

About Tameo

Tameo is a Swiss impact investing specialist serving the financial industry with independent expert solutions. Tameo guides investment funds, managers, and investors through the entire impact investing journey. It offers the most comprehensive online database of impact funds, customized analyses, and independent valuations. Through its research and advisory services, Tameo empowers clients to move towards best-in-class impact measurement & management. Tameo acts as the business services manager of the Swiss Investment Fund for Emerging Markets (SIFEM).

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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

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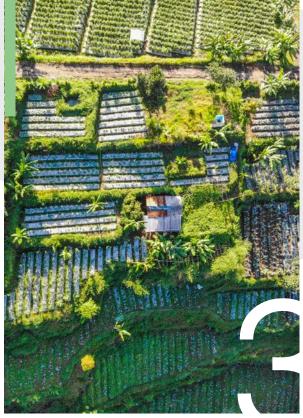


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Sponsorship contributions

This report would not have been possible without the leadership and sponsorship of:

- ___ the Center for Financial Inclusion (CFI)
- Luxembourg's Ministry of Foreign and European Affairs under its Directorate for Development Cooperation and Humanitarian Affairs
- ___ Symbiotics

each supporting Tameo in conducting this study.

About the Center for Financial Inclusion

The Center for Financial Inclusion (CFI) works to advance inclusive financial services for the billions of people who currently lack the financial tools needed to improve their lives and prosper. We leverage partnerships to conduct rigorous research and test promising solutions, and then advocate for evidence-based change. CFI was founded by Accion in 2008 to serve as an independent think tank on inclusive finance.

website: www.centerforfinancialinclusion.org

About the Directorate for Development Cooperation and Humanitarian Affairs

The Luxembourg Development Cooperation pursues the main objective to contribute to the eradication of extreme poverty and the promotion of economic, social and environmental sustainability. Its interventions are closely aligned with the Agenda 2030 and aim to promote meaningful progress in achieving the SGDs. Luxembourg's focus lies on four interrelated thematic priorities: Improving access to quality basic social services, enhancing socio-economic integration of women and youth, promoting inclusive and sustainable growth and strengthening inclusive governance. In all of its activities, the Luxembourg Development Cooperation places a particular emphasis on implementing its three cross-cutting priorities, namely human rights, gender equality and environmental sustainability.

website: www.maee.gouvernement.lu/en.html

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.

website: www.symbioticsgroup.com

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:

- AlphaMundi Group
- ___ BIM Investments
- Gender Lens Initiative for Switzerland (GLIS)
- ___ Impact Asset Management
- ___ Incofin Investment Management
- ___ INOKS Capital
- Microfinance Enhancement Facility (MEF)
- Regional MSME Investment Fund for Sub-Saharan Africa (REGMIFA)
- ___ Triodos Investment Management
- Sasakawa Peace Foundation

KEY FINDINGS

Finance and business indicators



USD 84bn

market size1

16.9% growth

in total assets in 2021

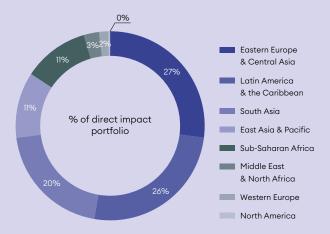
122 countries

invested in across emerging and frontier markets

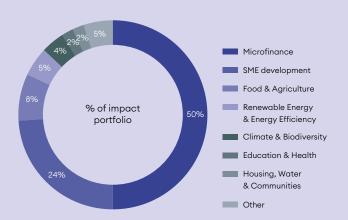
64% market share

concentrated among the top 10 investment managers

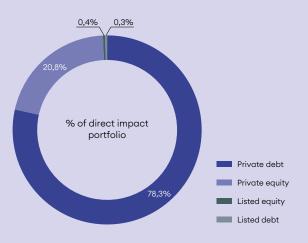
Funds' portfolio by region



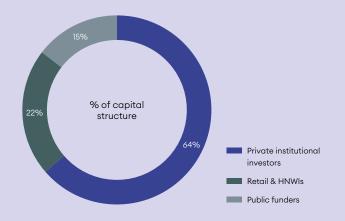
Funds' portfolio by impact sector



Funds' portfolio by asset class



Sources of capital



^{34%} survey coverage

KEY FINDINGS

Impact indicators



USD 6,541

average GNI per capita of funds' country portfolios

46% women

in the workforce of investment managers

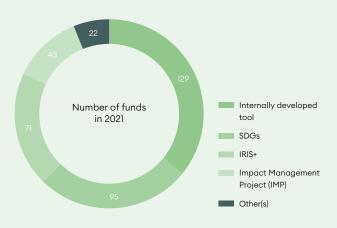
130k end-clients

outreach²

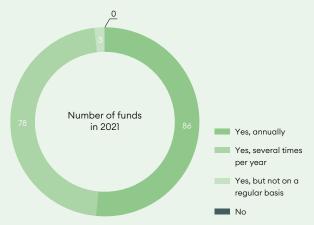
31% women

in the investment committees of investment managers

Tools to manage and measure impact



Impact performance monitoring



Main SDGs targeted









² median observation

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 2022 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.

The following key takeaways from the 2022 PAIF report are presented at two different levels:

1. THE OVERALL PRIVATE ASSET IMPACT FUND MARKET

A market size of USD 84 billion

Tameo has identified 672 funds run by 346 fund managers. We estimate the cumulative size of this market at USD 83.6 billion overall.

Multi-sector fund strategies are the most prevalent in the market

Out of the 672 funds currently operating in the market, 206 have a diversified multi-sector focus, with a combined size of USD 28 billion (33% of the total). Microfinance focused funds are the second most prevalent in the market (126 funds, 24% in volumes). SME development funds are typically smaller on average (9% of total assets), but still account for 17% of all funds (i.e. 116 funds out of 672). Climate & energy funds (115) account for 21% of the total market size.

Private equity funds account for half of the impact fund universe

In terms of asset class, private equity funds lead the way both in terms of number of funds and overall volumes. Today, there are 357 funds out of 672 (53%) that primarily have a private equity approach. These funds cumulatively size at USD 41.6 billion, or 50% of the total. Fixed income funds rank second with 218 funds and USD 32 billion. Mixed funds compose the rest of the universe.

One-fourth of assets are managed out of the United States

Investment managers headquartered in the United States manage 25% of the USD 84 billion impact fund market. Swiss-based investment managers absorb 15% of the market share, while the Netherlands (11%), the United Kingdom (10%) and Germany (7%) complete the top 5 investment manager location.

| 2022 PAIF REPORT EXECUTIVE SUMMARY |

2. THE SURVEYED SAMPLE

The 2022 study covers 34% of the overall impact fund market and 88% of the microfinance fund market

This survey compiles data on 198 funds affiliated with 94 investment managers that are based in 27 countries. In terms of assets under management, the survey covers nearly 35% of the private asset impact fund market, or USD 28.8 billion cumulatively. The sample size of microfinance funds adds up to USD 17.9 billion, representing 88% of its respective estimated total market size of USD 20.4 billion.

In 2021, growth recovered; forecasts show a lower but still positive single-digit growth for 2022

Total assets grew by 16.9% in 2021, demonstrating a recovery from the pandemic across nearly all impact sectors and asset strategies. Expectations are, however, lower but still positive for 2022 (6.0%).

— Assets are managed mostly out of Switzerland, at 33%

The surveyed sample is tilted towards Switzerland-based investment managers who represent 33% of the assets under management (AUM) of the sample, followed by Germany-based investment managers (18%), Netherlands-based companies (14%) and US-based companies (14%). When considering only microfinance funds, 77% of the overall sample size is managed by 10 firms, signaling a concentrated market.

Fund portfolios in impact-related activities are above the 80% mark, while cash levels decreased by 9% in 2021

The balance sheet structure of funds indicates that funds invest 83% of their assets in impact-related activities, while cash stands at 11%. Both elements have witnessed contrasting growth patterns in 2021, with the impact portfolio increasing by 19% and cash decreasing by 9% compared to end of 2020. This points to a more effective allocation of fund assets in 2021 and a return to pre-Covid levels of 2019 when the impact portfolio and cash respectively represented 84% and 10% of total assets.

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 18.9 billion outstanding (90% senior debt; 10% subordinated debt) as of December 2021. Private equity stands at USD 5.0 billion (78% common equity; 22% preferred equity), with higher exposures outstanding per investee (USD 6.0 million) compared to private debt (USD 2.6 million).

Private equity funds are smaller in size than fixed income and mixed funds, and have a less diversified portfolio

The average fund size of private equity funds stands at USD 80 million, lower than fixed income (USD 192 million) and mixed funds (USD 117 million). They also typically have a lower number of investees in their portfolio (12 investees on average vs 56 investees for fixed income funds and 28 investees for mixed funds).

| 2022 PAIF REPORT EXECUTIVE SUMMARY |

__ Investees in their growth-stage absorb the majority of funds' portfolios

As of December 2021, 59% of funds' direct impact portfolio was allocated to investees in their growth-stage, followed by mature-stage investees (34%) and early-stage investees (8%). Early-stage investments are more prevalent for private equity funds (15% of direct impact portfolio vs. 2% for fixed income funds and no early-stage investments for mixed funds). Portfolios into early-stage companies are also more prevalent for funds with a primary focus on food & agriculture (18%), multi-sector (16%) and climate & energy (10%).

Microfinance remains the most attended sector, attracting 50% of portfolio flows

Portfolio outstanding as of December 2021 was mostly allocated into the microfinance sector, cumulatively amounting to USD 11.9 billion of invested portfolio (50% of the total). The second most attended sector is SME development (24%), followed by food & agriculture (8%). The average portfolio exposure into investees that operate in the climate & biodiversity segment is the highest at USD 7 million. On the contrary, funds have the smallest exposure on average when investing into companies in the food & agriculture segment, at USD 2 million.

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

Financial institutions absorb the highest volumes (USD 18.9 billion outstanding; 82% of the total direct portfolio), making them the prime investee type of impact funds. They are followed by non-financial SMEs (10%), whereas non-financial corporations (4%) and project finance (1%) remain uncommon within the PAIF universe. Today, fintech and embedded finance companies together represent 3% of funds' total direct impact portfolio, but investment managers expect a moderate increase in their number of transactions towards such companies in the coming three years.

The surveyed funds invest in 122 countries, with two regions – Eastern Europe & Central Asia, as well as Latin America & the Caribbean – capturing over half of the funds' portfolios

Eastern Europe & Central Asia together with Latin America & the Caribbean capture 53% of portfolio outstanding as of December 2021. South Asia (20%) comes in third but is the region witnessing the highest growth year-on-year (+41%). The top country is India (15% of portfolio outstanding), well ahead of Ecuador (5%), Georgia (4%), Cambodia (4%) and Mexico (4%).

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

Fund's debt investments are mostly denominated in hard currency (66% vs 34% in local currency, of which 33% remain unhedged). Fixed interest rates are also more used than floating rates, respectively at 71% and 29%.

| 2022 PAIF REPORT EXECUTIVE SUMMARY |

Funds invest in nearly 70 different currencies but most use foreign exchange (FX) hedging to mitigate risk

In total, survey participants reported debt investments in 69 different currencies, among which 65 qualify as local (non-hard) currencies. The Indian rupee is the top local currency in volume terms, while the USD and EUR top all currencies used on the lending side.

Write-offs and loan provisioning resumed to prepandemic levels in 2021, from record high levels in 2020

Annual provisions and write-offs decreased to 0.46% and 0.24% of average assets in 2021 (down from 1.11% and 0.64% respectively in 2020). In terms of country-risk levels, the bulk of funds' country exposure sits within non-investment grade ranges (57%, from C to Ba1) on Moody's long-term sovereign risk rating scale, with the median rating at Ba2.

Fees and costs have slightly decreased to reach 2019 levels, after witnessing an increase in 2020.

Management fees, which include all administration, investor relation and distribution costs, averaged 1.48% in 2021 for all funds. Operating expenses amounted to 2.23%. Both have decreased compared to 2020 (1.55% and 2.30% respectively). Since 2007, both management fees and total expense ratio (TER) have been trending downward for microfinance funds, with the former decreasing from 1.9% to 1.5% and the latter from 2.2% to 2.1%.

 Private institutional investors are the source of nearly two thirds of funds' investor money

PAIFs from the sample source 64% of their funding from institutional investors, up from 55% as of end of 2020. This signals a rapid growth in institutional money towards impact funds (+30% y-o-y). More than a fifth of capital (22%) is sourced from private retail and qualified individuals (high-networth individuals – HNWIs) and the rest (15%) from public funders. The latter category leads the way in the climate & energy and health & education segments.

 Net returns have improved across all asset strategies, and market sentiment remains overall positive for 2022

Impact investing strategies brought positive financial returns for investors in 2021. At the median observation, unleveraged funds generated net returns of around 2.6% in USD, a result mainly driven by fixed income strategies (2.4%), with higher returns for mixed (4.2%) and equity strategies (6.8%). In the same currency, leveraged funds returned 2.3% on their equity tranche and 3.5% for their noteholders.

 PAIFs have a clear intent to positively contribute to the Sustainable Development Goals (SDGs)

The surveyed funds target nearly all SDGs, except SDG 16, 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, and nearly 50% of PAIFs in the sample reported monitoring impact performance several times in a year, while the rest do it once a year. Additionally, almost all funds subject to SFDR disclosure in our survey reported falling under Article 9 of the new regulation, implying they have sustainable investment as their objective.

Median outreach of nearly 130 thousand endclients in underserved markets

Quantitative impact results show a bias towards rural (60%) and women (59%) end-clients. In terms of country outreach, direct impact portfolio is allocated mostly in lower middle-income countries (48%), followed by upper middle-income countries (43%), with only 2% in low-income countries. The average gross national income (GNI) per capita targeted by PAIF strategies surveyed stands at USD 6,541, or about half the world average at USD 12,070.

Investment managers achieved good gender parity across the organization, with, however, the share of women in senior leadership positions being typically lower

Across all organization sizes, women represented approximately half of the investment managers' workforce. When looking at senior leadership positions (i.e., the C-suite, Board of Directors, investment committees), we see that their participation is typically lower, representing about a third of the team.

Most funds that adopt a gender lens investing (GLI) approach consider gender-related outcomes as one of the most important decision factors

Gender-related outcomes appears to be one of the top priorities of funds adopting a GLI approach (69% of funds with a GLI strategy), thus integrating gender considerations at the heart of their investment decision process. Most funds (79% of those with a GLI strategy) are considering both the investee's current state and potential to improve gender equity as equally important during their investment decision.



Methodology and peer group definitions

Starting June 2022, 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).

Our desk review enabled us to identify and reach out to nearly 350 fund or investment managers to collect fund-level data up to the month of September 2022. We then complemented our study sample through publicly available fund information to the extent possible. These four months of data collection enabled us to build a record sample size of 198 impact funds run by 94 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 2021 exchange rates. For the calculation of growth indicators and historical datapoints on microfinance funds, we also use end of 2021 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

SURVEY INCLUSION CRITERIA

CRITERIA	INCLUDED	EXCLUDED		
Impact intentionality	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		
Asset type	Private assets	Listed assets		
Prime geographical focus	Emerging and/or frontier markets	Developed markets		
Vehicle type	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		

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 funds

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 funds

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 funds

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;³ 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.

DEFINITIONS OF IMPACT SECTORS USED TO CLASSIFY PAIFS AND RELATED SUSTAINABLE DEVELOPMENT GOALS (SDGS)

Climate & energy funds

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 funds

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 funds

³ Available at https://www.cgap.org/research/publication/microfinance-investment-vehicles-disclosure-guidelines.

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 funds

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 funds

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 funds

Refers to the financing of small and medium enterprises, broadly defined as employing respectively 5 to 50 and 50 to 250 employees.4 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).

⁴ 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







Impact fund management landscape

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. The chapter then looks at how impact fund managers are positioned within the impact investing value chain, including information on their business model, roles and geographical focus. It then quantifies their market share, comparing the overall market with what the study sample shows, first in terms of their headquarters and then at a company level. Finally, on a more qualitative side, the chapter describes industry initiatives of which they are signatories and members, as well as their internal gender-lens practices and considerations.

