15 - Yearly funding growth by investor type in microfinance funds

Yearly growth	2015	2016	2017	2018	2019	2020
Private institutional investors	11,3%	13,1%	25,7%	4,0%	13,0%	3,2%
Public funders	11,5%	-6,8%	2,4%	-1,3%	17,5%	-15,4%
Retail & HNWIs	15,8%	21,5%	-3,3%	7,5%	6,5%	-3,5%

3.12 financial performance

Investors who fund the capital structure of PAIFs can either be shareholders, benefitting from the periodic distribution of dividends and capital appreciation of their fund units, or noteholders who have provided credit to the funds in return for fixed or floating interest.

There are multiple drivers of net returns for PAIF investors. For fixed income funds, the net return will depend mostly on the portfolio yield or interest income from which the management fees, operational expenses and provisioning expenses will be deducted, together interlinked with liquidity management and cash drag dynamics, as well as international money market fluctuations. As seen before, cash levels average 13% of total assets, yields average 7.4% of portfolio levels, operating expenses average 2.3% of total assets and provisioning levels reached 1.1% in 2020. For equity funds, dividend levels and exit valuations, minus total expenses and performance fees, will drive the net return for investors. As seen in previous sections, all these inputs vary according to each fund's primary impact sector of focus and overall investment strategy (currency, investee type, country allocation, etc.).

For the purposes of this study, we present the net returns by separating unleveraged and leveraged funds, enabling us to disaggregate note interests and equity tranche returns for leveraged funds, and net shareholder returns in the case of unleveraged funds, by presenting the information by strategy (fixed income funds, mixed funds, equity funds).

2020 – a resilient year despite the pandemic

The outbreak of the COVID-19 pandemic paralyzed financial markets all over the world in the first half of 2020. Stock markets quickly recovered and set record highs at the end of the year. In parallel, the euro witnessed a 9% rise against the US dollar in 2020, thus bringing some nuance in the financial returns of PAIF investors.

For unleveraged funds, the median 2020 returns in USD amounted to 1.5% for fixed income, -0.5% for mixed and 5.5% for equity funds, hence underperforming the 2019 values across all asset strategies. Returns were even lower in EUR and CHF, at 0.2% and 0.3% at the median, respectively for fixed income and -4.4% in EUR for mixed funds.

For leveraged funds, the equity tranche returns amounted to 0.5% in USD and 8.0% in EUR. Noteholders received on average 3.3% on their loaned capital in USD.

For unleveraged fixed income funds, food & agriculture funds positively drove returns in USD, at 3.0%, but achieved the lowest performance in EUR (-1.2%). PAIFs with a multi-sector focus had a positive return in USD (1.5%) and a null one in EUR (0.2%). The leveraged funds in the sectors of climate & energy and microfinance witnessed nice returns on their equity tranche in USD at 4.9% and 4.0% respectively.

Table 16 - Financial returns

		2019				
Unleveraged funds	USD	EUR	CHF	USD	EUR	CHF
All funds	4,1%	2,1%	1,6%	1,5%	-0,1%	0,2%
Fixed income	4,1%	2,0%	1,2%	1,5%	0,2%	0,3%
Equity	5,9%			5,5%		
Mixed	5,5%	2,7%		-0,5%	-4,4%	
Leveraged funds	USD	EUR	CHF	USD	EUR	CHF
Coupon returns	4,9%			3,3%		
Equity tranche (ROE)	3,9%	4,8%		0,5%	8,0%	

Figure 76 - Unleveraged funds (USD)



Figure 77 - Maximum drawdown - last five years



Maximum drawdown

Looking at maximum drawdown figures¹⁹ helps contextualize how stable the PAIF market is. Across all sectors and considering only funds with a monthly net asset valuation frequency, median maximum drawdowns over the last five years have amounted to -1.7% for USD, -1.9% for EUR and -1.8% for CHF share classes. As of the end of 2019, these values stood at -0.9%, -1.2% and -1.6% respectively, evidencing the relative instability brought by the COVID-19 pandemic.

Funds using FX hedging instruments against their local currency exposures (meaning highly hedged funds) show drawdown figures in 2020 of –1.1 %, –1.9% and –1.6% in for USD, EUR and CHF share classes, showcasing fewer swings in negative returns compared to highly unhedged strategies.

In general, the low drawdown numbers are testament to the stability of the private asset impact investing strategy, even during stress periods for financial markets.

Looking back at Microfinance funds' returns

In microfinance, net returns have varied over the years since initial observations dating back to 2006. Following a challenging 2014-2017 period, microfinance fund returns bounced back in 2018-2019 for unleveraged fixed income strategies in USD. For these specific funds, the 2020 values underperformed the SMX - MIV Debt Index²⁰ in USD (1.5% vs 1.8%), EUR (-0.3% vs 0.7%) and CHF (-0.3% vs 0.2%).

¹⁹ Maximum drawdown should be understood as the maximum observed loss from a peak to a trough of a fund share class net asset value (NAV) per unit, before a new peak is reached.

²⁰ The SMX - MIV Debt USD, EUR and CHF indexes are indexes managed by Tameo that track, on a monthly basis, the NAV of a selection of microfinance funds with a majority of assets invested in fixed income instruments. The funds are equally weighted. The index has been available on syminvest.com in USD, EUR and CHF since 2004, and will soon be transferred to Tameo's website.

Figure 78 - Historical USD returns of fixed income microfinance funds

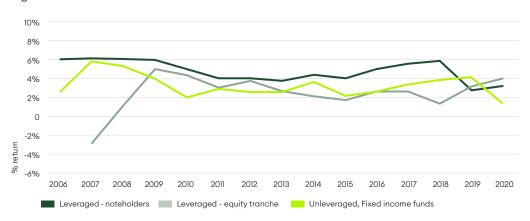
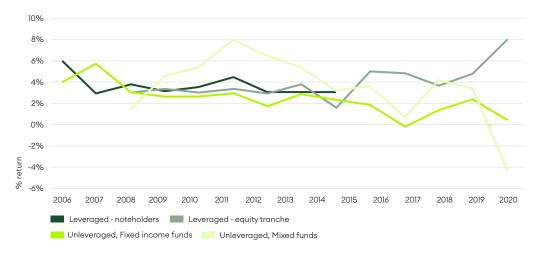


Figure 79 - Historical EUR returns of fixed income and mixed microfinance funds



For equity microfinance funds, median returns stood at 5.5% in USD in 2020, with high volatility over the years

linked to this business model.

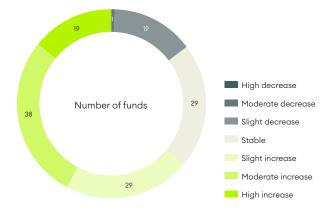
24% 22% 21.0% 20% 18% 16% 13.9% 14% 12% 9.4% 10% 8% 6% Too few 3.7% observations 4% 2.9% between 2008 2% and 2010 return 0% -2% -4% 2006 2007 2009 2011 2012 2013 2014 2017 2018 2020

Figure 80 - Historical USD returns of equity microfinance funds

Return forecasts

While the full, long-term effects of the COVID-19 pandemic on PAIF performance remain hard to predict, two-thirds of funds expect an increase in their performance in 2021: 19 respondents expect a high increase, of which 12 are equity and mixed funds (7 and 5, respectively). Half of funds appear to indicate slight to moderate increases in returns for 2021, while one-fifth expect stable returns and only 15% expect any sort of decrease, be it slight or moderate. Funds in SME development and housing, water & communities are the most optimistic (100% of them expect a return increase) compared to food & agriculture and microfinance (where 54% and 59% forecast an improvement, respectively). Equity funds, which had the best performance in 2020 and foresee the largest growth in asset in size for 2021 (see section 3.2 size & growth), are also more optimistic than fixed income funds (70% and 58% of them expect an increase in returns, respectively).

Figure 81 - Return forecasts



pandemic period update

The COVID-19 pandemic, which swept across PAIF markets in 2020, has had distressing socio-economic repercussions. The lower income population in the more affected regions has in many cases been more affected than their higher income peers. Also, lockdown and guarantine measures have stalled usual business flows and daily exchanges, affecting the financial sustainability of many microenterprises, small businesses, and larger projects and companies alike. We do not yet understand the full consequences of the pandemic, even though the situation seems to be on the path to recovery, at least in most regions. That said, as a proxy of the risk and return consequences for PAIFs, the more mature microfinance fund segment can shed some light on understanding the consequences of the pandemic on the impact investing sector so far.

Performance of microfinance debt funds in 2020 and 2021

The main microfinance fund index in private debt, the SMX-MIV USD debt index, currently has a market coverage of more than one-third (35%) of all microfinance fixed income fund volumes and of 42% of all open-ended ones. It regroups the leading microfinance fixed income funds, which are open to multiple investors, with monthly net asset valuations and using a fully hedged FX strategy.

Since its launch in December 2003, and as of end August 2021, this index has provided a cumulative return of 82.69% in USD, which represents a compound monthly net return of 28.43 basis points or a compound annual net return of 3.49%.