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An USD 84 billion 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.

According to the Global Impact Investing Network (GIIN),⁵ there were USD 1.164 trillion of assets under management (AUM) in impact investing at the end of December 2021 managed by over 3,349 organizations. Among a subgroup of 896 organizations, fund managers represent 61% of total impact AUM, followed by development finance institutions (DFIs) that account for 27% of impact AUM. This most recent estimate of the overall market size includes a variety of investor organizations, together investing in a variety of geographies and using a variety of instruments.

In comparison to global capital markets, impact investing represents only a small fraction. The sector nevertheless enjoys very strong backwinds and attraction among asset management and wealth management operators. Having passed the USD1trillion

mark also provides an indication of how far impact investing has grown since the terminology was coined nearly 15 years ago. 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. 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 112 trillion total at the end of 2021.

At Tameo, our focus is on a specific sub-segment of the overall impact investing market. Out of the USD 1.164 trillion in size, the universe that the 2022 PAIF report seeks to grasp regroups all investments that flow through funds and being re-directed into emerging and frontier markets. These funds are managed by private companies (meaning investment managers) on behalf of either their private or public sector investor-clients.⁸ Tameo estimates this market segment to include today a total of 346 investment managers, covering 672 private asset impact funds, with combined assets under management of USD 83.6 billion.

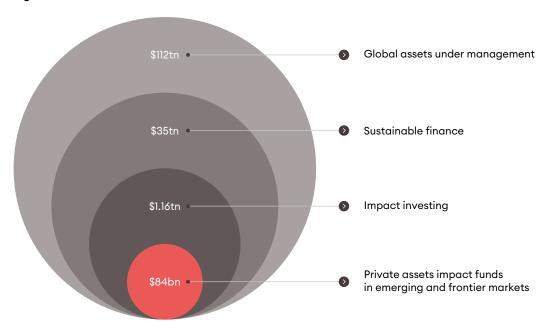
⁵ Global Impact Investing Network (GIIN) (2022). Sizing the Impact Investing Market 2022.

⁶ Global Sustainable Investment Alliance (2021). The Global Sustainable Investment Review 2020.

⁷ Boston Consulting Group (2022). Global Asset Management 2022: From Tailwinds to Turbulence.

⁸ The study excludes funds managed by public sector entities like development finance institutions (DFIs).

Figure 2 - Investment universe



We estimate our private asset impact fund universe by performing an extensive desk research, collecting data on the size of identified non-participant funds and adding the total assets of funds which participated in our survey. When we could not find any information on the size of non-participant funds, we applied the reported median fund sizes of comparable funds positioned within the same primary impact sector and the same asset class. For funds with a global strategy, investing both in developed and emerging economies, we considered that half of their AUMs were invested in emerging and frontier markets.

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 and fund managers sit at the center of the value chain, pooling investor money and injecting it with an impact bias in underserved emerging and frontier economies.

Their target market segment can vary according to their impact aspirations and goals. In most cases, and whatever the impact sector of focus, end-beneficiaries will typically include:

- (1) low- and middle-income households and/or
- ___ (2) micro enterprises in low- and middle-income ___ economies.
- (3) small and medium sized enterprises (SMEs) in low- and middle-income economies.
 - (4) larger corporations in low- and middle-income
- ___ economies.

These final recipients of the capital will include a population that is in most cases financially underserved. Such target recipients will be living or operating in both urban and rural areas of the countries. They will also be drivers of the local economies through a variety of different activities. For micro, small and medium enterprises (MSMEs) this can include trade, services, agriculture, transportation, and production to name a few. For individuals (low- and middle-income households), the capital will generally be used for productive consumption, including education, housing, and other immediate necessities.

To reach their targeted apply their theory of change, PAIFs will typically provide debt and/or equity financing to portfolio companies, namely investees that will cater to these end-beneficiaries, such as local financial institutions. While most PAIFs investments still flow today through financial institutions (please refer to chapter Investee types), in recent years PAIFs have also increasingly channelled capital directly towards end-beneficiaries when it comes to non-financial companies.

Therefore, investees can be categorized as:

- ____ financial institutions, such as microfinance institutions (MFIs), SME banks, fintechs, or commercial banks (to a lesser extent) to name a few.
- (2) **projects or project finance transactions**, namely related to infrastructure development
- (3) non-financial SMEs, or larger non-financial corporations.



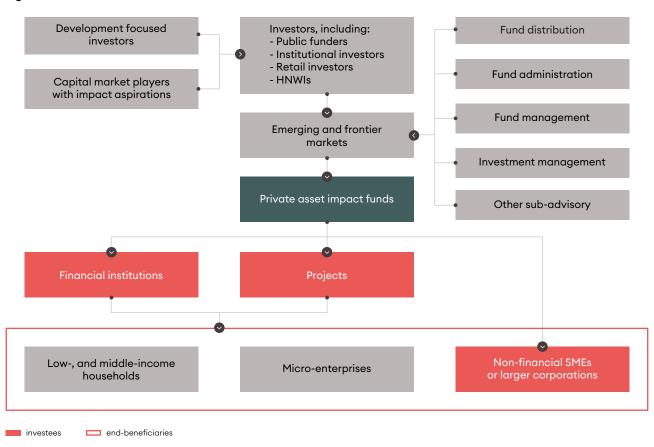


Table 2 - Defining the investment universe and value chain

STAKEHOLDER	DEFINITION	TYPE/ROLE
Public funders	Including multilateral banks, development finance institutions and other government and policy investors.	Capital providers
nstitutional investors	Pension funds, financial institutions (such as insurance companies, banks and asset management companies), treasury departments of companies, funds of funds, NGOs and foundations.	Capital providers
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).	Capital providers
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.	Capital providers
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.	Pooling capital and investing
Emerging and frontier markets	Upper middle, lower middle and low-income countries, as defined by the World Bank.	Target geographies
Financial institutions	Any type of financial institutions (banks, non-bank financial institutions, credit cooperatives, savings houses, leasing schemes, insurance plans, etc.) addressing the base of the pyramid (BOP).	Investees
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.	Investees
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.	Investees / End-beneficiaries
Small and medium enterprises (SMEs)	Businesses which employ between 5 and 50 employees (small), and between 50 and 250 employees (medium).	Investees / End-beneficiaries
licro-enterprises	Small-scale businesses which generally operate with less than 5 employees, and in most cases have no employee at all besides the owner. In developing countries, they are the drivers of the domestic economy alongside SMEs.	End-beneficiaries
ow- and niddle-income nouseholds	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.	End-beneficiaries

Market share & concentration

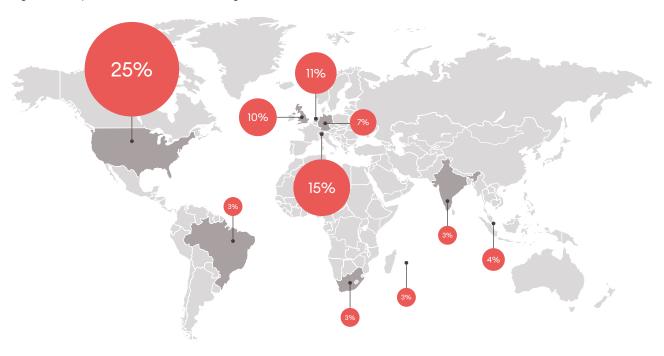
As of today, the 642 impact funds forming our universe of analysis are affiliated to 346 investment managers, a number that encompasses both fund managers covering the full PAIF value chain, as well as other more specialized entities offering only investment management services or a wider array of services. Together, they are in 56 countries.

The overall managed money is concentrated around a few high-income countries. The top 5 countries of investment management represent 68% of the USD 84 billion market, while the top 10 accounts for 83%. Firms headquartered in the United States have the highest concentration with a market share of 25%, followed by four European countries: Switzerland (15%),

the Netherlands (11%), the United Kingdom (10%) and Germany (7%). In terms of number of funds, 152 funds are affiliated to US-based investment managers, 77 funds are run by Swiss-headquartered managers, and 45 funds by Dutch-based companies.

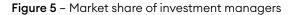
Comparing this to the recent findings of the GIIN for the overall impact investing market, we see that most organizations are headquartered in North America (50%) and Europe (31%).9 In terms of investment volumes, most AUM are managed out of Europe (55%), followed by North America (37%), while organizations located in developing countries represent 8% of total impact AUM.

Figure 4 - Top 10 fund investment management countries



⁹ The analysis is based on a subset of 1,013 organizations that reported on their headquarters location.

When considering market concentration on a company basis, the ten largest investment managers account for 34% of the whole market, whereas 50% of impact fund assets are managed by 23 investment managers.



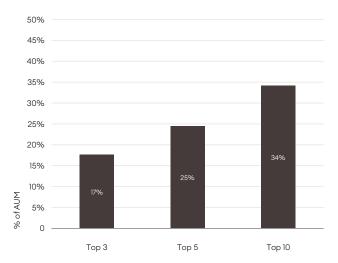




Photo by Pablo Merchan Montes on Unsplash

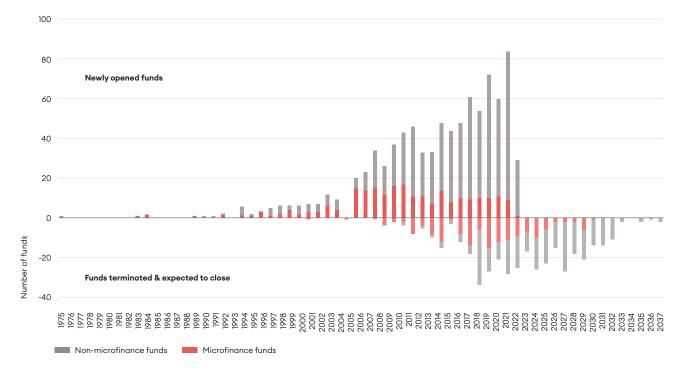
Fund strategies

Fund creations & profiles

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, having diversified beyond microfinance, particularly from 2007 onwards. More and more non-microfinance funds are successfully fundraising every year, with these types of strategies dominating the

market today, as shown below. In 2021 alone, 84 new funds were launched, with only 9 of them focused on microfinance. Out of the rest, 31 were favoring a multisectoral approach, 18 were targeting investments in climate & energy, 12 were SME development funds and 13 were positioned in other sectors, including food & agriculture, or health and education for instance.

Figure 6 - Inception and closing dates



Primary asset classes & impact sectors

The market is today largely composed of private equity (PE) funds. Over half of the funds identified, or 357 out of 672, represent this asset class. Fixed income funds are 218 in number and mixed funds complete the count at 97. Overall volumes follow this ranking, with private equity funds having a cumulative asset size of USD 42 billion. Fixed income funds (USD 32 billion) appear to be the largest funds on average, while mixed funds (<USD 10 billion cumulatively) are the smallest.

Sector wise, multi-sector funds are the most prevalent in the market, at 206 funds and USD 28 billion in total assets. They are followed by microfinance funds (123 funds and USD 20 billion in assets). SME development funds as well as climate & energy funds are almost equivalent in number (116 and 115 respectively), but the latter are much larger vehicles on average.

Table 3 – Breakdown by primary asset class and impact sector

Breakdown by total assets (in USD million)	Fixed income (in USD million)	Equity (in USD million)	Mixed (in USD million)	Total (in USD million)
Climate & energy	3 564	11 614	2 106	17 284
Education & health	153	2 055	115	2 323
Food & agriculture	1963	1856	1 051	4 871
Housing, water & communities	311	168	1760	2 239
Microfinance	14 483	2 521	3 366	20 370
SME development	2 239	4 715	611	7 565
Multi-sector	9 398	17 685	829	27 912
Other	74	1034	0	1 108
Total	32 185	41 648	9 837	83 671

Breakdown by number of funds	Fixed income	Equity	Mixed	Total
Climate & energy	27	71	17	115
Education & health	4	10	2	16
Food & agriculture	26	32	15	73
Housing, water & communities	5	4	2	11
Microfinance	75	29	19	123
SME development	32	67	17	116
Multi-sector	45	136	25	206
Other	4	8	0	12
Total	218	357	97	672

Target geographies

In terms of regional scope, most funds of our universe target Sub-Saharan Africa (SSA) (404 out of 672), either as part of a global geographical strategy that would include SSA along with other emerging market regions, or through a more focused regional approach. In the same vein, the second most targeted geography is Latin America & Caribbean (270 funds), followed by South Asia (251 funds), and East Asia & Pacific (230 funds). Countries within Middle East & North Africa

are targeted by 143 funds, a number closely aligned with funds targeting Eastern Europe & Central Asia (141 funds). Interestingly, SSA probably absorbs fewer overall volumes of capital, even if most funds include it as a target region. This is illustrated by the findings of our sub-sample of 198 funds analyzed. See chapter Geography of investments for more insights on regional portfolio allocations.

Figure 7 - Geographical scope







Fund financial metrics

This chapter presents the aggregated financial 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 2021 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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Sample coverage

While chapter one looked at the whole spectrum of PAIFs currently operating in the market, the following chapter is a deep dive into the financial and impact characteristics of a sub-sample of 198 PAIFs which participated in Tameo's 2022 survey. Gathering data on all the 650+ funds is of utmost challenge, but we aim to grow our sample size every year and achieve significant coverage of the market.

This year, our study sample includes 94 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 27 countries.

While the PAIF universe is composed of mainly private equity funds and multi-sector funds (see section Fund strategies), our sample is more tilted towards fixed income funds and microfinance funds. Another important difference with the whole market is that the combined assets of the nearly 200 funds are managed primarily by investment managers headquartered in Switzerland (33% AUM, 46 funds), Germany (18% AUM, 11 funds), the Netherlands (14% AUM, 18 funds), and the United States (14% AUM, 34 funds). Western European companies collectively manage 82% of AUM through 122 funds, ahead of those in North America (USA + Canada), with a market share of 14% AUM (42 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.

While there was a decrease in investment manager concentration levels between 2020 and 2019, indicating the emergence of new actors, they remained stable in 2021 whatever the metric used (top 3, top 5 or top 10).

Concentration levels in the microfinance funds segment remain higher, with the top 10 players accounting for 77% of assets as of end 2021.

These 94 investment managers collectively run 198 funds, which altogether represent USD 28.8 billion of assets under management, or more than a third (34%) of the total USD 84 billion 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 88% of the entire universe, estimated at USD 20.4 billion and a study sample size of USD 17.9 billion. The high coverage of the microfinance market aligns with past microfinance investment vehicle (MIV) survey numbers.

Fund profile

Vehicle term

Open-ended funds, which do not have set end dates, account for 48% of funds and 68% of AUM. Closed-ended funds account for the rest, with defined termination dates; their median term is currently set for 2025. Whereas open-ended funds are predominantly

fixed income funds, closed-ended ones include both debt and equity strategies. Looking specifically at equity funds from the sample, their median vintage year was 2017, with a median investment period of 4 years, ending in 2021.

Table 4 - Primary asset class and vehicle term

	Number of funds	Fixed income	Equity	Mixed
Open-ended	96	72	5	19
Closed-ended	102	41	42	19
Total	198	113	47	38

Vehicle type

This universe mainly comprises investment funds (85%) but 7% take the form of non-governmental organizations (NGOs), cooperatives or foundations (14 out of 198). These non-profit legal statutes generally have a below-market rate of return philosophy. Other types of vehicles include investment companies (8) and structured finance instruments (7).

Table 5 – Vehicle type

	Number of funds
Cooperative	6
Foundation	5
Investment company	8
Investment fund	168
NGO	4
Structured finance instrument	7
Total	198

Incorporation

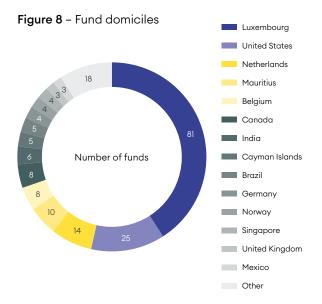
In the same way as for mainstream investment funds, certain jurisdictions provide better conditions for registering a PAIF. Various characteristics, including the different legal structures available, the taxation regime, the licensing requirements, and the rules applicable to foreign investors, have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

In Europe, Luxembourg has historically been and remains the top place to incorporate a fund. It is globally the second largest investment fund center behind the United States, and benefits from a strong position in terms of cross-border fund distribution. The latter is especially true for structures like Undertakings of Collective Investment in Transferrable Securities (UCITS) and Alternative Investment Funds (AIFs) which benefit from the EU and EEA passports, making them eligible to be marketed to investor bases in these areas. The country builds itself around this core strength, in addition to being a pillar of responsible investing.