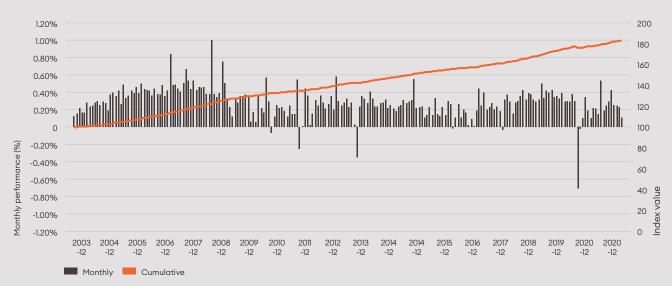


Figure 82 - Historical performance of the SMX-MIV USD Debt Index since inception

In early 2020, the SMX-MIV Debt Index took its hardest hit since inception; but it then managed to remain afloat and showed much less performance volatility than other asset classes. It concluded the year with a positive,

1.80% annual return in USD. So far in 2021 (up to August), the index generated a net return of 2.01%, which when annualized amounts to 3.01% or 3.14% when considering the past 12-months.

Figure 83 - Two-year performance of the SMX-MIV USD Debt Index

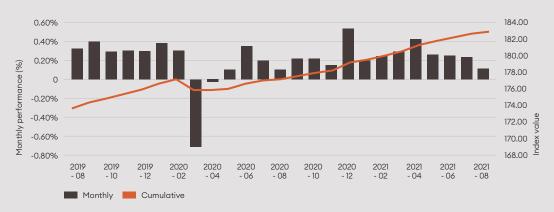
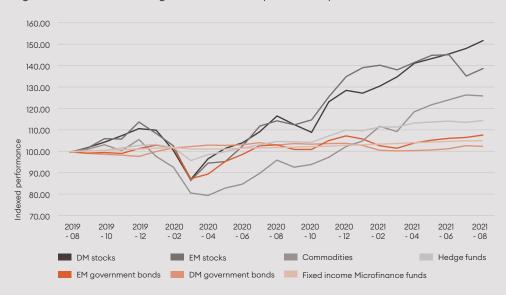


Figure 84 - Contextualizing the economic impact of the pandemic on fixed income microfinance funds



Risk as a measure of volatility

The SMX-MIV USD Debt Index has seen extremely low volatility since inception. Yet, it stood at a record high 1.05% in terms of monthly standard deviation of net returns in 2020, exceeding the values observed in 2008, 2011 and 2013 (respectively at 0.68%, 0.75% and 0.69%). In 2021, the volatility currently stands 0.25% as of end August 2021, hence returning to normal levels. Over the past decade, the cumulative volatility since inception has remained between 0.54% and 0.61%; it currently stands at 0.59%.

We can partly attribute these very low numbers to the valuation methodology of unlisted private debt instruments, measured at nominal value, plus accrued interest, minus loss provisioning. Since the start of the index, there have been only seven negative months over 212 periods, with four of them being smaller than a 0.07% monthly drawdown. This is a reflection of the very little loss provisioning expense ratio experienced by microfinance debt funds over the past decade and a half, with in addition little in cumulative write-offs thanks to high loan recovery rates in the space (reportedly of 50% to 75% on average). In the current PAIF pool surveyed (as disclosed in section 3.9 risk analysis) the loan loss expenses and write-off ratios over 2020 reached unprecedented highs at 0.8% and 0.6% respectively in microfinance, which remain low and acceptable.

Table 17 - Comparing the performance and volatility of fixed income microfinance funds to mainstream asset classes

	Volc	atility	Annualized returns Sharpe Rat		e Ratio	
Asset type	15-years	2021 (YTD)	15-years	2021 (YTD)	15-years	2021 (YTD)
DM stocks	15.93%	4.64%	7.86%	17.94%	0.41	3.84
EM stocks	21.43%	9.24%	6.02%	2.84%	0.22	0.30
DM government bonds	3.19%	3.00%	4.12%	-1.33%	0.87	-0.48
EM government bonds	9.27%	4.87%	6.64%	0.47%	0.57	0.07
Commodities	16.52%	9.53%	-2.87%	23.01%	-0.25	2.40
Hedge funds	5.65%	2.14%	1.17%	3.97%	-0.03	1.81
Fixed income microfinance funds	0.62%	0.25%	3.39%	2.01%	3.34	7.68

In 2020, the index experienced its highest single month decrease, at -0.70%, as well as its highest annual volatility scores and second lowest annual net return. Other financial market instruments, like developed market stocks, were significantly more affected, losing 20.57% over the months of February and March. Staying in developed markets, government bonds gained 2.30% during the same period. In emerging markets, stocks and government bonds lost 19.86% and 15.06% respectively. As for alternative investment products such as commodities or hedge funds, these lost respectively 17.20% and 7.23% in those two months.

Yet, all these market instruments returned to their prepandemic values during the second half of 2020. At the time of writing, the market seems to be more preoccupied by the potential signs of a stock market bubble, with all-time record values in many of these instruments.

Overall, microfinance funds remain attractive when positioning them on a global portfolio of stocks, bonds and alternatives in developed or emerging markets. Sharpe ratios from the different asset classes (using the 3-month LIBOR in USD as the risk-free rate and despite the divergent liquidity nature of each asset class) clearly signal an interesting coupling of risk and return, while the decorrelation with other asset classes is an added value when considering impact investing strategies through microfinance funds. This remains true in 2021 as well.

²¹ We used and sourced the following market indices from Bloomberg:

Stocks - developed markets: MSCI World Net Total Return USD Index; emerging markets: MSCI Emerging Net Total Return USD Index Government bonds - developed markets: JPM Hedged USD GBI Global Index; emerging markets: JPM EMBI Global Core Index Alternatives - commodities: Bloomberg Commodity Index Total Return; hedge funds: HFRX Global Hedge Fund Index





private asset impact funds - impact metrics

This chapter looks at PAIF impact measurement and management practices. We have divided the chapter into three distinct sections, looking at impact management and measurement from three distinct lenses, altogether defining the development finance narrative. We first look at their investment strategy, in terms of SDG intent, using impact investing principles and seeing how funds put them into practice in investment documentation and reporting. We then look at the investment process, in terms of ESG integration, using broader sustainable finance principles and seeing how they filter, screen and rate each of the investments. Finally, we look at the investment output in terms of BOP outreach, using more specific inclusive finance principles, and seeing how they actually deploy their capital at the base of the pyramid to maximize outreach and inclusion, as far out as possible in low- and middle-income countries and as deeply as possible into low- and middle-income households.

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4.2 SDG intent	94
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4.1 development finance narrative

Private sector development finance is inherent to PAIF business model and their investment managers who are seeking to pursue an investment philosophy geared towards sustainable finance, impact investing and inclusive finance in emerging and frontier markets. The development finance narrative thus integrates a triple promise or commitment, alongside the other risk, return, regulatory and cost elements built into their practice.

From a market size and investment universe standpoint, development finance is part of inclusive finance, in the sense of following an investment strategy with a view to create inclusive growth for the benefit of low- and middle-income economies in underserved markets, in a North-South dynamic. Inclusive finance is part of impact

investing, in the sense of positively addressing a range of global challenges, as illustrated by the SDGs. Finally, impact investing is part of sustainable finance, in the sense of integrating ESG norms into the investment value chain and decision-making process.

As a result, development finance investments stand out from mainstream investments because they integrate these filters and drivers in their decision-making process, added value and monitoring work. Development finance funds have a theory of change built on what impact goals they address, how they filter the investment universe and how far and how deep they reach out with their investments.

Figure 85 - Development finance narrative



4.2 SDG intent

Concerning the frequency of impact performance monitoring, 40% of respondent funds undertake such work several times per year, while more than half do so on an annual basis. These figures confirm the rigor put into action by the investment management companies

to fulfill the impact promises made to their investors. In this regard, almost all PAIFs (88%) have dedicated impact performance reporting for their investors, and among the few which do not have it, half are planning to do so soon.

Figure 86 - Impact performance monitoring

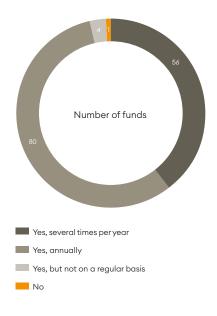
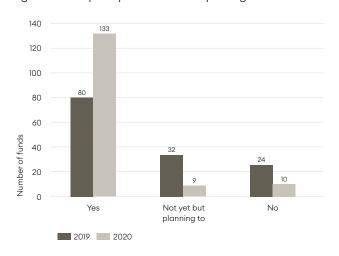


Figure 87 - Impact performance reporting to investors



When looking at the tools or frameworks to manage and measure their impact performance, PAIFs have historically used internal tools, generally developed by their specialized investment management companies.

Ever since the 2030 Agenda for Sustainable Development put forward the common goals adopted in 2015, a variety of investment products revolving around one or multiple SDGs have come to light. For PAIFs, their impact intentionality at the onset guides their operational impact

narrative. Many have even started implementing SDG considerations at the core of their impact investment activities. It is thus not surprising that the SDGs are becoming the reference industry tool to manage and measure fund impact performance.

PAIFs also frequently cite the GIIN's IRIS+ tool and the Impact Management Project as mapping tools that they use.

Figure 88 - Tools or frameworks to manage and measure fund impact performance

Integrating SDGs in the investment narrative and mapping them to specific strategies or transactions has become an important topic for the impact investment community. PAIFs increasingly map their social and environmental goals against the SDGs. Some remain

at the fund level (38%), while more and more funds map it at the investee level (35%, +6 percentage point increase from 2019), and even more granularly at the transaction level (23%).

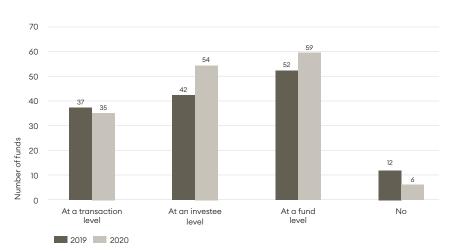
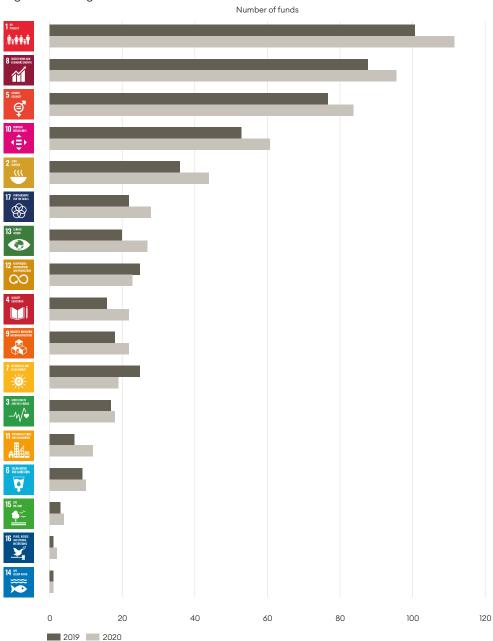


Figure 89 - Mapping of funds' social and environmental goals against the SDGs

When asked about the different SDGs targeted, the top five SDGs mentioned by survey participants were SDG 1 (112 funds), SDG 8, SDG 5, SDG 10 and SDG 2. When comparing this to the SDG rationale presented in the methodology

section, these numbers fit with the sample of funds active in each impact sector (3.5 impact sectors). They mention SDG 15, SDG 16 and SDG 14 as targets less often.

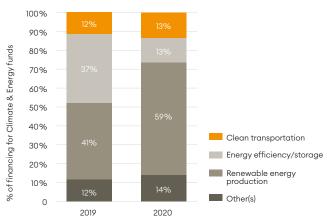




As a whole, we refer to this exercise as "SDG intent", in the sense of using impact investing principles upstream to tie the fund's investment strategy to explicit goals and objectives, which then trickle down in the fund and transaction documentation and can be measured thereafter in the fund reporting.

Each SDG has its own targets and indicators in terms of specification, implementation and measurement. For each PAIF category, we can break down the strategy and intent into specific categories, with some measurement protocols sufficiently evolved to propose ex-post indicators of impact performance.

Figure 91 - Climate & energy subsectors financed



Climate & energy

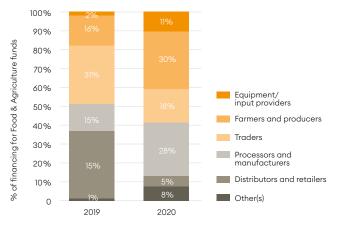
PAIFs in climate & energy allocate most of their portfolio to renewable energy production (59%), ahead of efficiency and storage (13%), clean transportation (13%) and other segments (14%), including climate insurance.

Reporting frameworks and measurement protocols for climate & energy PAIFs are much more advanced than most other categories, even than microfinance funds. Most companies and projects have clear guidelines to capture either energy savings, carbon dioxide (CO2) emissions reductions or renewable production, for instance. From the data collected in the PAIF sample, the annual renewable energy production from projects funded is 259,599 megawatt hours (MWh) per year at a fund level. The annual energy savings from projects funded is 27,011 MWh per year. The annual CO2 emissions reductions, avoidance or capture achieved from projects funded amount on average to 153,348 tons of CO2 per year.

Food & agriculture

The portfolio of food & agriculture funds can typically be split in terms of their strategy and target objectives between equipment and input providers (11%), farmers and producers (30%), traders (18%), processors and manufacturers (28%) and distributors and retailers (5%). In terms of ex-post outcome measurement, one key indicator is the area under sustainable management, which stands, on average, at 599,209 hectares per fund.

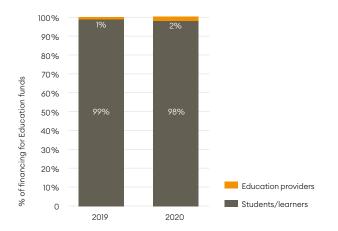
Figure 92 - Agriculture value chain actors financed



Health & education

The portfolio of health & education funds overwhelmingly addresses students rather than school needs (98% vs 2% of financing). Respondents were not yet able to report on their portfolio breakdown by type of healthcare service providers or beneficiaries, which can include clinics, health insurers, healthcare equipment suppliers and households, among others.

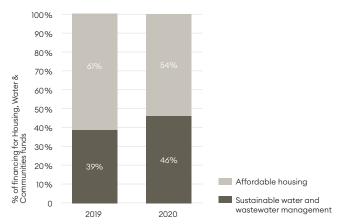
Figure 93 - Education actors financed



Housing, water & communities

Housing, water & communities sector funds typically channel their portfolio between affordable housing (54%) and sustainable water management (46%) strategies and objectives.

Figure 94 – Housing, water & communities subsectors financed



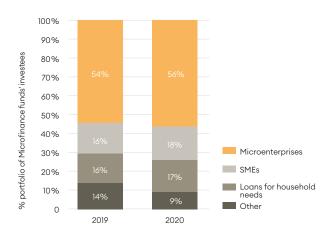
Microfinance

The impact of microfinance is best described in terms of three targets: (1) financial security, (2) household consumption and (3) employment and entrepreneurship dynamics. These can then be measured through a variety of indicators, in terms of (1) savings accounts, insurance policies, other non-credit products, and short-term liquidity loans; (2) household need loans, including housing loans and consumer loans; and (3) number of credit clients, average loans and number of employees thereof, respectively. In this survey, we were able to capture the breakdown of the gross loan portfolio of investees, in majority MFIs financed by microfinance funds. This breakdown relates to the type of loan products provided to end-clients.

Results indicate that investees allocate 56% of their gross loan portfolio to microenterprise loans, 18% to SME loans and 17% to loans for household consumption needs. Investees typically allocate the rest to corporate loans and other consumer products.

In terms of number of micro- and small enterprise clients and their average financing, figures show that they have remained very stable, corroborating the impact deep at the base of the pyramid over the past decade (see section 4.4 BOP outreach).

Figure 95 – Portfolio breakdown of microfinance fund investees



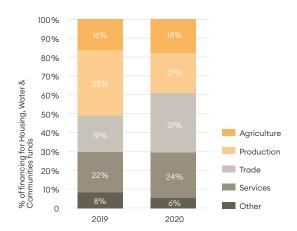
Regarding investee product offering beyond credit, half of them offer savings (46%), insurance (50%), other financial (43%) and non-financial services (56%). These products ultimately serve to fulfil the financial security of households, making them resilient in facing any shocks to their cash flows.

Overall, as one expression of the ex-post measurement of the main targeted impact by microfinance funds, the number of end clients financed, including borrowers and savers among others, is 138,126 per fund at the median, a figure that has been stable in the last four years, prior to which it increased significantly due to a methodology change in the computation process for equity funds. It evolved in a range of between 40,000 and 60,000 prior to the increase.

SME development

As mentioned previously, SME development portfolios flow to SMEs either directly or through financial institutions (3.6 investee types). For the latter, the study sample indicates that SMEs active in trade, services and production receive most of the financing (31%, 24% and 21%, respectively).

Figure 96 – Activity sector of SMEs indirectly financed by SME development funds



4.3 ESG integration

The second step in assessing the impact management and measurement practice of PAIFs applies broader sustainable finance principles, using ESG integration practices in terms of screening, filtering and rating the investments and investees as part of their decisionmaking process and reporting thereof. Almost all PAIFs (129 of them, or 92% of respondent funds) integrate ESG screening into both the prospection and investment decision processes, with only a handful that do it only during the prospection (2%), only in the investment decision (4%) or not at all (2%). In line with these figures, exclusion policies seem to be common practice (93% of funds).

Figure 97 - Integration of ESG screening into investment decision process

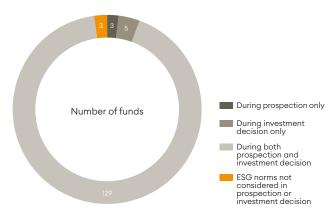
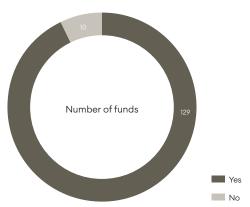
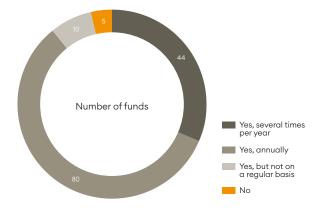


Figure 98 - Exclusion policy



Regarding ESG compliance monitoring, the frequency is similar to impact performance monitoring, with most funds undertaking such work on an annual basis (58%) and a third of them (32%) several times per year.