The study sample illustrates the prime role of Luxembourg with regards to funds' country of incorporation. Out of the 198 funds studied, 81 funds are registered in Luxembourg. These collectively account for 61% of total sample assets. Within Europe, Luxembourg is followed by the Netherlands (14 funds) and Belgium (8 funds).

In North America, the United States is the preferred jurisdiction, and lands second in rank within the fund sample (25 funds), Funds registered in Mauritius (10) have a regional bias on African and Asian markets.

In terms of volumes, funds incorporated in Luxembourg, the Netherlands and the United States collectively represent 82% of the market share.



Primary asset class

The majority of PAIFs from the sample are fixed income funds, 113 out of 198 funds. This has remained constant since these surveys started; equity and mixed funds have nevertheless grown over the years, currently respectively at 24% in headcount for the former and 19% for the latter. For more information on the breakdown of invested volume by asset class, see section Investment instruments.

Primary impact sector

With respect to the primary impact sectors, 47% (or 93 out of 198 funds) of impact funds have a core focus on microfinance, followed by multi-sector funds (24%). Food & agriculture, as well as climate & energy funds both account for 9% of the sample, or 18 funds in each category. There are 14 SME development funds (7%) in the sample, while health & education (2%) and housing, water & communities (2%) are still nascent. For more information on the breakdown of invested volume by impact sector, see section Impact investment sectors.

Table 6 - Primary impact sector and asset class

	Number of funds	Fixed income	Equity	Mixed
Climate & energy	18	6	4	8
Education & health	4	2	1	1
Food & agriculture	18	11	3	4
Housing, water & communities	4	4	3	0
Microfinance	93	63	14	16
SME development	14	8	3	3
Multi-sector	47	19	22	6
Total	198	113	47	38

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 transactions towards developing countries have mobilized USD 170 billion to date through over 5,600 financial commitments into blended finance transactions. Nearly 35% of such transactions are structured through funds (the rest being through bonds, companies, projects, etc.).

Some 20%, or 40 funds of the sample mentioned integrating some form of blended finance component. The most common types of blended finance used are the financing of technical assistance facilities and concessional (including first-loss) capital.

Figure 9 - Blended finance components



¹⁰ Convergence (2022). State of Blended Finance 2022, Climate Edition

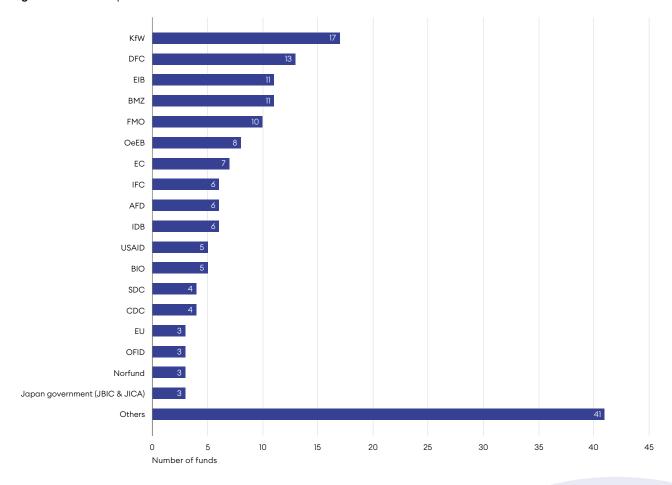
¹¹ Convergence (2021). "Blended Finance: Market Size". Retrieved from https://www.convergence.finance/blended-finance#market-size.

Fifty-five different public and private sector organizations were mentioned as being sponsors of our pool of participating funds. These sponsors/funders act in most cases as catalysts to attract commercial capital into blended finance fund structures.

The ten most frequent ones were the German Development Bank (KfW; 17 funds), the United States International Development Finance Corporation (DFC;

13 funds), the European Investment Bank (EIB; 11 funds), the German Federal Ministry for Economic Cooperation and Development (BMZ; 11 funds), the Dutch Development Bank (FMO; 10 funds), the Austrian Development Bank (OeEB; 8 funds), the European Commission (EC; 7 funds), the International Finance Corporation (IFC; 6 funds), the French Development Agency (AFD; 6 funds), and Inter-American Development Bank (IDB; 6 funds).

Figure 10 - Public sponsors and funders



The key role of Luxembourg and its development cooperation in fostering the impact fund ecosystem

Europe's sustainable finance hub

As illustrated on the previous "fund profile" section, our sample is composed in large part of impact funds registered in Luxembourg, both in terms of number and volumes. This is not surprising given the conducive environment Luxembourg provides for fund managers in terms of being Europe's largest fund center, and the second worldwide.

As the prime jurisdiction for PAIFs in Europe, the Luxembourg Government's role in facilitating the set-up, growth, innovation, and transparency of impact funds investing in developing countries has played a key role over the years. Since the turn of the 2000s, the government has launched several initiatives promoting sustainable finance practices and impact investing strategies, thus consolidating the country's position as a sustainable finance hub in Europe.

More specifically, Luxembourg is highly committed to the microfinance sector, acting as the primary domicile in assets held in microfinance funds, at 60%¹². This is also confirmed by our study sample, which covers 88% of the microfinance fund industry. Within this set of funds, about 50% of microfinance funds are domiciled in Luxembourg.

Funds domiciled in Luxembourg in our sample have about 50% of their impact portfolio invested in microfinance, in line with the entire sample. Nonetheless, the share of climate and energy funds is slightly higher for this subset (13% vs 9% for the entire sample). Interestingly, they are typically larger, with an average size 42% higher (USD 215m) than the average fund size of the entire sample (USD 152m). Their balance sheet breakdown is however similar to funds domiciled in other

Key facts about funds domiciled in Luxembourg in the sample

- 81 funds domiciled in Luxembourg, of which 59 fixed income funds, and 45 microfinance funds
- ____ 12.4% growth in total assets
- ____ USD 215m average fund size
- ____ 49 investees per funds on average
- ____ 65.7% and 18.1% of capital sourced from private institutional investors and public funders, respectively
- ____ 2.21% and 2.56% median return of unleveraged funds in USD and EUR, respectively
- SDG 1 (No poverty), SDG 8 (Decent work and economic growth) and SDG 5 (Gender Equality) are the three main goals targeted
- ____ 99 million end clients reached (median)

jurisdictions, with the impact portfolio representing on average more than 80% of assets. In 2021, their assets grew by 12.4%, which is slightly lower than the entire sample (16.9%), which is not surprising given the lower proportion of equity funds. In terms of net returns in 2021, unleveraged funds domiciled in Luxembourg showed slightly lower net returns than the total sample (2.21% vs 2.59% in USD, and 2.56% vs 3.05% in EUR), again driven by the relative lower number of equity funds.

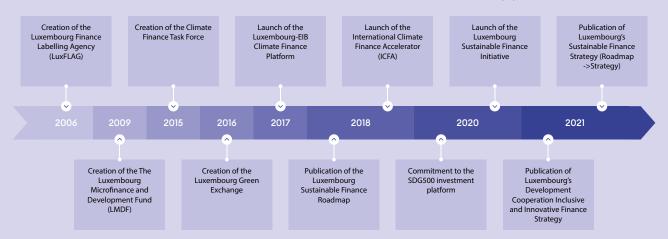
¹² Luxembourg for Finance (2019). Sustainable Finance.

Creating an enabling environment

Luxembourg's intervention targets impactful contribution at both micro- and macro-levels, including households, microentrepreneurs, incubators, networks,

associations, cooperatives, MFIs, governments, and regulators to name a few. More specifically, it aims to support evidence-based policy-making and conductive regulations to scale sustainable finance.¹³

Timeline of key sustainable finance initiatives launched or supported by the Luxembourg government



Created in 2006 by seven private and public founding partners, the Luxembourg Finance Labelling Agency (LuxFLAG) is another key actor in the promotion of responsible investments. Set up as an independent and international non-profit association, it provides several labels to financial actors, including the microfinance, climate finance, environment, green bond and ESG labels. As of July 2022, there were 363 labelled investment and insurance products, with total assets under management of €208 billion and domiciled across nine jurisdictions in Europe.¹⁴

Several government-supported associations and initiatives also aim to bring together public, private, and civil society actors involved in the inclusive

finance space, as for example the Inclusive Finance Network Luxembourg Asbl (InFiNe.lu) and the European Microfinance Week organized by e-MFP.

In addition, the Luxembourg government aims to play an active role in bringing more harmonization in the sector and setting common standards and principles. For example, the Luxembourg-based non-profit association Social Performance Task Force (SPTF) has set the Universal Standards for Social and Environmental Performance Management, fostering best practices for the inclusive finance sector.

On the green and climate finance side, examples include the International Climate Finance Accelerator

¹³ Luxembourg Aid & Development (2021). Inclusive and Innovative Finance Strategy.

¹⁴ LuxFLAG (2022). LuxFLAG labels 11 new investment and insurance products for a total of 363 financial products labelled by LuxFLAG as at 1st July 2022.

(ICFA), a public-private partnership set up in 2018 to support fund managers launching funds with a positive impact objective on climate, including trainings and networking activities.

In 2020, Luxembourg was also the first European and the first AAA-rated country to launch a sovereign sustainability bond framework that meets the International Capital Markets Association's (ICMA) Green, Social and Sustainability (GSS) Bond principles.¹⁵ The Luxembourg stock exchange (LuxSE) is the world's leading exchange for sustainable securities and home to almost half of the world's listed green bonds displayed on the Luxembourg Green Exchange (LGX).16 There are also several examples of Luxembourgbased climate initiatives, such as the EIB-Luxembourg Climate Finance Platform, the Green for Growth Fund, or the Global Climate Partnership. These are set up in the form of public-private partnerships, facilitating the unity of different parties towards a common goal using the layered fund principle. To illustrate the potential of blended finance, it is worth noting that with an investment from Luxembourg of EUR 40 million to help de-risk climate funds under the EIB-Luxembourg Climate Finance Platform, more than 18 billion of project investments have been mobilized so far.

A new general strategy for Luxembourg's Development Cooperation & Sustainable Finance

In 2018, the Luxembourg Ministry of Finance and the Ministry of the Environment, Climate and Sustainable Development, in collaboration with UNEP FI and Innpact, a Luxembourg-based specialist in impact finance, drafted a sustainable finance roadmap (the

Sustainable Finance Roadmap) contributing to the UN's Sustainable Development Agenda and the 2015 Paris Agreement. It aims to connect public, private and civil society actors to contributing to sustainable development and climate action.¹⁷ This also includes developing new innovative financing tools.

A recent example is the joint announcement of the Ministry of Finance, Schroders and BlueOrchard to launch an innovative financing vehicle which provides the Luxembourg government with the opportunity to set up multiple blended finance impact sub-funds with different investment strategies over the next years through public-private financing. A first vehicle will focus on the green transition and biodiversity in emerging markets. As illustration of the contribution of public sector financing into impact funds, our study shows that in 2021, the share of capital sourced from public investors was slightly higher for Luxembourg-registered funds (18.1%) than the total sample (14.8%).

In parallel to the roadmap, Luxembourg's Development Cooperation released its general strategy, entitled "The Road to 2030", committing to the eradication of extreme poverty and promotion of economic, social and environmental sustainability. In this context, the Directorate for Development Cooperation and Humanitarian Affairs also adopted a multi-stakeholder inclusive and innovative finance strategy in 2021, promoting collaboration with and amongst financial and private sector actors, NGOs, academia, and regulators. Its general strategy also focuses on innovative financing mechanisms next to grant financing.

¹⁵ The Government of the Grand Duchy of Luxemourg (2022). Sustainable Finance.

^{16 17} Sustainable Development Goals. Luxembourg: A Financial Centre at the Heart of Sustainable Finance.

¹⁷ UN Environment Program (2018). A Journey towards a sustainable financial system: Luxembourg Sustainable Finance Roadmap.

¹⁸ Luxembourg Ministry of Finance, Schroders and BlueOrchard (2022). Luxembourg Ministry of Finance appoints Schroders and BlueOrchard to accelerate climate action with a landmark partnership.

Supporting innovative financial mechanisms

The governmental program for the period 2018-2023 aims to support innovative financing mechanisms for development, such as risk-management instruments, and impact investment funds. More particularly, it will continue to support blended finance instruments, as for example the SDG500 Platform or the Luxembourg Microfinance and Development Fund (LMDF). For the latter, the Luxembourg Government provided a first-loss tranche, protecting the capital of impact investors and attracting additional fundings.

The government will also continue to provide technical assistance, and support capacity building as well as knowledge transfer. For example, the Luxembourg House of Financial Technology's Catapult development program supports inclusive fintechs in Africa, involving Luxembourg's inclusive finance and fintech actors. Luxembourg has committed to further develop this program towards South-East Asia, involving the knowhow of Luxembourg's community of investors, technical assistance (TA) providers, and industry builders such as the SPTF.

Investing in women, youth, agriculture and MSMEs with a digital angle

Main SDGs targeted by the Luxembourg's Development Cooperation

SDG 1 (No Poverty),
SDG 2 (End Hunger),
SDG 3 (Health and Wellbeing),
SDG 5 (Gender Equality),
SDG 8 (Decent work and economic growth),
SDG 9 (Industry, Innovation and infrastructure),
SDG 10 (Reduced inequalities),
SDG 13 (Climate action),
SDG 15 (Life on land), and
SDG 17 (multi-stakeholder partnerships)

The Luxembourg's Development Cooperation seeks to serve specific groups in the population, including women, youth, or smallholder farmers in emerging economies, with a focus on the West African and Sahel region specifically. Focusing on the economic inclusion of youth in Least Developed Countries (LDCs), the program aims to provide young entrepreneurs with access to financial and non-financial services, including trainings, business support and an enabling environment.

In 2021, funds registered in Luxembourg invested 8.5% of their impact portfolio in LDCs across 21 countries. For the priority countries targeted by the Luxembourg's Development Cooperation¹⁹,

¹⁹ Namely Burkina Faso, Cabo Verde, Mali, Niger, Senegal and Lao PDR.

the share of the impact portfolio of these funds amounts to 0.73% across 6 countries, namely Burkina Faso (0.29%), Senegal (0.19%), Benin (0.09%), Rwanda (0.06%), Mali (0.05%) and Niger (0.05%). The share of the Western Africa region is higher at 2.5% across 10 countries.

The median number of end-clients financed by Luxembourg-based PAIF is slightly lower than for the total sample (99 million vs. 130 million). However, the share of rural and women end clients is slightly higher for these funds at 68% and 63%, respectively (vs. 60% and 59% for all funds), while the share of youth end clients is slightly lower at 6% (vs. 11%).

In terms of SDGs, Luxembourg-based funds mainly target SDG 1 No Poverty (50 funds out of 81 funds), SDG 8 Decent work and Economic Growth (47 funds) and SDG 5 Gender Equality (41 funds). There is no significant difference in terms of the target SDGs amongst Luxembourg-based funds and the total sample.

Across these main investment themes, the Luxembourg's Development Cooperation applies a digital angle, looking at solutions to improve agricultural value chains or better connect actors for instance. In this context, cybersecurity, resilience, and consumer protection are key.

It will also look to support solutions embedding social, economic, and environmental aspects, and specifically promoting green microfinance, using microloans to improve access to renewable energy.

As the impact fund industry currently witnesses exponential growth worldwide but also in Europe, Luxembourg's leadership in promoting the sector will remain key to catalyze impactful capital towards developing countries. As set forth in the Government's sustainable strategy, the legal and regulatory framework as well as government-led initiatives will need to continue to evolve in support of this fast growth and in meeting the needs of fund managers to bring to scale innovative and impactful fund products.



Photo by II Vagabiondo on Unsplash

Balance sheet size, composition & growth

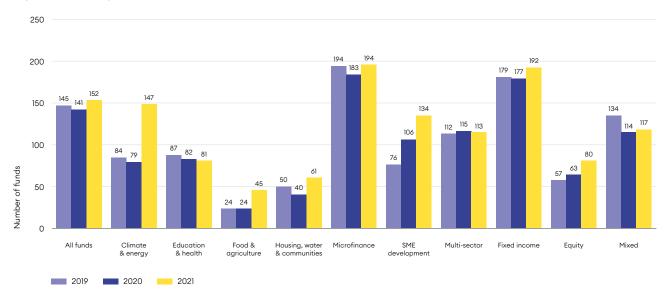
Average assets

A private asset impact fund's average size amounts to USD 152.2 million while the median observation is USD 50.6 million. The latter has remained stable when compared to the end of 2020 (USD 49.1 million) whereas the average has increased by USD 15 million per fund compared to last year (USD 137.7 million).

Fixed income funds (USD 191.9 million) are typically larger than mixed funds (USD 117.4 million) and equity funds (USD 79.8 million). Fixed income funds, given their size, along with their reach for diversification in managing their risk, logically 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 funds (USD 194.4 million), climate & energy funds (USD 147 million), and SME development (USD 133.5 million) funds are on average significantly larger than their counterparts. On the other end, housing, water & communities funds (USD 60.7 million) funds, and health & education funds (USD 44.9 million) are the smallest ones.

Figure 11 - Average fund size



Focusing on microfinance funds only, we see that their average size has increased considerably since 2006, when total assets per fund amounted to USD 40 million. As of December 2021, the average microfinance fund

size is nearing USD 200 million, and has witnessed an increase across all strategies compared to 2020, translating in a rebound of the sector following a challenging 2020 calendar year.

250 200 150 100 **USD** million 2006 2007 2008 2010 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Mixed

Figure 12 - Historical average size of microfinance funds

Asset composition

All microfinance funds

On average, PAIFs invested 83% of total assets in impact-related activities. Cash stands at 11%, whereas non-impact portfolios (which include sovereign bonds, for instance) and other assets (such as accrued interest and receivables) remain low (4% and 2% respectively). Cash balances witnessed a decrease of 8.7% year-on-year, taking a constant sample of funds which participated in the survey over two consecutive years. This translates to an increase in investment activities, illustrated by an impact portfolio growth of 19% compared to the end of 2020. The balance sheet structure is today closer to what was observed before the COVID-19 outbreak.

Fixed income

Equity

Overall, cash levels are higher for fixed income (12%) and mixed funds (11%), 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, USD 763 million of capital remains uncalled across the whole sample, with USD 428 million still available for multi-sector funds. For microfinance equity funds, most of the committed capital has been paid-in (92%).

The asset composition varies across the different impact sectors. We observe larger cash levels in housing, water & communities funds (28%), health & education funds (23%) and food & agriculture funds (20%) On the other end, funds in the SME development and climate & energy sectors have the highest portion of assets invested in impact (95% and 87% respectively).

Figure 13 - Asset composition by primary asset class

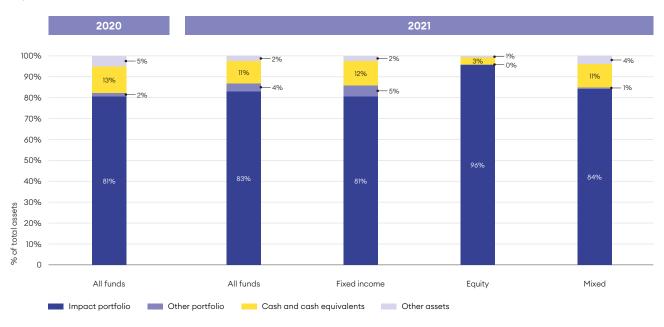
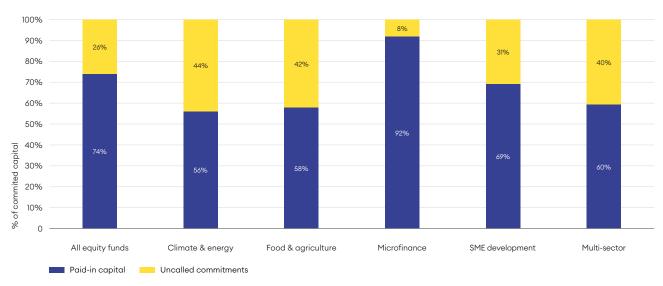


Figure 14 - Paid-in capital and uncalled commitments by primary impact sector



Since 2006, microfinance funds have seen their cash levels fluctuate between a low 8% of total assets in 2018 and a high of 18.2% in 2009 (which was an all-time growth year, resulting in +89% cash levels compared to 2008). More recent years have seen cash levels

grow, with 2019 seeing a 10-year record growth of 32%, and 2020 witnessing a 14% increase. In 2021, cash slightly reduced by 1% across a constant sample of microfinance funds, signaling somewhat of a rebound in investment activities.

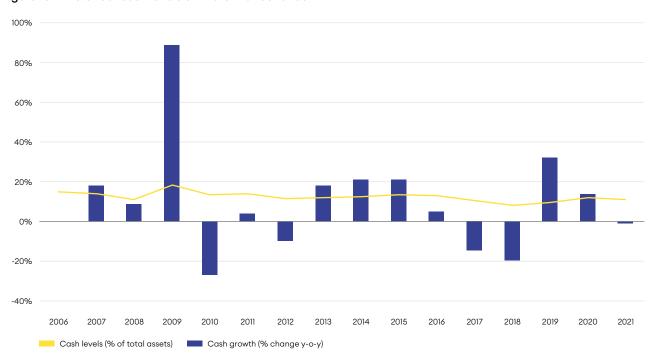


Figure 15 - Historical cash levels of microfinance funds

Equity & liability composition

Of the 184 funds in the sample that have reported on their equity and liability composition, 62 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 145 million, with notes and other debt securities issued representing 44%. Their average debt-to-equity ratio amounts to 1.22.

Leveraged funds are found in all sectors but proportionally more so in those focusing on housing, water & communities (3 out of 4 funds), microfinance (34%) and climate & energy (33%) when compared to unleveraged funds. In addition, the 62 leveraged funds in the sample are almost exclusively fixed income (44) and mixed (14) funds, with only 4 equity funds using some debt mechanisms to finance their overall capital.

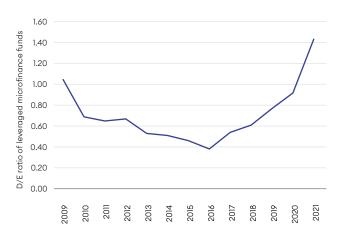
Table 7 - Leveraging strategy

Peer group	Leveraged number of funds	Unleveraged number of funds	D/E ratio of Leveraged funds
All funds	62	122	1.22
Climate & energy	6	12	1.59
Food & agriculture	5	12	0.55
Education & health	1	2	Too small sample
Housing, water & communities	3	1	2.28
Microfinance	31	60	1.44
SME development	6	6	0.19
Multi-sector	10	29	0.79
Fixed income	44	61	0.94
Equity	4	39	0.49
Mixed	14	22	3.69

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. Housing, water & communities funds are the most leveraged, with debt funding representing 2.3x their equity base, followed by climate & energy funds (1.6x). 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 leveraged microfinance funds decreased from 1.04 in 2009 to 0.38 in 2016. It has increased continuously since then, up to 1.44 in 2021.

Figure 16 – Historical D/E ratio of leveraged microfinance funds



Market growth

The total assets of PAIFs witnessed a rebound in growth during 2021 (+16.9%), calculated on a constant sample of 168 funds. The sector bounced back following a relatively flat 2020 in terms of asset growth (+1.6%) because of the COVID-19 pandemic.

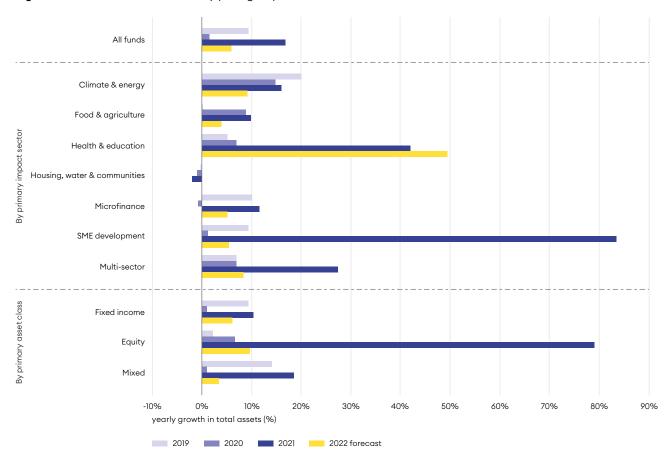
Funds across the three asset classes witnessed a double-digit growth in balance sheet size, albeit some differences. Equity funds (+79.1%) grew the most compared to mixed funds (+18.6%) and fixed income funds (+10.4%), albeit starting from a lower base in terms of average assets. While fund managers expected a considerable growth in 2021 across all asset classes (+22.6% for equity funds; +14.6% for mixed funds; and +9.8% for fixed income funds), their funds' actual growth was higher than envisioned.

At a sectoral level, SME development funds are those that grew the most in 2021 (+83.5%), followed by health & education funds (+42.1%), with the latter category having smaller assets on average at the onset. Only

housing, water & communities funds witnessed a decrease in total assets as of year-end 2021 (-2.1%). As a reminder, fund managers expected significant increases in 2021 across 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.

On a more forward-looking basis, funds forecast a moderate 6% growth on average across the industry for 2022, in parallel to an increase in return expectations (see section Financial performance). For 2022, equity funds are also those that expect the largest increase (+9.6%), followed by fixed income funds (+6.2%) and mixed funds (+3.5%). Sector-wise, funds expect significant increases in all sectors, with health & education funds (+49.4%, starting from a lower base in terms of size), climate & energy funds (+9.2%) and multi-sector funds (+8.3%) forecasting the largest boost.

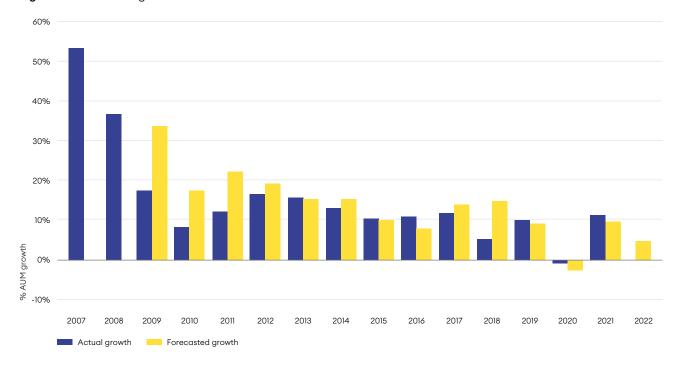
Figure 17 - Growth in total assets by peer group



Since 2006, the size of microfinance funds has increased more than eight-fold, representing a compound annual growth rate of 15.2%, 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. In 2021, growth resumed at 11.6% as the sector started recovering the growth pace observed in previous years, and slightly above what had been predicted for the year (+10.0%). The forecasts for 2022 remain positive but lower (+5.2% growth expected).

Figure 18 - Historical growth of microfinance funds

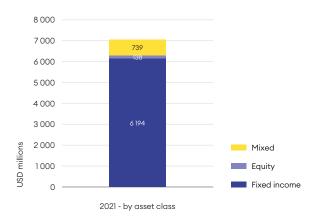


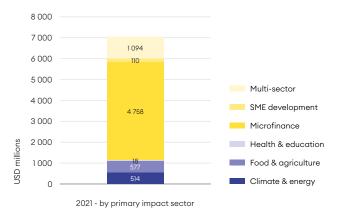
Market activity

In 2021, funds across our sample reported making 4,378 transactions (including new deals or follow-on investments) with an average ticket size of USD 1.4 million. The cumulative size of these investments during the year amounted to USD 7.1 billion. Most of this investment activity was accounted for by fixed income

funds (USD 6.2 billion) and microfinance funds (USD 4.8 billion). The number of transactions and average deal size foreseen for 2022 were difficult to predict for our participants, but overall, they are expected to reduce to respectively 3,711 and USD 1 million.

Figure 19 - Transaction volumes during 2021 by peer groups





Investment instruments

At an impact portfolio level, private debt is the most used financial instrument, with USD 18.9 billion, representing 79% of the impact portfolio outstanding. It is principally composed of senior debt investments (90%), although subordinated debt investments have recently gained importance (37% year-over-year growth in total volumes, on a moving sample), now representing 10% of private debt volumes outstanding at end 2021 (up from 8% in 2019, and 9% in 2020).

With regards to private equity, which stands at USD 5 billion – accounting for 21% of volumes outstanding – it is mostly common equity (78%) rather than preferred equity (22%). The latter's proportion has however increased by seven percentage points compared to 2020 (15%).

PAIFs naturally only invested some minor volumes in listed debt and listed equity (together 170 million outstanding) on average, their focus being on private market transactions.

Figure 21 - Seniority level of private debt

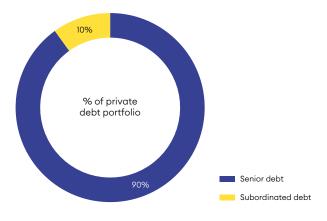


Figure 20 – Outstanding volume by investment instrument

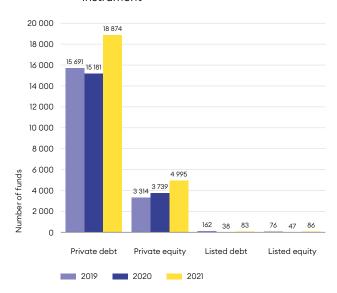
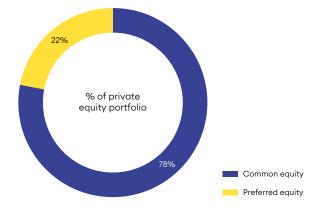


Figure 22 - Preferred and common shareholding



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 (65% of their portfolio) and multisector funds (36%).

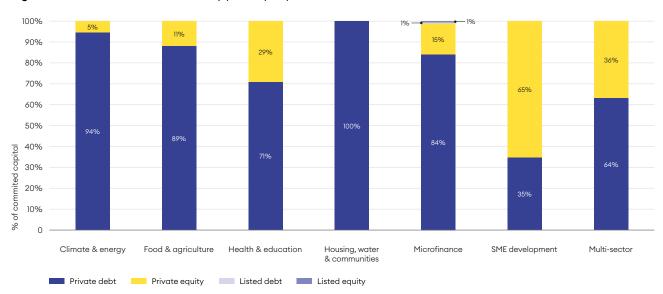
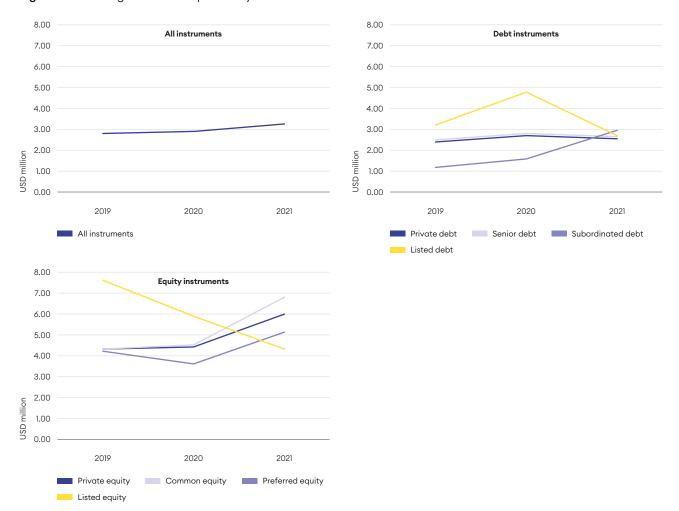


Figure 23 - Investment instruments by primary impact sector

The average exposure per investee varies considerably depending on the financial instrument used. Over the last three years, the ratio has increased from USD 2.8 million per investee in 2019 to USD 3.28 million in 2021. The recent surge was triggered by private equity instruments which grew to nearly USD 6 million compared to USD 4.3 million in 2019. Private equity investments typically have higher exposures compared to private debt (USD

2.6 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 an average exposure outstanding of USD 2.97 million, which is higher than senior debt.