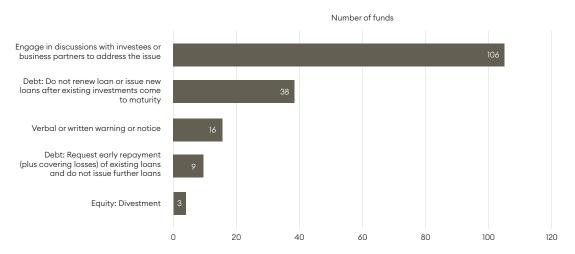
Figure 99 - Compliance monitoring



Interestingly, funds have different approaches when confronted with an investee not complying with the ESG procedure. The first (and often only) reaction is to engage in discussions with the investee or business partners to address the issue (106 funds). When such discussions are not fruitful, fixed income funds can decide not to renew the loan or issue new loans after existing investments come to

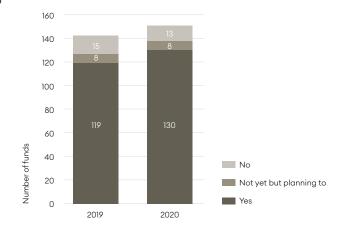
maturity (38 funds), or even to request early repayment (plus covering losses) of existing loans, although this is rarer (9 funds). They can also choose not to go beyond a verbal or written warning or notice (16 funds). Only a couple of equity funds (3 funds) mentioned they are ready to divest in cases of non-compliance.

Figure 100 - Consequences of non-compliance with ESG procedure



In the same way as for the impact performance reporting, the vast majority of funds (130, or 86%) report on ESG indicators to their investors.

Figure 101 - ESG reporting to investors



While PAIFs account for ESG factors, the majority do not – or do not yet – offer preferential treatment for their investees that demonstrate strong ESG commitment. A few PAIFs do, however, systematically offer preferential treatment (20 of them, or 14% of the respondent funds). For those that do it always, often or sometimes, the most frequent types of preferential treatment mentioned are lower interest rates on the credit side and accepting lower dividends on the equity side. Other answers included more lenient financial covenants, such as more flexible repayment schedules, less collateral and higher risk-taking willingness, as well as additional capital disbursements (both debt and equity).

Figure 102 – Use of preferential terms for investees demonstrating strong ESG commitment

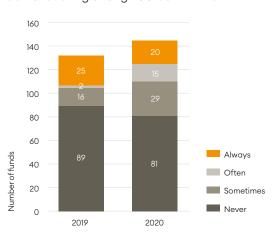
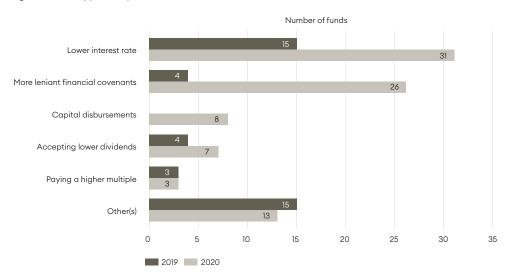


Figure 103 - Types of preferential terms



In terms of social or environmental covenants included within the investment agreement between a PAIF and its investee, a majority of PAIFs from the sample report that they always or often include such covenants (126 and 6 of them, respectively, which is 88% of funds in aggregate). These generally include social or environmental performance reporting from investees to the PAIF, use of proceeds, earmarking, caps and floors on financial ratios, social performance milestones, the establishment of social performance management units, etc.

Figure 104 – Inclusion of social or environmental covenants within investment agreements

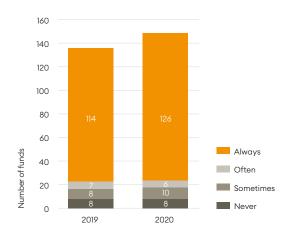
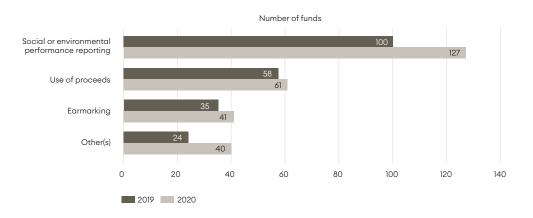


Figure 105 - Types of social or environmental covenants



4.4 BOP outreach

The third and last step in assessing the impact management and measurement practices of PAIFs is to use specific inclusive finance principles, anchored in development finance, looking at investment output in terms of BOP outreach, and seeing how they actually deploy their capital at the base of the pyramid to maximize outreach and inclusion, as far out as possible in low- and middle-income countries (country level) and as deeply as possible into low- and middle-income households (end-beneficiary level).

We derived the results presented below from common reporting metrics used by PAIFs in their disclosure of impact performance to investors, with more tracking and granularity for microfinance funds given the sector's historical track record and higher level of industry maturity.

Country outreach

In terms of volume, a PAIF's direct impact portfolio is allocated mostly in lower middle-income countries (48%), followed by upper middle-income countries (45%), with only 3% in low-income countries. Arguably, grant funding and concessional investments probably best serve least developed countries, given the sovereign risk management dynamics inherent to private sector investors and their fund managers. Housing, water & communities as well as health & education funds are the most inclusive, country-wise, allocating almost all their impact portfolio and close to three quarters of it, respectively, to lower middle-income economies. Mixed funds seem to be the ones allocating the most to upper middle-income and high-income countries.

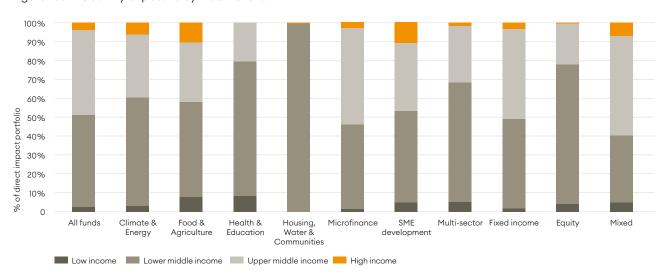
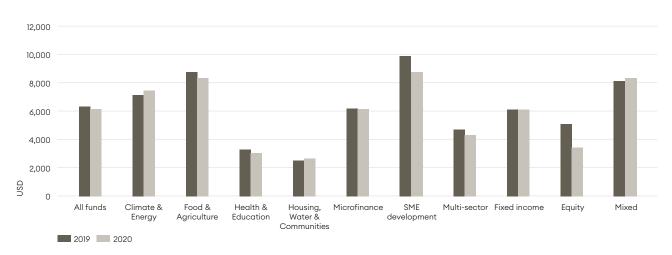


Figure 106 - Country exposure by income level

Across all these markets, the gross national income (GNI) per capita averages USD 6,090. Comparing this to the world average (USD 11,558) demonstrates the ability of PAIFs to channel capital to where the population and households have lower than average income levels. SME development and food & agriculture PAIFs have

the highest GNI per capita recorded for their country portfolios, while housing, water & communities and health & education the lowest.

Figure 107 – GNI per capita



Investee outreach

Investees are a prime link for PAIFs to the BOP. As observed, PAIFs mostly finance financial institutions and SMEs (section 3.6 investee types). It is relevant to point to some social metrics at the investee level, especially since those are major drivers of employment in emerging and frontier markets. For this second survey edition, we have aimed to gather data on the number of employees of investees and the gender breakdown, looking at whether gender parity exists in PAIF impact portfolio investees. On average, investees

have 38,201 employees, while the median stands at 17,682. About two-thirds of employees (64%) are men, but contrasts exist when looking at primary sectors of focus. Education funds seem to finance investees with more women on staff (at 80% of total employees), for instance, whereas food & agriculture investees have the highest share of men on staff (71%). In terms of number of employees, microfinance funds have the largest headcount at the investee level (average of 51,598 employees, median of 28,965), MFIs being known as labor-intensive employers.

Figure 108 – Number of people employed by fund investees

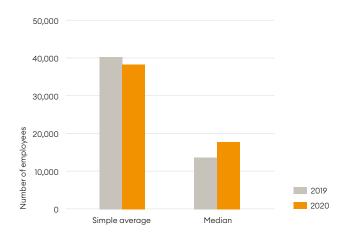
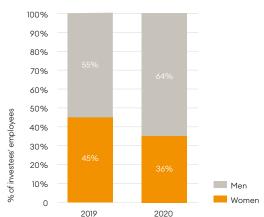


Figure 109 - Gender profile of investee employees



End-client outreach

For all funds, we attempted to retrieve the number of end-clients financed and assess where these clients were located and their gender. Results show that a PAIF finances on average 1.9 million end-clients, whereas the median observation stands at 146,000 end-clients, signaling the presence of high values that stem from equity funds (average of 8.3 million end-clients financed), with their higher outreach ability given their ownership stakes and capacity to drive decision-making in their investees (compared to fixed

income and mixed funds, which only report the pro rata segment of the clientele they finance, with averages of 439,000 and 471,000 end-clients respectively). In terms of location and gender, 59% of end-clients are in rural areas and 62% are women. Outreach to women seems to be particularly prevalent for housing, water & communities (84%) and microfinance (65%) funds. In terms of historical trends for microfinance funds, they do show a bias in working with MFIs that have had a higher number of rural and women borrowers over the years.