Figure 24 - Average investee exposure by investment instrument

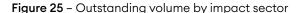


Impact investment sectors

Irrespective of how we classify funds in accordance with their main sector of focus, our survey requires funds to report the detailed breakdown of their impact portfolios by sector of investments. This implies for instance that a food & agriculture fund might have some pockets of exposure in other sectors like climate, or microfinance for instance. This section captures where the money flows in terms of portfolio outstanding at year-end.

Still today, most of PAIFs' sectoral allocation is towards microfinance, and by far. However, the ratio of microfinance portfolio has been steadily decreasing from 58% in 2019 to 50% in 2021. Cumulative volumes towards microfinance amount to USD 11.9 billion, with 132 PAIFs having some exposure in it. The second most attended impact sector is SME development, rising in the past decade as the logical next adjacent financial inclusion market "beyond microfinance". SME development accounts for USD 5.7 billion outstanding, while 86 funds are invested in it. For the first time

since the PAIF Survey was initiated, we managed to compile data on portfolios allocated towards climate & biodiversity, as well as renewable energy & energy efficiency, both historically part of a broader "climate & energy" sector of allocation. These topics have seen an important rise in the number of new dedicated funds in past years. Overall, 62 PAIFs have some exposure in climate & energy (14 in climate & biodiversity / 48 in renewable energy & energy efficiency) without necessarily dedicating most of their portfolios to this sector. Together, they represent 9% of impact portfolio of all funds (4% climate & biodiversity / 5% renewable energy & energy efficiency). Food & agriculture accounts for 8% but also attracts many funds (78), but few are primarily positioned into food & agriculture (our sample has 18 funds categorized as primarily investing in food & agriculture). The rest is spread between housing, education, healthcare, communities, WASH, and others, many of whom are funded in large part by domestic public sector investments by nature.



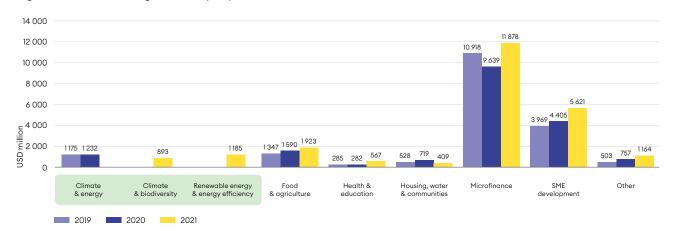
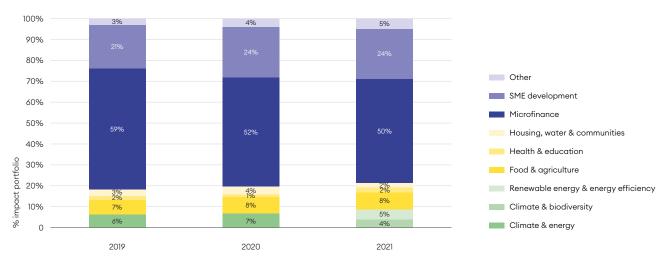
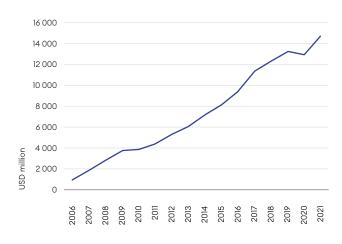


Figure 26 - Portfolio breakdown by impact sector



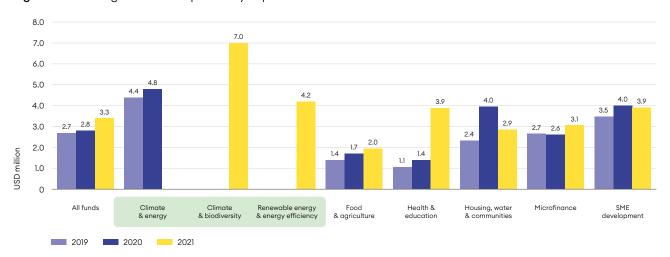
Looking back at historical datapoints from microfinance fund portfolios, we see that their cumulative portfolio (mainly microfinance but also including their smaller exposures in other impact sectors) has increased from less than USD 1 billion in 2006 to about USD 14.7 billion at the end of 2021.

Figure 27 - Historical outstanding portfolio of microfinance funds



In terms of exposure per investee, food & agriculture investees are those that receive the smallest volume on average (USD 2.0 million). This is explained by the fact that funds in these sectors: (1) invest a significant share of their portfolio directly in non-financial SMEs (rather than through local financing intermediaries, as is the case for other funds), which have smaller funding needs, and (2) predominantly follow debt strategies requiring high diversification, both triggering smaller ticket sizes. In contrast, investees positioned into climate & energy, and housing, water & communities exhibit the largest funding volume on average. Many of the funds active in climate & energy are larger in size and invest in infrastructure projects that generally require larger funding volumes. Housing, water & communities have significant exposures into non-financial corporations compared to other fund types, which can explain the higher exposure of investees within these segments.

Figure 28 - Average investee exposure by impact sector



Investee types

On average, a PAIF invests in 40 investees. Fixed income and mixed funds that are larger in size (see section Balance sheet size, composition & growth), have higher investee outreach by design compared to equity funds. On average, they invest in 56, 28 and 12 investees, respectively. Sector peer groups show that microfinance and multi-sector funds have the largest number of investees, at respectively 47 and 43 per fund. They are followed by food & agriculture funds that have on average 32 investees in their portfolios.

Table 8 - Number of investees by peer group

Peer group	Average number of investees	
All funds	40	
Climate & energy	20	
Food & agriculture	32	
Education & health	17	
Housing, water & communities	16	
Microfinance	47	
SME development	32	
Multi-sector	43	
Fixed income	56	
Equity	12	
Mixed	28	

Types of investees

As seen in the chapter about business models, these investees can take various forms. 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 most of the fund investments, with USD 18.9 billion and 82% of the PAIF impact portfolio outstanding. Non-financial SMEs attract 10% (USD 2.3 billion), whereas non-financial corporations and projects remain lowly attended within the PAIF universe (4% and 1%, respectively).

Compared to previous study editions, funds' portfolio allocation by type of investees has not changed drastically. However, this year provides an additional layer of granularity since we have added two new investee-type categories: fintechs and embedded finance companies. Both these investee types currently account for a small portion of the invested portfolios (3% cumulatively). As a methodology caveat, fintechs would historically be reported under "financial institutions" during our past surveys, whereas many of the embedded finance companies in the off-grid solar space would generally be reported under «projects» in past years.

With both fintechs and embedded finance companies gaining traction within the impact investing community, we have included a special chapter about these investment strategies, including a market pulse from fund managers that prominently look at these investee-types. Transactions are expected to increase at a moderate, double-digit rate for this segment in the next three years (see special chapter on fintech and embedded finance strategies).

Depending on the sector, PAIFs favor different investee types. 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 non-financial SMEs, which represent 70% of their portfolio. Multi-sector funds appear to be the most diversified with regards to types of portfolio companies.

Health & education funds witness some non-SME investments (4%), but interestingly include some larger non-financial corporations within their portfolios (47%). Healthcare businesses like hospitals and clinics, or schools on the education side would fall under these categories. However, financial institutions remain the

prime way to address these sectors (69% of portfolios). Regarding SME development funds, there are two different approaches, with PAIFs focusing either on SME finance institutions (like SME banks) (4 out of 14 funds) or direct investments into non-financial SMEs (10 out of 14 funds), resulting in an aggregate 68% portfolio in financial institutions and 26% portfolio in non-financial SMEs. This signals the capacity of financial institutions to absorb larger chunks of investments when compared to non-financial SMEs.

Finally, climate & energy and multi-sector funds are the only ones to make use of project finance (6% and 1% of their portfolio, respectively). Funds of the former sector tend to have infrastructure assets as part of their investment strategy.

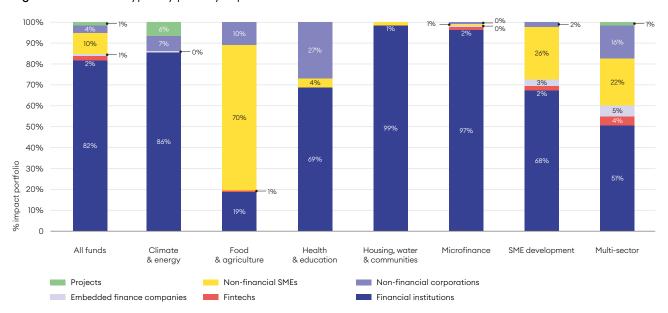
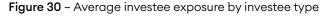
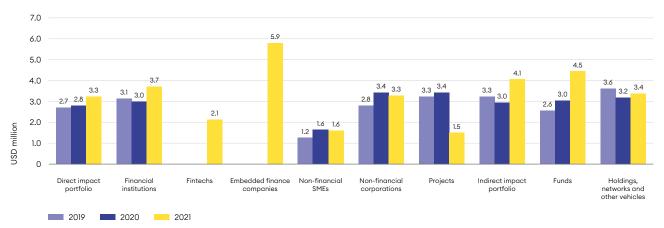


Figure 29 - Investee types by primary impact sector

In terms of funds' average exposure by investee type, financial institutions and non-financial corporations attract higher volumes on average (USD 3.7 million and USD 3.3 million outstanding per investee) as of end of 2021. Logically, non-financial SMEs attract the smallest amounts, with an average of USD 1.6 million per direct fund investee, a number which has been stable since 2019.

The consideration of fintechs and embedded finance companies in this year's study brought some changes to the overall results when compared to previous years. Projects were the investees with the highest average exposures in past samples. At the end of 2021, this distinction goes to embedded finance companies, many of whom used to be classified under projects in 2019 and 2020 as explained above. Similarly, fintechs which today have smaller fund exposures on average used to be part of financial institutions in the past. With the former now forming a distinct category, this brought the financial institutions average up as of end of 2021.





Focusing on microfinance funds, their average direct investee exposure increased from USD 1.5 million to USD 3.4 million between 2006 and 2021, 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 that target an upper segment of end-beneficiaries that have larger financing needs, which

can include a population beyond low-, and middle-income households and microenterprises, such as SMEs and larger corporations.

Equity microfinance funds have been witnessing a decrease in their average investee allocation since the peak of USD 8 million per investee observed back in 2018.

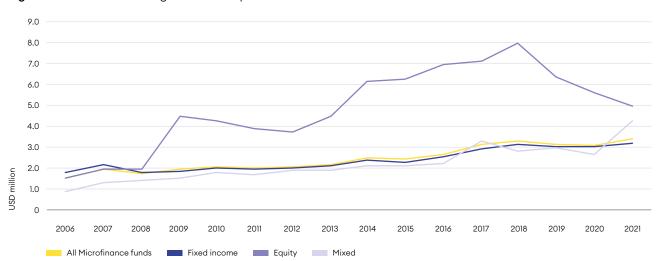


Figure 31 - Historical average investee exposure of microfinance funds

Business stage of investees

For the first time in this year's study, we have integrated indicators about the stage of business of funds' portfolio companies (i.e. investees). During the data collection, we realized that this is not a metric that is systematically tracked by investment managers, at least not integrated within their reporting channels. However, data is of higher quality for equity funds given their more hands-on business model and involvement at portfolio-company level.

As of December 2021, 59% of funds' direct impact portfolio is allocated to investees in their growth-stage, followed by mature-stage investees (34%) and

early-stage investees (8%). Average exposure per investee shows that funds have higher exposures on average in mature-stage investees (USD 6.5 million), followed by growth-stage investees (USD 3.4 million) and early-stage investees (USD 1.1. million).

Early-stage investments are more prevalent for private equity funds (15% of direct impact portfolio vs 2% for fixed income funds and no early-stage investments for mixed funds). Portfolios into early-stage companies is also more prevalent for funds with a primary focus on food & agriculture (18%), multi-sector (16%) and climate & energy (10%).

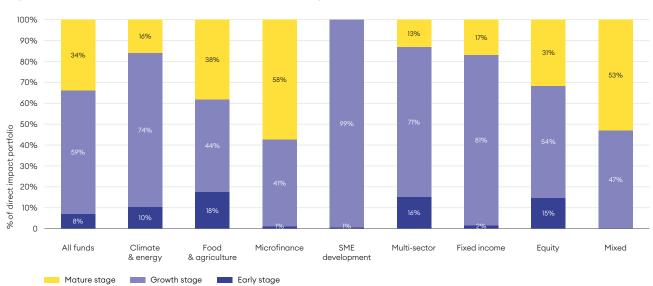


Figure 32 - Portfolio allocation by investee business stage



Fintech and embedded finance strategies

Fintechs and embedded finance (EF) companies are garnering attention within the impact investor community, with a broad consensus that financial technology companies will effectively drive financial inclusion through a variety of models and products. Given both the potential and emerging risks of these models, there is a need for increased data transparency on investment activity into fintechs and EF companies, both on the financial and impact fronts.

In partnership with the Center for Financial Inclusion (CFI), Tameo started filling some of these data gaps within the universe of PAIFs. Besides data on transactions, portfolio breakdowns and projections, we also conducted qualitative interviews with several investment managers to provide a view of the current market pulse for fintech and EF strategies.

Defining fintechs and EF companies

Throughout the survey, we refer to fintechs as organizations with an innovative technology that have the potential to transform the provision of financial services (e.g., credit, savings, and payments), spurring the development of new business models, applications, processes and products.²⁰ More specifically, inclusive fintechs are actively working to provide services to those who lack access to meaningful financial services.²¹ Khazna, based in Egypt, is an example of an inclusive fintech. It delivers an app-based banking solution, including savings, loans, insurance, and access to a pre-paid card for underserved communities.²²

Embedded finance companies are defined as organizations or platforms that integrate financial products (credit, savings, payments, insurance, etc.)

alongside their core non-financial offerings and/or API-based enablers that plug into existing companies and allow those partners to offer financial services to their customers.²³ The financial services offered by these companies complement their range of products or services, which are specific to the primary impact sector they serve. For example, pay-as-you-go services may be offered to customers installing solar panels. The embedded finance services provided serve as catalyst to boost market access and revenues for the core products or services provided.

Although the difference between fintech and EF companies is very subtle, both strategies are at different stages of development within the study sample and fund portfolios. The current chapter presents information on both investee types separately to highlight current trends.

Level of fintech & EF uptake within impact funds

The increased interest for fintech and EF of investments was reflected in the study sample, with 43% of funds having done such transactions already or were planning to (78 funds and 8 funds, respectively). PAIFs that are already active in the space have done 281 transactions in fintech companies, translating to an average of 4 transactions per fund since inception. In comparison, the EF landscape is still very nascent, with 103 transactions done across the funds, and on average 2 EF transactions done per fund since inception.

The proportion of equity funds (66%) having fintech and embedded finance strategies is higher than fixed income and mixed funds (39% and 29% respectively). This can probably be explained by the fact that equity

²⁰ International Monetary Fund and the World Bank (2018). The Bali Fintech Agenda – Chapeau Paper

²¹ Center for Financial Inclusion

²² Accion (2020). A new way to help people living paycheck-to-paycheck in Egypt

²³ Accion (2021). Embedded finance: More than a trend

investors tend to invest in earlier-stage companies with innovative business models. This is also reflected in portfolio allocations, with an already sizeable share of equity funds' portfolios invested in fintech and embedded finance companies (11% across all

equity funds), while this amount remains very limited across the entire study sample (3%). Volume-wise, this 3% corresponds to a portfolio outstanding as of 31 December 2021 of USD 417m for fintech investments and USD 252m for embedded finance investments.

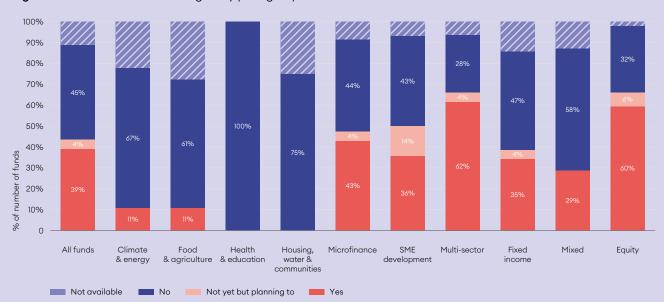


Figure 33 - Fintech and EF strategies by peer groups

A fine line between fintechs and financial institutions

In the universe of PAIFs, there is a demarcation between two types of fintech-focused funds:

- those which tend to see fintech as a different sector than microfinance, and
- those that started adding fintech investments to their portfolio opportunistically and across other verticals as the next logical development in the financial inclusion space.

Whatever the case, the line between more traditional financial institutions and fintechs is becoming blurrier as more financial institutions, such as MFIs, are digitizing. The COVID-19 pandemic accelerated this digitization trend²⁴ and enabled MFIs to remain in close contact with their clients. We see investment managers providing support to these institutions to go through their digital transition, with initiatives such as the "LocFund Next: Financial Inclusion and Digital Transformation in Microfinance Institutions in Latin America and The Caribbean» promoted by BIM and IDB Lab in Latin America and the Caribbean.²⁵

²⁴ Excerpt from the case study with Inpulse Investment Manager

²⁵ Financial Inclusion Week 2022. Excerpt from Fernando Sanchez, CEO of BIM.

While the last couple of years accelerated the uptake of technology within financial services, digitization of business models is not new. The mobile money in emerging markets, and most prominently in Africa, took off in the 2010s, which brought efficiency and safety to people. The tech component also brought nonlinear growth potential, bringing the cost of customer acquisition down. But the technology itself is neutral and brings new benefits alongside new risks. One of the key aspects consists in finding the right founders and teams, who are committed to having an intentional positive impact, as many tech folks are becoming more and more interested in providing financial services. From their experience in microfinance, impact investment managers can support these founders to understand some pitfalls, such as over indebtedness, while improving access to financial services to underserved populations and help them understand customer behavior and impact data.

While the analysis and understanding of the tech components and algorithms are very important during due diligence, the founders' background was also key. Several investment managers mentioned that they will not invest in a team that has a tech background, but no prior knowledge in financial services. In the same vein, the ability of fintech models to understand the end-beneficiary of their product is a key consideration, and what Triodos IM refers to as the "tech and touch" approach.²⁶ One good example of a fintech investee that started very strongly on the tech side and had to gradually work on the touch aspect of its business, is Apollo Agriculture. The company uses historical satellite data to assess the soil and the crops of small-scale farmers in Kenya and integrates this data into their credit assessment. The tech element really

boosted efficiency and insights. However, the algorithm does not always predict the behavior of customers and the team invested heavily in customer call centers for example. In other cases, agent networks are also the only connection point, as digitalization has not yet reached more remote areas of the world.

Vox Capital's portfolio company Celcoin is an interesting example of a fintech that enables small businesses and merchants to provide a variety of financial services to their customers, which are underserved populations in small towns scattered across Brazil, typically far from regular bank branches or bricks and mortar banking agents. The services provided range from payment of utility bills to recharging prepaid cell phones and purchasing prepaid cards. These innovative models allow for qualitative improvement in the life of people who benefit from them.²⁷

Knowledge of financial services is key in the EF space

Embedded finance models are also not new per se. However, as Edoardo Totolo, vice-president of research and programs at CFI, pointed out during 2022 Financial Inclusion Week, the digital economy and fintech applications has brought the embedded finance space to an all-new level, with the potential to revolutionize how small businesses access and use financial services. ²⁸ In the long-term, this dynamic may change how providers price financial services, and potentially financial services may become not only more accessible but also more affordable. Although investment managers may not yet systematically track financial impact metrics for these models but rather focus on other aspects, this would be key in the future to assess the impact potential of these models.

²⁶ Financial Inclusion Week 2022. Excerpt from Tim Crijns, Fund Manager at Triodos IM.

²⁷ Excerpt from the interview with Rafael Campos, Investment manager at Vox Capital.

²⁸ Financial Inclusion Week 2022. Excerpt from Edoardo Totolo, Vice President of Research and Programs at CFI

For some investment managers, EF models seemed less risky than fintech companies, as they are specialized in a sector and firmly understand its dynamics. However, embedded finance models present an added layer of complexity, as more players can operate financial products or services. The founders and teams in these businesses are not necessarily prepared to manage these types of processes and risks. They usually have less experience dealing with issues related to financing models, from regulation and credit issues to behavioral economics. There can be a higher execution risk related to this crossover, especially for startups that want to go alone into financial services.²⁹ In this context, some investment managers usually prioritize startups that partner with specialized solutions providers to help them provide financial services. An example of company that managed to integrate financial services in its operations is Sistema.bio, a producer of bio digester active in rural areas in Kenya, India and Colombia, and which is a portfolio company of CO Capital. The founders quickly realized that they needed to offer small-scale farmers the possibility to pay in several installments, or they would simply not be able to pay for the product upfront. Integrating financial services in their operations was nevertheless a big challenge at the beginning.³⁰

Market regulation factors into funds' geographic exposure

The regulatory environment plays a fundamental role in the emergence of fintech and EF models, as well as in the investment landscape. To illustrate the differences in the main regions for these types of investments, it is interesting to understand better the regulatory risk perspective of several investment managers in different countries across these regions. In India, the fintech and EF companies are operating in a grey zone, whereas financial services are very regulated.31 Regulation around these new players is unclear, resulting in some companies taking advantage of these regulatory loopholes. But regulators have clamped down on businesses in the past and there is a lot of ambiguity. While the customer and infrastructure risk may be much lower than previously, the legal risk is seen important for investors in India. On the other hand, this also provides more comfort to investors when entities are regulated as NBFIs.32 In Brazil, the central bank is deemed more tech-driven and has welcomed new models,³³ but credit risk still prevails. The regulatory risk was nevertheless still perceived high in Mexico, where fintechs have more flexibility and are not as regulated as banks. For instance, there is no requirement to hire a chief risk officer. Fintech companies face several challenges, as they might not be aware of regulatory risks or lack the resources to implement regulatory changes.34

Looking at actual numbers reported by funds in the survey, the fintech and EF portfolio allocations show interesting differences with the overall regional exposure of PAIFs' portfolios within the study sample. Although being the top region of fund investments, Eastern Europe & Central Asia received no capital when it comes to fintech or EF investees.

The main target region for both strategies is South Asia (49% for fintech and 73% for EF companies), with Latin America & the Caribbean also accounting for a

 $^{29\}quad \text{Excerpt from the interview with Rafael Campos, Investment manager at Vox Capital.}$

³⁰ Excerpt from the interview with Anca Huzum, Director of Operations and Finance at CO Capital.

³¹ Excerpt from the interview with Sowmya Suryanarayanan, Impact & ESG Director, and Sushma Kaushik, Partner, at Aavishkaar Capital.

³² Excerpt from the interview with Eleonora Castaldo, Asia Regional Manager at Enabling Qapital AG.

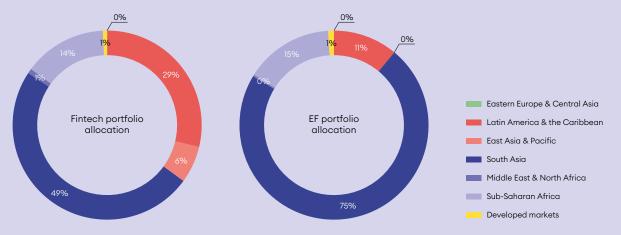
³³ Excerpt from the interview with Rafael Campos, Investment manager at Vox Capital.

³⁴ Excerpt from the interview with Alejandra Revueltas, Senior Portfolio Officer at Deetken Impact.

considerable share of both strategies (29% for fintech and 11% for EF companies). Sub-Saharan Africa is also more prevalent in fintech (14%) and EF strategies (15%) compared with the overall portfolio. The Sub-Saharan Africa exposure for EF companies is explained by the

inclusion in the funds' portfolio of Africa-based off-grid solar companies including pay-as-you-go (PAYGO) models and enabled mobile-money transactions for their end-clients to finance solar panels at home.

Figure 34 - Regional exposure of fintech and EF portfolios



Fintech and embedded finance investees sit at different business stages of development

Business stage exposure also differs across both strategies and compared to funds' overall portfolio. Within investments into fintechs, PAIFs in the survey sample managed to invest in companies at different stages of growth, in a relatively balanced manner. The space has matured, and the investment pipeline is growing as more companies are meeting the characteristics of the funds. Some investees are thus already profitable while launching a new revenue stream for instance.

Nevertheless, exposure to early-stage companies is considerably higher than in the total sample. In many cases, fintechs are early-stage companies, growing more rapidly compared to what was witnessed in the past with microfinance institutions, and bringing new challenges for investment managers. For instance, investment managers need to consider new financial indicators on top of more traditional metrics - such as the capital runway - in their assessment of these companies. The approach adopted by Triodos Investment Management to gain knowledge and exposure in the field was to invest first in fintech funds, to learn from the experience of other investment managers and get access to a global fintech portfolio.³⁶

³⁵ Excerpt from the interview with Eleonora Castaldo, Asia Regional Manager at Enabling Qapital AG.

³⁶ Financial Inclusion Week 2022. Excerpt from Tim Crijns, Fund Manager at Triodos IM.

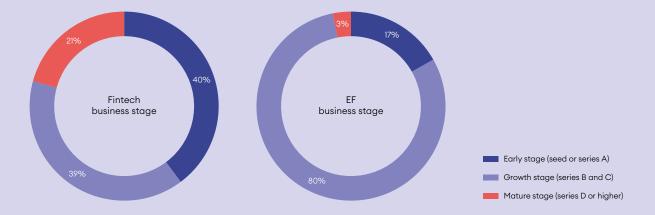
"Intentionality is the key aspect that differentiates impact fintechs, especially when it comes to assessing and providing credit, given the vast asymmetries present in our region."

Rafael Campos, Investment manager at Vox Capital

In the case of EF companies, the trend is much more pronounced, with 80% of the EF portfolio invested in growth companies. The addition of financial services to the operations of the company may come at a

later stage, although they might also be integrated into the business model from the start to solve the problem of access to their products or services by their target clients.

Figure 35 - Business stage allocation of fintechs and EF portfolios



Aligning impact monitoring to stage of business

In terms of portfolio monitoring and management, most PAIFs (75%) in the survey collected end-client impact data for their fintech and EF investments, similar to practices around their other strategies, including outreach to underserved communities such as women or rural populations, income-levels and livelihood. More sector-specific indicators such as energy access levels or number of municipalities without banking services reached was also mentioned through investment manager interviews. Interestingly, Aavishkaar also monitors whether it was a first mover, and thus provides funding for potentially underserved founders in very early-stage transactions and differentiating itself within a fintech space that is already crowded with many investors competing for allocation.³⁷

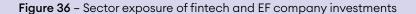
For the investment managers that did not collect impact data (25%), most mentioned that the data was simply not available. The data availability might be again related to the stage of development of companies, which haven't implemented yet a structured data collection process. Some metrics typically used for microfinance investments, such as first-time loans, can also be more difficult to have as the contact with end-beneficiaries might be more transactional for fintechs, and it might be more difficult to reach the end-beneficiaries. In these cases, investment managers mentioned being primarily focused on intentionality rather than data in their due diligence. However, several investment managers are very cautious not to add a reporting burden on companies which are on a highgrowth trajectory, in a development stage in which all

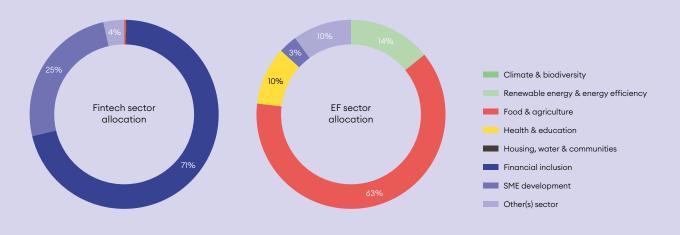
³⁷ Excerpt from the interview with Sowmya Suryanarayanan, Impact & ESG Director, and Sushma Kaushik, Partner, at Aavishkaar Capital

resources need to be focused on the business. Vuyo Angoma-Mzini, portfolio Manager at Launch Africa, ³⁸ and Amie Patel, Partner and CEO at Elevar Equity³⁹ emphasized the importance of selecting KPIs that are somehow natural for the investee to track and have a strong alignment between impact and business. More specifically, Elevar Equity is looking at three sets of metrics - community, business model, and scale which combine business and impact components when assessing a potential investee. Altogether, these three metrics look at the customer segment (community), the customer loyalty (business model) and how these twin business and customer metrics work together to deliver high impact (scale). These metrics are also used to monitor the performance of investees over time and are decided upfront, in discussions with the founders.

Embedded finance drives sector diversification in fund portfolios

As mentioned, fintech portfolios are the next logical development into the financial inclusion space and not surprisingly they are mainly focused on financial inclusion in terms of impact sectors. By definition, EF companies focus on other sectors than financial inclusion. The main target sector for these models is food & agriculture, followed by renewable energy and health & education. These sectors are much more attended by funds through their EF investees than in their overall portfolio allocation. An example of EF investment in the healthcare sector is Garantia, a portfolio company in one of Triodos IM's funds. Garantia is a platform linking small healthcare clinics with medical equipment suppliers. The company realized that banks are not lending to healthcare models, and thus started to provide credit for these small local clinics.⁴⁰





³⁸ Excerpt from the interview with Vuyo Angoma-Mzini, Portfolio Manager at Launch Africa.

³⁹ Excerpt from the interview with Amie Patel, Partner & CEO and Shikha Gupta, Investment Director at Elevar Equity.

⁴⁰ Financial Inclusion Week 2022. Excerpt from Tim Crijns, Fund Manager at Triodos IM.

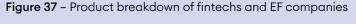
Products catered mainly at the retail segment

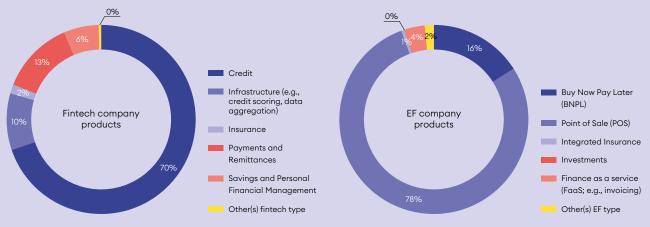
Credits are the main types of products of fintech investees that are financed by PAIFs, followed by payment services. In addition, funds' fintech portfolio is tilted towards Business to Consumer models (B2C, at 53%), followed by Business to Business (B2B) at 41%, and B2B2C types absorbing the rest (6%).

This is aligned with what investment managers see in frontier markets on the African continent for example, where mobile money and lending are models that often emerge first, with examples such as the fintech Wave in Senegal. This is also a logical evolution for microfinance investors, building-up experience first with online lending which is closer to traditional microfinance investments and leveraging this experience to gradually enter other segments of the fintech space, such as payments. However, the issue for some investment managers with fintech credit models is to find companies operating outside of the consumer credit space. The fintech

consumer credit space is also deemed more volatile, with many players who went bankrupt during the recent pandemic in Latin America and the Caribbean. On the other hand, some investment managers are reassessing the possibility to enter the retail lending space thanks to new insights made possible with data analytics. In the past, the lack of data made it hard to assess the benefits of consumer lending in emerging markets, and technology can help to better understand the actual usage of credits and get more insights on the repayment behavior and repayment capacity of end clients.⁴¹ This is nevertheless a different knowledge to gain and different types of metrics to monitor.

For EF companies, the main models funded are point of sales (POS, i.e incremental payments) financing models and Buy-Now-Pay-Later (BNPL or PAYGO) models, with other models such as finance as a service or integrated insurance being still very limited.





⁴¹ Financial Inclusion Week 2022. Excerpt from Tim Crijns, Fund Manager at Triodos IM.

The next three years

Differing growth prospects

On a forward-looking basis, most PAIFs with fintech and EF strategies answered that they expected moderate growth in terms of the number of transactions foreseen over the next three years. Deal growth in embedded finance companies looks to remain below 10% for most funds, while growth in fintech transaction leans towards double-digit, similar to levels witnessed in the microfinance sector 15 years ago.