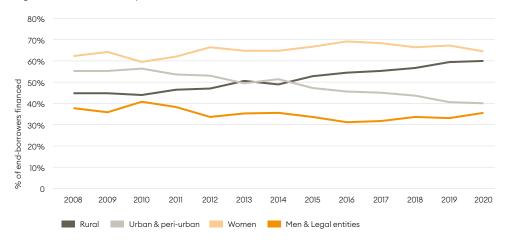
Table 18 - Number of end clients financed

All funds	146'049
Climate & Energy	106'214
Food & Agriculture	211'743
Health & Education	79'268
Housing, Water & Communities	43'685
Microfinance	138'126
SME development	256'504
Multi-sector	302'535
Fixed income	113'894
Equity	3'621'686
Mixed	50'432

Table 19 - Profile of end clients financed by primary impact sector

	Rural	Urban & peri-urban	Women	Men & Legal entities
All funds	59%	41%	62%	38%
Climate & Energy	55%	45%	36%	64%
Food & Agriculture	76%	24%	31%	69%
Health & Education	36%	64%	53%	47%
Housing, Water & Communities	62%	38%	84%	16%
Microfinance	60%	40%	65%	35%
SME development	68%	32%	58%	42%
Multi-sector	51%	49%	65%	35%

Figure 110 - Historical profile of microfinance fund end-borrowers

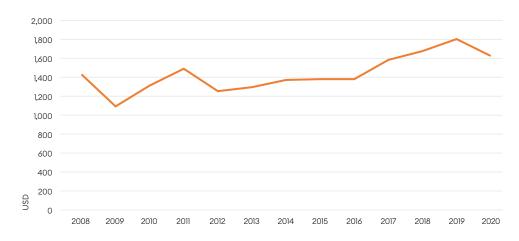


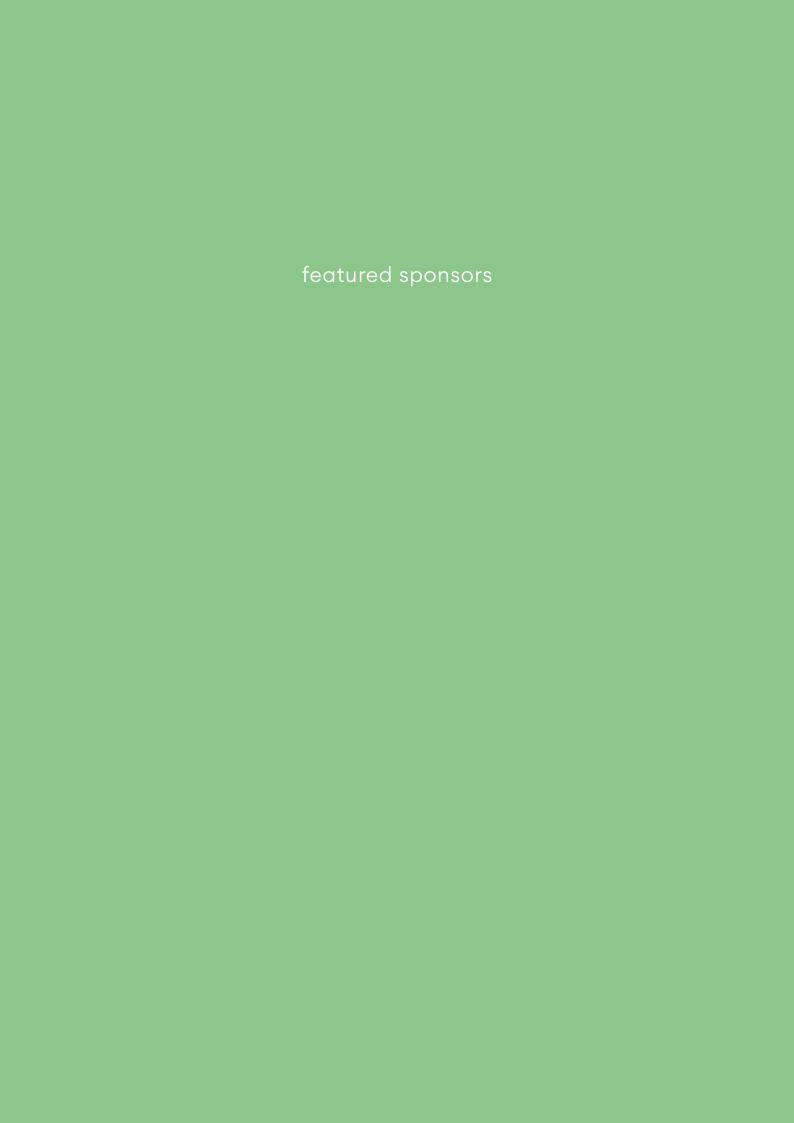
Depth of outreach

In the specific cases of microfinance and SME development funds investing through financial institutions, we consider the average financing size as a measure of depth in the market. We find that the median financing sizes for microfinance and SME development funds is USD 1,631 and USD 7,503, respectively. For microfinance funds, the average loan size has remained stable at between USD

1,250 and USD 1,500 over the decade prior to 2017 and has only slightly increased in recent years, showing overall that these funds remain well-anchored in their markets and focused on ultimately serving the bottom end of their markets. Similarly, SME funds investing through financial institutions are positioned towards the lower end of the market segment, which can easily move into the millions for more established SME investments.

Figure 111 - Historical average loan size of microfinance funds





We would like to thank the following entities active in the impact space for their generous financial support and collaboration for this second edition of the PAIF survey. In the following pages, our sponsors showcase their product offerings, business models and track records in the impact investing sector.





















Impact Investment Managers



















Over the past 13 years, 100+ impact funds active across the developing world in multiple sectors including MSME finance, distributed energy, agriculture and social infrastructure, have hedged over USD 6 billion of local currency loans in 70+ currencies, with TCX or with its main intermediary MFX as hedging counterparties. Of that number USD 5,5 billion was hedged by TCX, of which USD 2,0 billion with the funds directly, and USD 3,5 billion indirectly through MFX intermediation. MFX has also intermediated USD 0,5 billion between impact funds and the FX desks of commercial banks, in the more liquid currencies where TCX is not additional and therefore not active.

"A business in a developing country should not have to bear currency risk because of financial market limitations. This means that impact funds must have the product and capacity to lend in local currency. Making that possible is at the core of the TCX mission. We are happy to support this survey and to receive responses from such a large audience. We will use the feedback to improve on our products and services wherever we can. We wish to thank the TAMEO team for this opportunity."

Ruurd Brouwer, CEO, TCX Fund



TCX Fund is a Netherlands based development finance initiative backed by a wide range of development finance institutions and government agencies. The fund's mandate is to eliminate currency risk associated with impact lending. TCX for that purpose offers swaps and forwards, without any tenor restrictions, to hedge emerging and frontier market currencies globally. Since TCX started operations in 2007, it has supported USD 10+ billion equivalent of local currency loans in 70+ currencies. Of that, USD 3,5 billion were loans by 85 different impact funds, of which 25 were serviced by TCX directly and 60 through its principal intermediary MFX.



MFX Solutions contributes to currency risk elimination by ensuring that impact lenders can effectively access the hedging products that TCX, and commercial banks, offer. MFX can transact without collateral thanks to government guarantees that backstop its clients' credit. Hedging through MFX can eliminate the cost of holding liquidity for – and the operational complexity and uncertainty of – margin calls. MFX trades with TCX to hedge the least liquid currencies and with several commercial banks for other currencies. Since 2009, MFX has transacted USD 3.5 billion of hedges in 60+ currencies for some 75 impact funds. Of that, USD 2 billion was hedged with TCX, and the rest with banks.

alphamundi

Investment Solutions For People and Planet

SocialAlpha Investment Fund (SAIF)

SAIF's mission is to reduce poverty and preserve the environment in developing countries, with a gender lens. The fund's investment thesis is predicated on the increasing purchasing power of low-end consumers in developing countries, and their growing need for basic products and services, delivered through sustainable value chains enhanced by technology.

The fund's strategy is to identify emerging and established SMEs across sectors such as sustainable food, financial inclusion, and renewable energy in Sub-Saharan Africa & Latin America, with annual sales of USD 500K-50M, and build up fund exposure progressively as they achieve financial and impact milestones. Loans usually range from USD 250K to USD 2M per company, over 12-24 months with quarterly payments.

Impact

AlphaMundi is dedicated to the 2030 Agenda and the transition to a sustainable economy and equitable society, powered by a financial industry investing with impact.

SAIF's impact aligns most closely with 6 of the UN Sustainable Development Goals: No Poverty (1), Gender Equality (5), Clean Energy (7), Economic Growth (8), Reduced Inequalities (10), Responsible Production (12).

We measure our quantitative, qualitative and catalytic impact with IRIS+ indicators, twice a year. The fund also played a key role in the resilience and recovery of its portfolio companies during the pandemic.