Table 9 – Expected growth in number of transactions in the next three years

Peer group	Fintechs	Embedded finance companies
0% to 10% growth	27	44
10% to 20% growth	26	6
20% to 30% growth	4	5
30% to 40% growth	1	1
40% to 50% growth	1	0
More than 50% growth	4	2

No foreseen shifts within models and products, but new geography potential

In terms of strategy, most investment managers don't foresee a shift in their fintech or EF strategy in the coming three years, with a continued focus on fintech for fixed income microfinance funds, and on credit and payments in terms of product

types. In India for example, the payment system is also changing fast, bolstered by the important rise in digital adoption and internet uptake, setting the stage for new models to emerge in the coming years.⁴²

While it seems that the focus on Latin America & the Caribbean will also continue for these funds, they are also looking at Eastern Europe & Central Asia and East Asia & Pacific, two regions that are not very well attended in the current fintech and EF portfolios of investment managers in the sample.

High impact potential and new monitoring tools

Overall, the investment managers interviewed continued to see many unbundling possibilities in fintech models, with players in different industries also increasingly adding embedded finance solutions to their products or services. These EF models are key to reach the target beneficiaries of funds but are also capital intensive at the same time, creating opportunities for investment managers to support these entrepreneurs in a variety of sectors. Fintech and embedded finance strategies can also help the resilience of low-income households and improve their ability to weather shocks. According to investment manager testimonies, an investee that exemplifies the impact approach is Tienda Pago, a portfolio company of CO Capital. Tienda Pago provides non-cash loans to mom-and-pop stores in Mexico and Peru, working closely with fast-moving consumer goods companies (FMCGs, for instance AB inBev) and offering their clients the possibility to receive an inventory loan. For many households, family businesses are often the only source of income and personal expenses (e.g., health emergencies) are often mixed-up with the

⁴² Excerpt from the interview with Sowmya Suryanarayanan, Impact & ESG Director, and Sushma Kaushik, Partner at Aavishkaar Capital

"Deal volumes & valuations in the fintech sector boomed during the pandemic because lockdowns boosted digital adoption, especially in emerging markets.

As investors rushed to benefit from this tailwind, we were in competition with Silicon Valley funds used to writing larger checks than impact investors. Similarly, we could not always compete on their due diligence style & pace taking place over a day or sometimes a conversation: as an impact investor we need to dive into the impact & product market fit on each deal. This takes time & efforts."

Sarah Djari, Private Equity Principal at responsAbility Investments – Excerpt from Building Bridges 2022

store's finances. In addition, it is also a learning process for the store owners, who can buy more and understand better which products have higher margins or sell better.⁴³

The market also sees the emergence of new models to assess and monitor the impact of investee companies. For instance, GK Ventures, the investment manager of the Good Karma Fund in Brazil, is using an impact multiple method to assess their theory of change during their due diligences based on the investee's business plan. For example, a farming education company would foresee the number of people to be trained in the next 5 years. Thanks to assumptions on the number of graduates per year, the average increase in income after graduation, or the average land size of farmers trained depending on each product cultivated, it is possible to calculate the expected social impact for each dollar invested.⁴⁴

Barriers to overcome

Current challenges weigh in on valuations, scalability, regulation and profitability of fintech models, as well as the competition with a broad variety of investors. Fintech and EF companies often need to raise more capital than responsible finance investors can provide for growth or to support operations. This is an opportunity to channel more capital towards financial inclusion and amplify their impact potential, but also a risk to crowd-in bigger investors who might be less mission oriented. At the same time, the stage of business of portfolio companies also influences the

type of financing instruments provided by funds. In recent years, early-stage fintechs have attracted a lot of interest from equity investors, with valuations skyrocketing. As raising debt is for expensive for investees, this somehow limits the opportunities in the space for private debt investors. Exiting equity investments also brings challenges for PAIF managers to find mission-aligned investors. Investment managers may venture into different types of instruments to overcome some of these challenges. Deetken Impact for instance is using different types of instruments, such as debt with performance-based flexible repayment schedules, convertible debt, and revenue-based instruments.⁴⁵

In addition, unregulated non-financial firms are playing an increasingly important role in the design and delivery of financial services. There is a risk that an increasing share of financial activity is happening outside the radar of financial regulators, as indicated by Edoardo Totolo of CFI during Financial Inclusion Week 2022.46 Overall, it is important for investment managers to bring forward initiatives that protect consumers, as for example the Responsible Digital Financial Services Guidelines, and build on existing guidelines such as the Client Protection Pathway in microfinance as indicated by Tim Crijns from Triodos IM during the same event.⁴⁷ And as Fernando Sánchez, CEO of BIM Asset Management reminded, "we should not forget that the solutions, tools and fundings must be focused on the final client, on reducing the financial inclusion gap and to increase the quality of the financial services to the population".48

⁴³ Excerpt from the interview with Anca Huzum, Director of Operations and Finance at CO Capital.

⁴⁴ Excerpt from the interview with Patricia C. Nader, Partner & Head of Impact and Investor Relations at GK Ventures.

⁴⁵ Excerpt from the interview with Alejandra Revueltas, Senior Portfolio Officer at Deetken Impact.

⁴⁶ Financial Inclusion Week 2022. Excerpt from Edoardo Totolo, Vice President of Research and Programs at CFI.

⁴⁷ Financial Inclusion Week 2022. Excerpt from Tim Crijns, Fund Manager at Triodos IM.

⁴⁸ Financial Inclusion Week 2022. Excerpt from Fernando Sanchez, CEO of BIM.

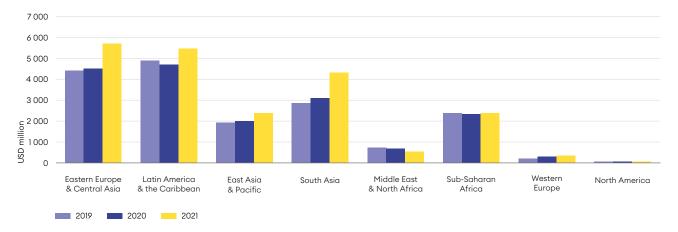
Geography of investments

Regions

Both Eastern Europe & Central Asia, as well as Latin America & the Caribbean dominate the regional landscape of fund investments. Together, they account for 53% of funds' direct impact portfolio, with the former at 27% and the latter at 26%. They are followed by South Asia (20%) in third position. East Asia & Pacific and Sub-Saharan Africa both represent 11% of portfolio

outstanding. The Middle East & North Africa (3%) is still at a nascent phase regarding funding from PAIFs. 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.

Figure 38 - Outstanding volume by region

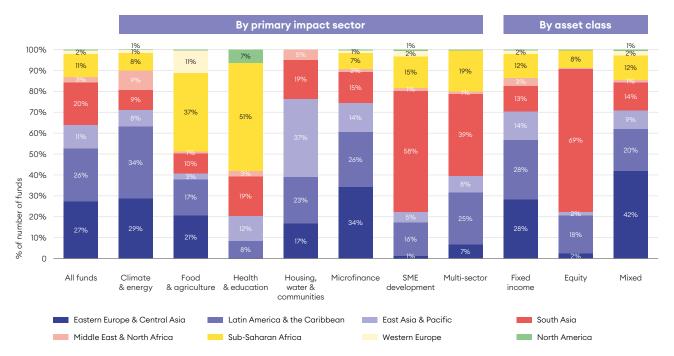


Equity funds have the highest exposure into South Asia (69% of their portfolio), with India contributing to this finding. Fixed income and mixed strategies have higher allocation towards Sub-Saharan Africa comparatively to Equity funds this year. The first region for mixed funds is Eastern Europe & Central Asia (42%), something which has been a constant over the past three years.

The regional breakdown differs considerably according to the primary impact sector. The prime region for climate & energy funds remains Latin America & the Caribbean (34%). Food & agriculture funds, as well

as health & education funds principally target sub-Saharan Africa, at 37% and 51% respectively. Needs for basic access to health and education are highest in the region. Housing, water & communities funds, on the other hand, principally focus on Asia, cumulatively at 56% of portfolio outstanding between East Asia & Pacific (37%) and South Asia (19%). SME development funds and multi-sector funds have similar regional allocation patterns, with Latin America & the Caribbean (16% and 25%), Sub-Saharan Africa (15% and 19%) and South Asia (58% and 39%) attracting most of their investments, albeit at varying levels.

Figure 39 - Regional breakdown by peer groups



Growth-wise, on a yearly sample of repeat fund participants, volumes outstanding towards South Asia increased the most at 41% year-on-year, followed by East Asia & Pacific (+24% growth) and Sub-Saharan

Africa (+15% growth). The latter witnessed significant growth in 2021 within climate & energy fund portfolios (+32%), multi-sector fund portfolios (+26%) and microfinance fund portfolios (+18%).

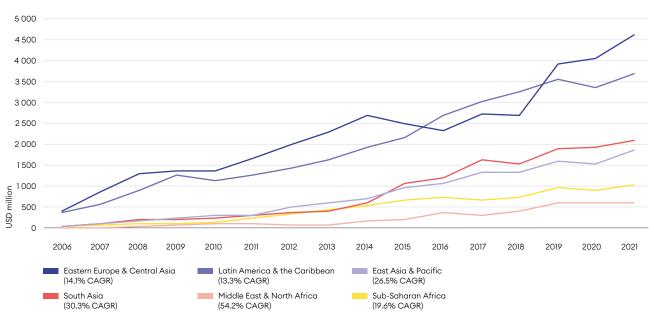
45% 41.2% 40% 35% 30% 23.8% 25% 20% year-on-year growth 15.2% 13.7% 13.5% 15% 10% 5% 1.1% South Asia Middle East Sub-Saharan Eastern Europe East Asia Latin America & the Caribbean & Pacific

Figure 40 - Year-on-year growth of regional portfolios

Finally, from a more historical viewpoint, microfinance funds still channel more than 60% of their funding to Eastern Europe & Central Asia (34%) and Latin America & the Caribbean (26%). However, since 2006, the regions seeing the highest growth are the Middle East & North Africa (+54% compound annual growth rate - starting

from a very low base), South Asia (+30%), East Asia & Pacific (+27%) and sub-Saharan Africa (+20%). Growth picked up across all regions for microfinance funds during 2021, following a rather low or even negative growth witnessed in most regions in 2020.

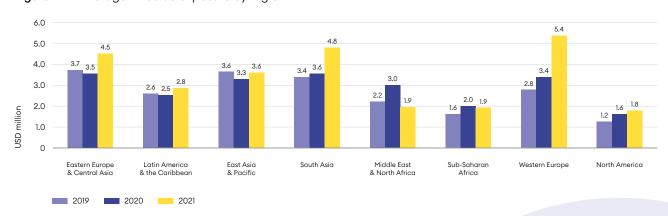
Figure 41 - Historical growth of microfinance fund portfolios by region



When considering only the portfolio allocated towards developing market regions, the funds' average exposure volume per investee is the lowest in sub-Saharan Africa and MENA, both at USD 1.9 million. On the contrary, the portfolio outstanding per investee is the highest

in South Asia and Eastern Europe & Central Asia (USD 4.8 million and USD 4.5 million, respectively). This was systematically the case since 2019 but it has further increased as of end of 2021.

Figure 42 - Average investee exposure by region



Countries

At a country level, for all funds, the top 5 countries in terms of year-end portfolio outstanding are composed of India (USD 2.9 billion, representing 14.5% of total volume), Ecuador (4.6%), Georgia and Cambodia, both at 4.4%, and Mexico (3.9%). These have systematically been the prime destinations of impact fund portfolios ever since the PAIF survey was conducted three years ago. India is also the country which is the most attended in terms of number of funds, with 87 funds having some sort of exposure there.

Other countries considered as significant in impact fund portfolios include Russia, Armenia, Bolivia, Uzbekistan, and Peru.

Contrasting this with the asset class peer group, we see that fixed income funds have Costa Rica, Turkey, and Colombia within their top 10, while mixed funds include Eastern European nations such as Belarus, and the Czech Republic. Equity funds, with many single-country or regionally focused mandates, include Argentina, Bolivia, Brazil, Nigeria, Bangladesh, Indonesia, and Kenya within their top 10. India remains nonetheless in first place by a large margin (55%).

Table 10 - Top 10 country exposures by primary asset class

2.EcuadorArgentinaIr3.GeorgiaBoliviaCzech4.CambodiaBrazilUzbe5.MexicoColombiaCam6.ArmeniaNigeriaMexico	ced
3. Georgia Bolivia Czech 4. Cambodia Brazil Uzbe 5. Mexico Colombia Cam 6. Armenia Nigeria Me	ederation
4.CambodiaBrazilUzbe5.MexicoColombiaCam6.ArmeniaNigeriaMexico	dia
5.MexicoColombiaCam6.ArmeniaNigeriaMe	Republic
6. Armenia Nigeria Me	kistan
	bodia
7. Costa Rica Mexico Be	xico
	arus
8. Turkey Bangladesh Kaza	khstan
9. Peru Indonesia Ecu	ador
10. Colombia Kenya Ug	ında

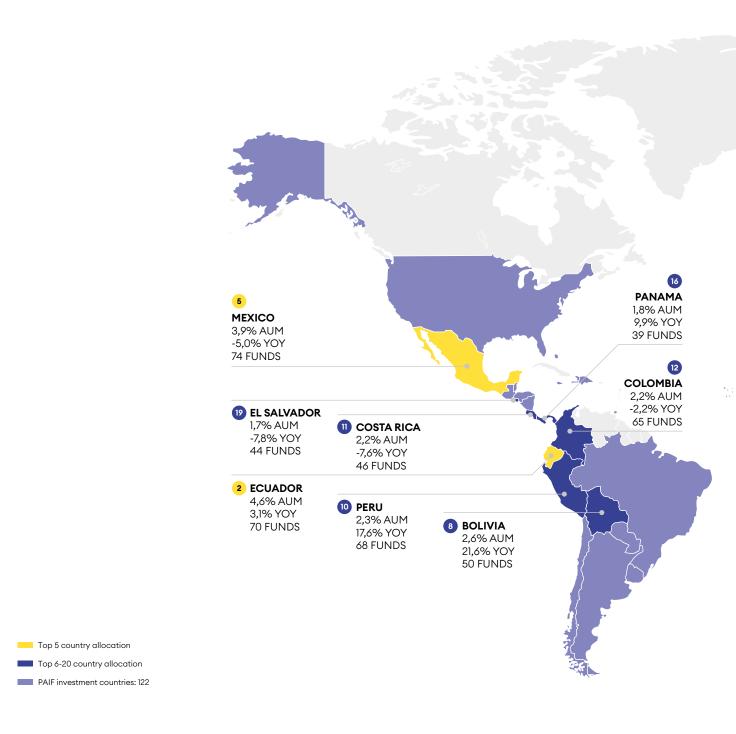
The rank varies even more when segmenting the analysis by primary impact sector. One of the few similarities is that India is in first position for all sectors, except for climate & energy funds where it is seventh and SME development funds where it is fifth. The latter funds in fact target Mexico as their first country of

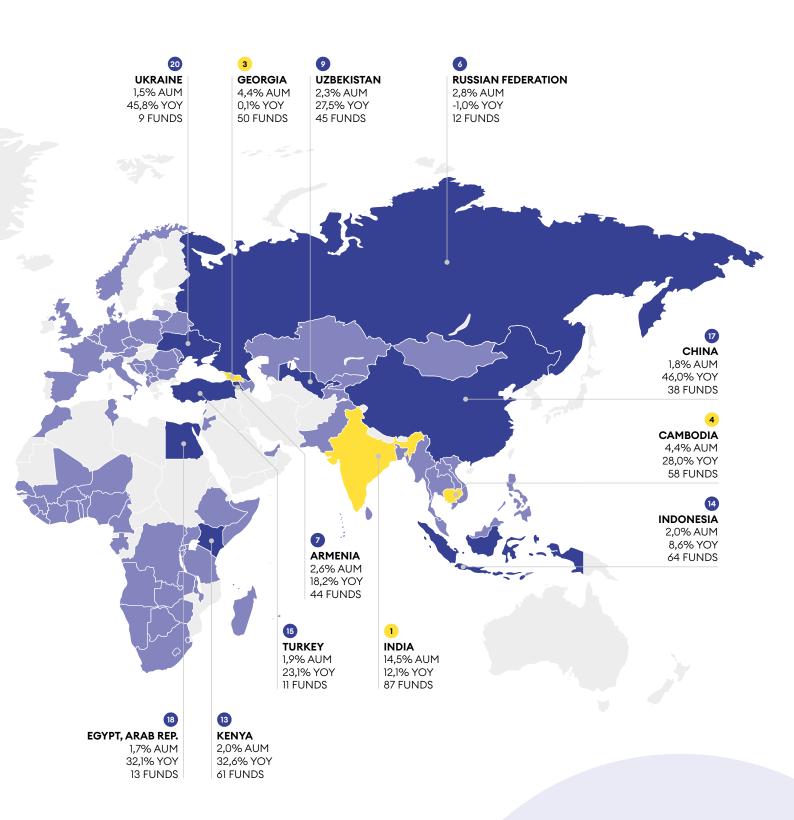
investment, while Kenya and Uganda complete the top 3. Egypt and Turkey appear second and third in climate & energy funds, while they are less predominant in other sectors. Similarly, Côte d'Ivoire and Kazakhstan are second and third for food & agriculture funds but much less attended by other sectoral funds.