Track record of 12 years, financing 47 SMEs through 110 transactions.

Open-ended, quarterly NAV, low correlation to markets, capital preservation instrument.

Co-investment right x1.5 the fund commitment, managed by AMG at half the fund's fees, target IRR 6%- 9% on debt & 10%-15% on equity.

45% loss co-guarantee from USAID and SIDA on fund loans to household technology companies (about 25% of the fund portfolio).

Field monitoring with 4 investment officers based in Bogota and 4 in Nairobi.

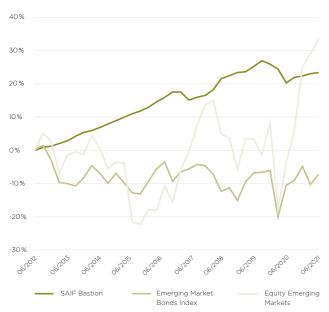
Technical Assistance Facility for Gender Lens to promote the role of women in SMEs, hosted by the AlphaMundi Foundation.

Leading manager with AlphaMundi Group listed among the ImpactAssets 50 managers in 2021.

Results

The Fund delivered a net average annual USD IRR of 2.7% since it became fully invested in 2012, with fund co-investments delivering a net IRR of 11.48% across debt and equity since co-investment inception in 2013.

CUMULATIVE RETURNS





About Caspian Debt

https://www.caspiandebt.in

Caspian Debt is the third fund promoted by Caspian Advisors a leading impact fund manager in India. Caspian Debt's mission is to enable the growth of companies that can achieve in a responsible, sustainable, and transparent manner positive social & environmental impact. We are a certified B Corporation, which means we take into account the impact of our decisions on our employees, customers, community and environment. We have served over 160 companies in the last 8 years responsibly ${\mathfrak E}$ profitability.

Our Strategy



Focusing transformational business models.

SDGs served

sectors

critical and

women-led

companies

of disbursements to



Identifying transparent, ethically professionally managed organizations that require early stage funding.



of clients were loss-

making at the time

of their loan

employed people full-time by portfolio

people reached by our portfolio

the loan cycles.

\$ 270Mn

Providing collateral free customized

loans to these organizations &

closely monitoring impact through

Amount disbursed

Next step in Caspian Debt's impact journey - Venture Debt Fund

Caspian Debt is launching thematic venture debt funds to support high-impact start-ups across sectors like food & agriculture, clean energy, healthcare, education, WASH and retail financial institutions serving the underserved low-income households or small businesses. We are looking for investor partners to join us in providing much-needed customized debt capital. Please write to us at info@caspian.in



About Grassroots Capital Management

https://www.grassrootscap.com

Since 2000, Grassroots has pioneered private investment in impact companies, starting with microfinance and evolving to include SMEs, sustainable agriculture, affordable education, and other sectors. Grassroots mobilizes the "First mover" capital that develops innovative, scalable business models to alleviate the challenges of poverty, food and health insecurity, climate and gender vulnerability, and to build resilient communities.

Milestones

2005

2001

South micro

2013

First Delaware Public Benefit Corp Caspian Debt

2003

Launch first microfinance fund of funds

2015

First of four consecutive Best for the World ratings by B Lab for Governance Customers

Anchor investment in Bellwether, Microvest, International Pilot,

International first impact becomes company to suc IPO on London Stock Exchange

2008

Partner to launch equity funds in India & Latin America targeting SME & microfinance, affordable housing with over USD 100Mn capital

Latin America equity fund winds up and returns capital to LPs

Support pilot & launch of B Corp & GIIRS Ratings

2020 Co-invest alongside USD

30 Mn in DFC financing for Caspian Debt; Co-edited Future published Brookings

Key Indicators



USD 350 millio ted across Latin America, Africa and Asia



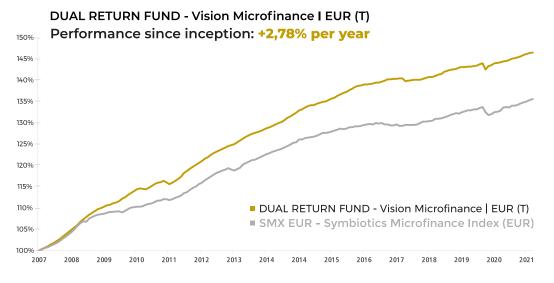
All funds exceeded return of capital



Targeted seven SDGs: poverty, hunger, gender equality, work and economic growth, responsible consumption, climate action and partnerships



The Dual Return Vision Microfinance Fund contributes to sustainable development worldwide by working towards at least 13 out of the 17 United Nations Sustainable Development Goals (SDGs). Since its inception in 2006, the fund focuses not only on financial inclusion, but also on gender equality, education, and access to clean water and energy. Through its investments in 67 emerging and frontier markets, it empowers micro-entrepreneurs and helps them get closer to their goals to improve their living standards.



Source: Cyberfinancials Datenkommunikation GmbH

Past performance is not a reliable indicator of future performance. Every capital investment is associated with a risk. Issue and redemption fees are not included in the calculation of the performance results. The performance was calculated using the OeKB/BVI method. For an investment amount of EUR 1,000, a subscription fee of EUR 10 is charged. Any custody fees may additionally reduce the investor's return. This marketing document is provided for non-binding information purposes only and does not represent any offering or invitation to purchase or sell units in an investment fund, and nor should it be deemed an invitation to submit an offer for conclusion of any contract on investment services or collateral performance. The basis for an investment in the fund is the current sales prospectus, the key investor information document ("KID", "KIID"), the fund's articles of association and the annual report or semi-annual report. These documents are available free of charge in German at the Investment Company Axxion S.A., 15, rue de Flaxweiler, LU-6776 Grevenmacher, and on the Internet at www.axxion.de.

State of the date: 30.07.2021





Committed beyond Investment

About Incofin Investment Management:

Incofin is a leading emerging markets focused impact investment management company specialized in financial inclusion and in the agri-food value chain, with an AIFM license since 2014.

Driven by a strong interest for business solutions that promote inclusive progress, Incofin aims to improve the lives of the less privileged people. By doing so, Incofin is committed to delivering positive social impact, in addition to attractive financial returns to its investors.

As a "glocal" entity, Incofin built a team of 74 members spread over its headquarters in Belgium and local investment teams in India, Colombia, Kenya and Cambodia. This allows Incofin to maintain an extensive and in-depth local market knowledge.

Fund manager KPIs

Incorporation year:

2001

financial inclusion, agri-food

Headquarters:

value chain

Antwerp

Main asset class: private debt and private equity

Main impact sector:

No. of offices:

Number of end beneficiaries:

No. of staff (FTE):

45 million people

74

Female borrowers:

AuM (USD M):

1.3 billion

Geography of investment:



Current funds:

	INCOFIN CVSO Micro-finance	Fural impulse II	FAIRTRADE ACCESS FUND™	-agrif	Incofin Inclusive	ALF	
FUND NAME	Incofin cvso	Rural Impulse Fund II	Fairtrade Access Fund SA	agRIF	Incofin Inclusive Finance Fund	Agri-Finance Liquidity Fund	Incofin India Progress Fund
THEMES: § Financial Services iii Agri-Food	©	©	¥¥¥		(E)	** *	
PRODUCT	Equity / Debt / TA	Equity / Debt / TA	Debt / TA	Equity / Debt / TA	Debt	Debt / TA	Equity
START	1992	2010	2012	2015	2018	2020	2021
AUM (USD)	98 million	46 million	54 million	148 million	24 million	46 million	60 million

New initiatives:







How we invest defines the world we want to live in

About Triodos Investment Management:

Triodos Investment Management is a globally recognised leader in impact investing. As an impact investor we serve as a catalyst in sectors that are key in in building an economy that is inclusive, green and resilient.

We have built up in-depth knowledge in sectors such as Energy & Climate, Financial Inclusion and Sustainable Food & Agriculture. We also invest in listed companies that materially contribute to the transition toward a sustainable society.

Triodos Investment Management is a wholly owned subsidiary of Triodos Bank, a leading expert in sustainable banking.

The true purpose of investing is to serve the real needs of society

We believe how we invest defines the world we want to live in, recognising the instrumental role and creative power of capital when used consciously. As an impact investor, we use money as a driving force towards a society that is humane, ecologically balanced and works for the benefit of all.

For more than 30 years, we have offered impact investment solutions that connect investors who want to make money work for positive change with innovative entrepreneurs and sustainable businesses doing just that.

Our Financial Inclusion strategy

Through our Financial Inclusion strategy, we finance values-driven organisations that use financial services to deliver sustainable development. We are active in over 45 countries in Asia, Africa, Latin America, Eastern and Central Europe, and the Caucasus, financing 100+ institutions.

Fund manager KPIs (current figures)

Headquarters

Zeist, the Netherlands

No. of staff (FTE)

AuM (USD M)

7.1 billion (30 June 2021)

No. of investees

750+ direct investments

Main geography of investment

global

Impact strategies

energy transition, food transition and an inclusive society

Main asset classes

(senior) debt, mezzanine finance and equity

Our investment focus ranges from microfinance institutions and SME banks to Fintech companies and financial institutions that address specific basic needs, such as affordable housing and education. We also look for opportunities that tie together financial services, renewable energy and sustainable agriculture.

Our financial instruments are tailored to the longterm needs of the institutions and based on their business model and the stage of development. They range from equity and mezzanine finance to (senior) debt.

Impact highlights

We manage 4 financial inclusion funds with close to EUR 1 billion AUM, offering investment opportunities for private and institutional investors. The impact created by our investment portfolio includes the following:

109

47

financial institutions

countries

18.2M

76% female borrowers

borrowers reached

69%

20.2M

rural borrowers

savers reached

20

equity investments with active board membership

www.triodos-im.com



Valcourt - your bond specialist

Valcourt S.A., a market maker, regulated by FINMA in Switzerland, with a team of experienced professionals, offers an in-depth knowledge of bond markets and a first-class dealing service. Over the years, Valcourt has built a network of over 800 counterparties and is working with market correspondents and financial institutions such as banks, independent asset managers and investment funds.

Active for 34 years in the bond market, Valcourt has developed expertise in private debt deals, facilitating primary issuances and secondary transactions in a traditionally illiquid market, thanks to its large network of counterparties and its extensive experience.

"Impact investing can be a powerful instrument for change"

With the mainstreaming of impact investment, Valcourt and its team wanted to be at the forefront of this growing market. In the last years, the company has facilitated numerous transactions in emerging countries, in both hard and local currencies, notably in the sectors of microfinance, trade finance and renewable energy.

Our company pays particular attention to the personal development of our employees by promoting continuous training, including the understanding of the latest impact investing market trends.

As a key partner in the private debt sphere, the team of experienced Fixed Income Sales / Traders applies its know-how and independent expertise to improve the liquidity in the impact bond market.

We are currently pricing on Bloomberg and making the market for various actors in the private debt sphere, including several impact bonds. Our knowledge and understanding of the market combined with our extensive network allow us to offer secondary opportunities in a reasonable time and competitive prices to our counterparts.

Impact investing actors are invited to contact Valcourt for any Buy and Sell request. Any question is welcome. All enquiries will be treated in the strictest confidence.

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FINANCIAL INCLUSION

FUND MISSION/STRATEGY

The Strategy provides finance to micro, small and medium enterprises in developing and emerging economies by providing senior debt and sub-debt capital to Financial Institutions. The Strategy aims to improve access to finance for low-income people and potentially realize above-average returns in an inefficient market.

KEY IMPACT THEMES

- > Financial inclusion: Improve access to finance for low-income people in developing and emerging economies.
- Client-centric approach: Enhance MFI clients' capacity to manage their financial affairs in a responsible way, prompting MFIs to increase their transparency and optimally protect the interests of their clients.
- > Organizational development: Prompt MFIs to improve the quality of their reporting on financial and nonfinancial performance according to generally agreed-upon standards.

PROVEN TRACK RECORD

Realized annualized net return: 3.7% since inception in 2014 (ultimo June 2021). Since 2007 more than 250 Financial Institutions from 46 countries were screened, for a total of approximately $\ensuremath{\in} 3.7$ billion. The Fund measures the impact on the following Sustainable Development Goals (SDGs):

















FUND KPIS (CURRENT FIGURES)

Asset class

Private Debt

Regional focus

Emerging & frontier

Total assets investment strategy € 135 million

€ 133 IIIIII0II

Currency strategy

Investor-type

Institutional and retail

Fund style

Buy & hold

FUND STRUCTURE

ACTIAM Financial Inclusion Fund Open-end (AIF)

ACTIAM Impact Financial Inclusion Fund

Open-end (FBI, ISIN: NL0015000GU4)

Universe

Debt & sub-debt, HC & LC

Target Net Return

EUR 3% - 5%

ACTIAM makes investment opportunities scalable in highimpact themes like financial inclusion. With a track record of around 15 years, its team of 7 professionals demonstrates a sound performance.

Contact: romee.vanwachem@actiam.nl



Leveraging advanced technology and knowhow

Founded in 2013 and headquartered in Singapore, Asia Africa Investment & Consulting (AAIC) drives value at its investee companies through a combination of knowledge, people and capital built on its unique Japanese background. Before the launch of the current Africa Healthcare Fund, AAIC already has had years of impact investing experiences in the region since 2015.

Realizing social issues and creating sustainable businesses

The Africa Healthcare Fund (AHF) is an active investor into the healthcare sector in Africa. The rise of non-communicable diseases in the region as well as necessity of enhancing healthcare services to wider population requires the continual strengthening of innovative solutions and advanced medical care. AHF invests in healthcare tech including EMR provider, Al-powered teleradiology, online mental wellness platform, InsurTech and dental and online pharmaceutical e-commerce, patient communication etc. as well as specialized advanced services such as dialysis centers, and maternity hospitals to strengthen the entire healthcare ecosystem to deliver inclusive, high-quality, and affordable healthcare to African people. AHF also invests in businesses focused on logistics and fintech to support the healthcare ecosystem.

Africa Healthcare Fund KPIs

Asset class

Venture Capital

Impact sector

Healthcare, Financial Services, Mobility

Regional focus

Africa

Total fund size (USD)

50 million

No. of investees

28 (as of August 2021)

Investor-type

Corporates, Financial Institutions, HNWIs

Shaping the future together

The onslaught of the Coronavirus against the world has made severe health and economic damages to all and disproportionate impact on low-income countries, all the more highlighting the need for impact investments. AAIC will continue to play an active advisory role in not only healthcare, but also other sectors such as Food, Education, amongst others in its subsequent funds. Reach out to the team at: contact@aaicinvestment.com



BIM Ltd. is a member of the Panamerican Group established in 1994. As a group, we have the vision to administrate and operate responsible investments with an internationally recognized corporate brand.

BIM has the mission to originate and manage investment vehicles and specialized programs with a global positions brand, applying its regional experience and local presence seeking to create positive impact beyond financial return.

Locfund Next













Relationship with 70+ Institutions



Local Presence in 14 countries



USD 250MM+ Disbursed in Impact Investments





Technical Assistance and support enhancing the governance o Microfinance Institutions

nergy

Development of small solar energy plats aiming the growth of distributed energy



Member of the Schroders Group

Investing to mitigate climate change

Fund mission/strategy:

The BlueOrchard Sustainable Asset Fund (BOSAF) is providing debt funding to renewable energy, energy efficiency, sustainable transport and data infrastructure in emerging and frontier markets globally. The Fund's focus on mid-size projects, flexible mandate, active engagement and ability to act fast aims at offering particular opportunities for impact and financial return.

Closing the SDG funding gap:

The Fund's investments contribute to closing the funding gap towards the United Nations' SDGs. This reflects the large and unmet need for infrastructure in emerging and frontier markets on the one hand as well as the essential role of infrastructure for social and economic development on the other hand. Given the typically long life of infrastructure assets, investments in sustainable and low-carbon infrastructure can make a difference for decades. The Fund's impact management, measurement and reporting reflects best practice standards for ESG assessment, impact management, and SDG mapping along the investment process, driven by an independent impact team.

Fund KPIs*

Asset class

Sustainable Infrastructure

Impact sector

Climate Finance

Regional focus

Global emerging and frontier markets

Investor-type

Institutional

SDGs addressed

SDG 8 & 13

Reference currency

USD Hedged

*as of 10/2021

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Camco Clean Energy is a climate and impact fund manager, leading the clean energy transition in emerging markets.

We offer practical and valuable financing solutions by pairing the discipline of a development bank with the agility of a small private company.

With our long and proven track record in sustainable finance and on-the-ground experience in African and other emerging markets, Camco combines local presence with global connections, resulting in a practical approach and secure, clean returns.

Renewable Energy Performance Platform

Camco manages the Renewable Energy Performance Platform (REPP), a USD 200m fund specialised in financing small and decentralised renewable energy projects in Sub-Saharan Africa. REPP is funded by the UK's International Climate Finance through the Department for Business, Energy and Industrial Strategy (BEIS).

REPP KPIs

Asset classDebt, Equity

Impact sector
Energy

Regional focus

Sub-Saharan Africa

Total assets (USD)200 million

No. of investees

Investor-typeGovernments, DFIs

Through its investments, REPP has:

- Supported 28 projects across 16 countries
- Provided first time energy access to more than 640,000 people - with a 170% increase in the last year alone.
- Committed USD 49.9m and mobilised USD 113m from third parties.
- Total planned capacity by end of 2023 through currently contracted projects is 153MW, with ~995,000 tCO2e avoided per year.



Connecting the economic resilience and vibrancy of low-income communities with capital markets - #equityforequity.

Fund mission/strategy:

Elevar Equity has been at the forefront of impact investing since 2006. Led by an entrepreneurial emerging markets team, Elevar seeks to connect the economic resilience and vibrancy of low-income communities with capital markets. To address issues of access and inequity, Elevar invests early growth capital in entrepreneurs and businesses that demonstrate a direct correlation between high impact and returns. The Elevar Method of investing has democratized essential products and services for over 40 million low-income households in India and Latin America, and catalyzed billions of dollars of capital into 40+ companies.

Impact:

Below are our investment themes and related impact: > Overall: 40 million households directly impacted

- > Financial Inclusion: 1million+ female borrowers; 50,000+ thin file and new borrowers; 28,000+ affordable housing borrowers
- > MSME & Market Linkages: 450,000+ MSMEs served

Fund KPIs:

Asset class

Venture Capital

Impact sector

Financial Inclusion, Education, Agriculture, MSMEs

Regional focus

India, Latin America

Total assets (USD)

315 million

No. of investees

41

Currency strategy

USD

Investor-type

Diverse set of institutional investors

- > Education & Employability: 4,500+ schools supported; 4.2 million+ students served; 70K+ jobs created
- > Agri Supply Chains: 220,000+ farmers impacted directly; 4 million+ farmers impacted indirectly



IMPACT INVESTING IN THE RESILIENT FOOD SECTOR

ABOUT INOKS CAPITAL

INOKS Capital (thereafter "INOKS") is a Swiss asset manager prudentially regulated by FINMA, providing customized financing solutions, via collective investment schemes or segregated mandates, to companies active non-speculatively in mainly the Agriculture/Food sector. INOKS



aims to be the market leader in capital access in the real economy while applying its proprietary Impact framework.

INOKS IMPACT FRAMEWORK

INOKS deploys a two-fold investment strategy consisting of investing its capital (i) responsibly by mitigating negative effects according to ESG criteria and (ii) impactfully by con-tributing to address specific sustain-ability challenges and generating positive impact according to INOKS's four Impact Themes.

INOKS CAPITAL KPIS

Asset class: Alternative Credit - Loans
Regional focus: Global with EM bias
Total assets (USD): 680 million
Currency strategy: EUR, CHF, USD

No. of staff (FTE): 31 No. of investees: 39 Incorporate year: 2004

No. of PAIFs: 4

Main impact sectors:

Food Security, Poverty Reduction, Environmental Quality, Women Empowerment

RESILIENT RETURNS FOR INVESTORS

INOKS' managed funds have been achieving positive returns for more than ten years now with a low correlation to traditional asset classes offering resilience to investors. The food sector is an essential economic sector with inelastic demand pattern as witnessed during COVID pandemic.



The Microfinance Enhancement Facility (MEF) was initiated in 2009 by KfW (German development bank) and IFC (International Finance Corporation) as a joint initiative with OeEB (the Development Bank of Austria). It has since attracted substantial interest from private investors. MEF supports economic development and prosperity in developing markets globally through the provision of short and medium-term financing to financial institutions which support microfinance to low-income households and microenterprises (MFIs). MEF is the 6th largest Microfinance Investment Vehicle (MIV) globally as per year-end 2020.

Demand-oriented impact Fund with wide outreach

Co-advised by four leading private investment advisors (BlueOrchard Finance AG, Incofin Investment Management, responsAbility Investments AG and Symbiotics SA), MEF's objective is to promote and support microfinance activities as a powerful catalyst in stimulating growth, creating jobs and reducing poverty in emerging markets around the globe. MEF is a signatory of the Operating Principles for Impact Management, a key commitment given impact is at the core of its mission.

MEF KPIs:

Asset class: Private debt **Impact sector**: Microfinance

Regional focus: Developing countries worldwide

Total assets (USD): 760 million

No. of investees: 139 MFIs in 45 countries

Currency strategy: Hedged, with 63% of portfolio denominated in local currency (including countries

where USD and EUR are legal tender)

Capital structure: DFIs and private sector through one class of notes and three classes of shares, including a first loss tranche.

Average SPI4-ALINUS score: 71%

Since inception MEF has supported low-income borrowers by providing over USD 2 billion to more than 270 financial institutions active in the microfinance space in nearly 60 developing countries worldwide.

MEF's impact in a nutshell, as of year-end 2020:











Since 2009, Nexus for Development has leveraged market-based mechanisms to provide small and medium enterprises (SMEs) operating across Asia with access to finance. Our organization has launched innovative funds to facilitate the fulfilment of this mission, with a broader mandate to address poverty and mitigate climate change. Our funds seek to use creative, blended finance models to crowd-in capital from foundations, governments, international development agencies, and the private sector.

THE PIONEER FACILITY ("PF")

The PF is a developing economy impact fund managed by Nexus for Development. The PF provides short to medium term debt capital to private growth-stage enterprises. These enterprises are selected based on their commitment to sustainable economic development through the scaling-up of low-carbon solutions across the sustainable energy, clean water, and improved sanitation sectors, which benefit and create positive impact in their communities.

The PF's objective is to provide access to finance to commercially-viable enterprises that fall into the 'missing middle' of the lending pyramid. The PF seeks to deploy capital to graduate these enterprises, facilitating their access to the next stage of capital raising, whether it be an equity raise or additional debt from the formal banking sector.





A UNIQUE BLENDED FINANCE STRUCTURE FOR MSMES IN SUB-SAHARAN AFRICA

REGMIFA aims to foster economic development, employment creation and poverty alleviation in Sub-Saharan Africa. The Fund provides innovative financial products and technical assistance support to Partner Lending Institutions serving MSMEs and low- and middle-income households (LMIHs). The Fund is a unique public-private partnership between development finance institutions, private investors, and African stakeholders.

IMPACT IN 2020

Contribution to 3 SDGs: No poverty, Gender Equality & Decent Work and Economic Growth

- > 165,188 end-borrowers reached
- > 1,220 jobs supported at FIs' level
- > 64% of FIs served had assets below USD 30 million at disbursement
- > 49% female clients financed (vs. 37% male)
- > USD 826 average loan size of end-borrowers

REGMIFA KPIs

Launched: 2010

Asset class: Fixed-income

Impact sectors:

Microfinance, SME banking, LMIHs.

Total assets (USD): 158 million

No. of investees: 52 (as of June 2021)

No. of countries: 20

Currency strategy: local currency, fully hedged

Investor-type: Public, Professional

COVID-19 IMPACT ON END-BORROWERS SURVEY

REGMIFA participated in a leading industry initiative to assess the impact of the pandemic at the level of end-borrowers.

3,150 end-borrowers of 5 FIs in 5 African countries.

- > The financial situation worsened for 93%
- > The income decreased for 89%
- > Food consumption decreased for 44%
- > However, 78% were at least somewhat confident they could make repayments

TRACK RECORD TECHNICAL ASSISTANCE



INVESTING FOR IMPACT

The Swiss Investment Fund for Emerging Markets (SIFEM) is the Development Finance Institution (DFI) of the Swiss Confederation. SIFEM promotes long-term, sustainable, and broad-based economic growth in developing countries and emerging markets by providing financial support to commercially viable small and medium-sized companies (SMEs) as well as fast-growing enterprises. This helps create and secure more and better jobs and reduce poverty while also contributing towards the integration of these countries into the global economic system. SIFEM, together with its co-investors, has supported the creation and maintenance of nearly 900,000 jobs world-wide. SIFEM also targets investments that contribute to climate change mitigation and to fostering women's economic empowerment. Around 40 per cent of employees in SIFEM portfolio companies are women and SIFEM is an active member of the "2X Challenge: Financing for Women Initiative".

SIFEM invests through 100 financial intermediaries by investing indirectly in local or regional risk capital funds and by providing credit lines to local banks and other financial institutions, often in collaboration with other DFIs and private investors. In contrast to other DFIs, SIFEM has a strong exposure to private equity as 65.9 per cent (31 Dec 2020) of its portfolio are equity and quasi-equity instruments, and around 34.1 per cent (31 Dec 2020) are current income earning assets.

FUND MANAGER KPIs

Incorporated in its current form 2011

Headquarters

Bern

No. of offices

1

No. of employees

30 (Obviam AG)

Total active commitments (USD) 884 million

Total assets (CHF)

617 million

Total investments to date (USD)

1.147 billion

No. of active projects

100 (83 funds and 17 financial institutions)

No. of investees

More than 500

Geography

More than 70 countries

Impact sectors

Broadly diversified portfolio, including industry & manufacturing, infrastructure, financial services, energy, and agriculture

Internal rate of return (IRR)

5.2% (31 Dec 2020)

Total Value over Paid-In

120%

For further information - www.sifem.ch





acronyms

AUM	assets under management	MFI	microfinance institution
ВОР	base of the pyramid	MIV	microfinance investment vehicle
CAGR	compound annual growth rate	MSCI	Morgan Stanley Capital International
CGAP	Consultative Group to Assist the Poor	MWh	megawatt hour
CHF	Swiss franc	NAV	net asset value
CO2	carbon dioxide	NGO	non-governmental organization
COVID-19	coronavirus disease 2019	P/B	price-to-book
D/E	debt-to-equity	PAIF	private asset impact fund
DFI	development finance institution	ROE	return on equity
ESG	environmental, social and governance	SDG	Sustainable Development Goal
EUR	euros	SECO	Swiss State Secretariat for Economic Affairs
FX	foreign exchange	SME	small and medium enterprise
GDP	gross domestic product	SMX	Symbiotics Microfinance Index
GIIN	Global Impact Investing Network	TCX	The Currency Exchange Fund
GNI	gross national income	TER	total expense ratio
HNWI	high-net-worth individuals	USD	U.S. dollars
JPM	J.P. Morgan		

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