Table 11 - Top 10 country exposures by primary impact sector

	Climate & energy	Food & agriculture	Health & education	Microfinance	SME development	Multi-sector
1.	Georgia	India	India	India	Mexico	India
2.	Egypt, Arab Rep.	Côte d'Ivoire	Kenya	Cambodia	Kenya	Argentina
3.	Turkey	Kazakhstan	Ghana	Georgia	Uganda	Mexico
4.	Ecuador	Bolivia	Cambodia	Ecuador	Brazil	Cambodia
5.	Ukraine	Ukraine	United States	Russian Federation	India	Ecuador
6.	Panama	Zambia	Botswana	Mexico	Argentina	Kenya
7.	India	Ghana	Colombia	Uzbekistan	Hong Kong SAR, China	Brazil
8.	Mexico	Tanzania	Indonesia	Armenia	South Africa	Indonesia
9.	Serbia	Ecuador	Burkina Faso	Bolivia	Egypt, Arab Rep.	Bolivia
10.	Colombia	Mauritius	Mexico	Costa Rica	Nigeria	Peru

Figure 43 - World map of country exposures, all funds





Investment terms

PRIVATE DEBT PORTFOLIO

As highlighted in section 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.

We go through some of these characteristics related to debt investment terms, before discussing private equity considerations.

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 total, survey participants reported investments in 69 different currencies, among which 65 qualify as local currencies. Most of the debt investments by fixed income and mixed funds are in hard currency (66% vs 34% in local currency), namely the US dollar (51.5%) and the euro (14.6%). The other two mentioned hard currencies are the British pound sterling and the Swiss franc, but their usage is minor.

The use of local currency for debt investments in emerging and frontier markets represents 34% within our sample, a figure that has mildly dropped from 36% back in 2019. Funds from our sample display an incredible diversity of local currency usage, with many that have become the dominant currency of investment within their respective portfolios. The Indian rupee (10.0%) for instance, is ranked third in terms of volume, after the US dollar and the euro. The other currencies making up the top 10 are the Georgian lari (1.7%), the Russian Ruble (1.6%), the Colombian peso (1.6%), the Mexican peso (1.4%), the Indonesian rupiah (1.4%), the West African CFA franc (1.2%), and the Uzbekistani Som (1.1%).

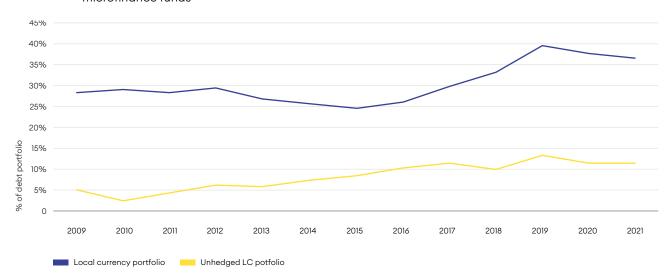
Table 12 - Currency breakdown of impact debt portfolio (top 10 currencies)

Ranking	Currency	Total exposure (USD)	% hedged	% unhedged
1.	USD	7 494 724 791	52%	48%
2.	EUR	2 132 248 952	74%	26%
3.	INR	1 451 352 715	84%	16%
4.	GEL	243 076 321	52%	48%
5.	RUB	231 250 898	93%	7%
6.	СОР	228 355 752	67%	33%
7.	MXN	209 926 275	62%	38%
8.	IDR	196 827 616	76%	24%
9.	XOF	180 160 824	61%	39%
10.	UZS	165 588 426	57%	43%

Among loans made in local currency, 33% remain unhedged against the accounting currency of the fund (vs. 31% as of December 2020). 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 show that 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 since 2009, especially since 2015, which is an encouraging sign for investees in terms of managing their foreign exchange (FX) risk exposure. Trends in the last three years show a slight decrease of local currency portfolios, from a peak of 39% at the end of 2019 to 37% of debt exposure today. Twelve percent of microfinance funds' debt exposure is unhedged, equating to 30% of unhedged, local currency debt exposure for microfinance funds.

Figure 44 – Historical local currency portfolio of microfinance funds



In terms of primary impact sector peer groups, PAIFs in housing, water & communities and health & education seem to offer the highest proportion of local currency lending, at 77% and 74% of local currency

loans respectively. The unhedged portion of the debt portfolio is the highest for housing, water & communities (53%), ahead of multi-sector (19%) and microfinance (12%) funds.

Figure 45 - Currency type of debt portfolios

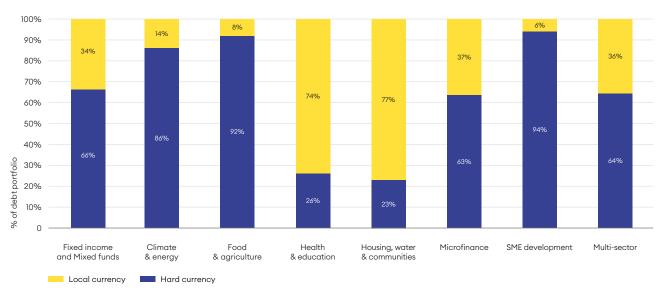
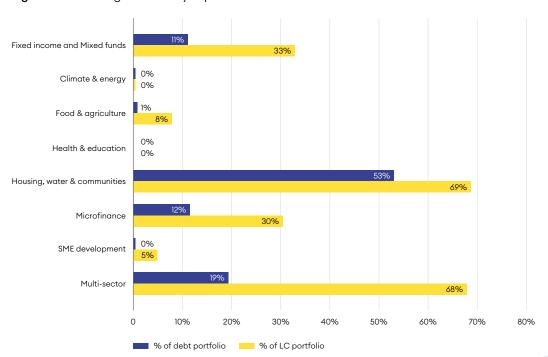


Figure 46 - Unhedged currency exposure



Interest rate type

A majority of PAIF loans (71% of debt portfolio) have a fixed interest rate, which means that the same interest rate is paid out on each interest payment date. Nearly 30% of fund loans to their investees are negotiated at floating rates, which 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 will generally be adopted when interest rate markets are expected to fluctuate upwards, although borrowers will prefer fixed rates, especially for long-term borrowing, to prevent unknown movement in money markets.

For all funds, floating rate portfolios have varied since end of 2019, starting at 34% of debt exposure, then increasing to 35% and dropping 29% as of December 2021. It will be interesting to see what the end of 2022 figures will show, given the current high inflationary context.

Floating rates are currently more prevalent for climate & energy, at around two-thirds of the debt portfolio respectively.

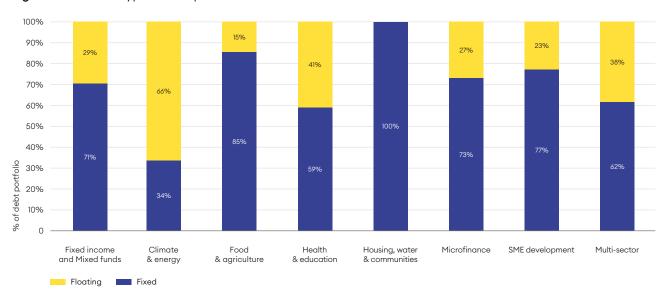


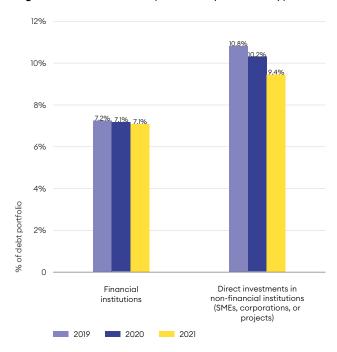
Figure 47 - Interest type of debt portfolio

Portfolio yield

The portfolio yield⁴⁹ 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 non-financial SMEs, non-financial corporations or projects. For the sample of all fixed income and mixed funds, portfolio yields amount to 7.2% 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.

As presented in the business model section, investees can take various forms, namely financial institutions, projects, non-financial SMEs, and non-financial corporations. 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 (50% or more) through financial institutions (including fintechs, together at 7.1%) when compared to those that partner mostly (50% or more) with non-financial institutions (embedded-finance companies, non-financial SMEs, non-financial corporations, or projects, together at 9.4%). The risk premium associated with the latter is currently priced at 2.33%.

Figure 48 - Yield of debt portfolio by investee type



Gross portfolio yields are highest for health & education funds (13.8%) as well as SME development funds (10.2%), both of which channel a significant portion of their capital through non-financial institutions such as SMEs or larger corporations. In the former case, high yields are also driven by the fact that education and healthcare projects typically will need longer maturities given their underlying business needs.

⁴⁹ 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.

16% 14.6% 14% 13.29 12% 11.1% 9.7% 10.1% 10.2% 10% 8.6% 8.8% 8.7% 8.6% 8.5% 7.6% 7.4% 7.20 7.5% 7.2% 8% 6.8% % of debt portfolio 4% 2% 0 Fixed income Food & agriculture Climate Health Housing, water Microfinance SME development Multi-sector and Mixed funds & education & eneray & communities 2019 2020 2021

Figure 49 - Yield of debt portfolio by primary impact sector

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, and declining over the past three years.

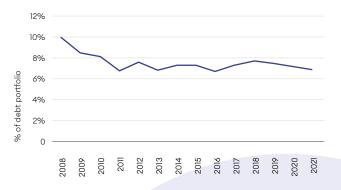
Declining money market rates and slightly lower credit premiums explain this yield shift and then stability, affecting the way microfinance funds priced their loans at the turn of the past decade. Interbank rates fell from 5% to under 1% between 2008 and 2011, then grew back to 3% between 2016 and 2018, 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 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.

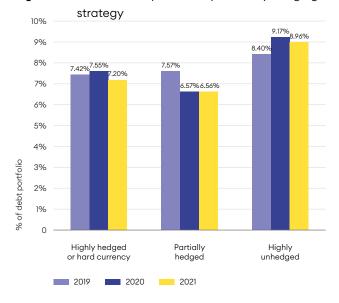
With rates increasing at a fast pace in 2022 to curb inflation, it will be important to monitor how microfinance funds and overall PAIFs' portfolio yields will compare in the next survey edition covering 2022 data points.

Figure 50 – Historical debt portfolio yield of microfinance funds



As mentioned earlier, there is a clear causality effect between the hedging strategy and the yield levels, with the latter varying significantly between highly hedged funds (7.2%) and highly unhedged funds (9.0%).⁵⁰



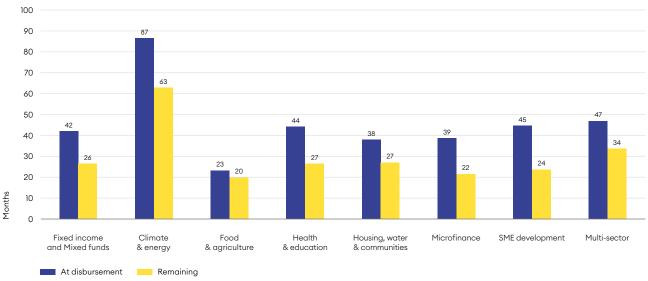


Maturity

The average maturity of private debt investments at disbursement in our sample ranged from 6 months to 125 months depending on the strategy. Funds investing through financial institutions have the maturities at disbursement on average of 40.4 months, whereas funds investing into non-financial institutions such as SMEs, corporations or projects, have longer maturities on average at disbursement (50.2 months). Within the latter, funds having project portfolios such as climate & energy funds exhibit higher maturities of 86.6 months, whereas food & agriculture funds display shorter maturities on average (23 months). Considering all fixed income and mixed funds, the remaining maturity stands at 26 months on average.

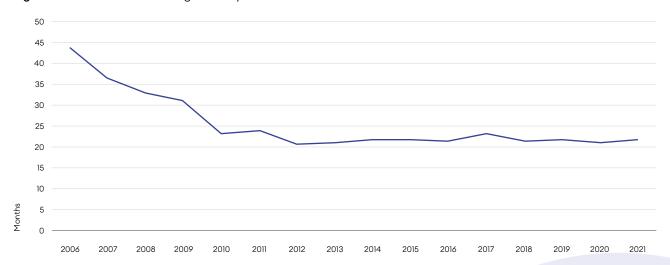
⁵⁰ Highly hedged funds: those with an unhedged proportion of their local currency portfolio of 5% or less.
Partially hedged funds: those with an unhedged proportion of their local currency portfolio of more than 5% and less than 95%.
Highly unhedged funds: those with an unhedged proportion of their local currency portfolio of more than 85%.

Figure 52 – Maturity of debt portfolio



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 53 - Historical remaining maturity of microfinance funds



PRIVATE EQUITY PORTFOLIO

Dividend income

In 2021, equity and mixed funds had dividend yields (dividend income divided by the equity portfolio)

amounting to 2.0%, mainly driven by food & agriculture (2.6% dividend yield) and microfinance (2.2%) funds.

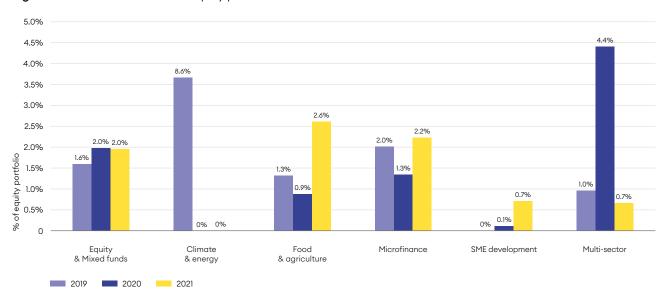


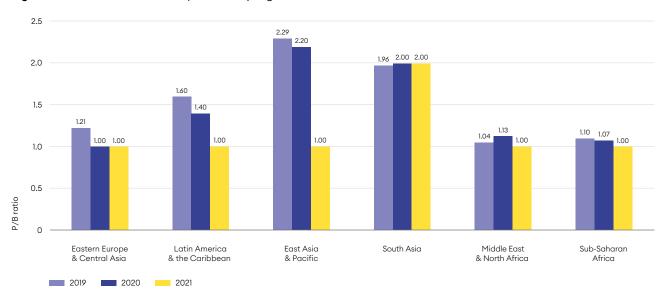
Figure 54 - Dividend income of equity portfolio

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

Valuation of investees in private equity portfolios measured in terms of P/B ratios dropped across all

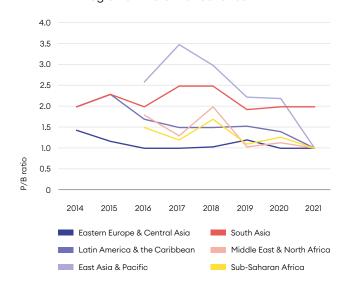
regions in 2021. The decrease in valuation since 2019 can be attributed to the challenging environment linked to the global pandemic.

Figure 55 - Median P/B ratio of portfolio by region



The same trend can be observed for microfinance equity and mixed funds, with the median P/B ratio decreasing in the last two years, at 1.0x in 2021 from 1.9x in 2019. P/B ratios reached their lowest level since 2014 across all regions.

Figure 56 – Historical average P/B ratio of portfolio by region of microfinance funds

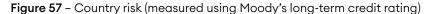


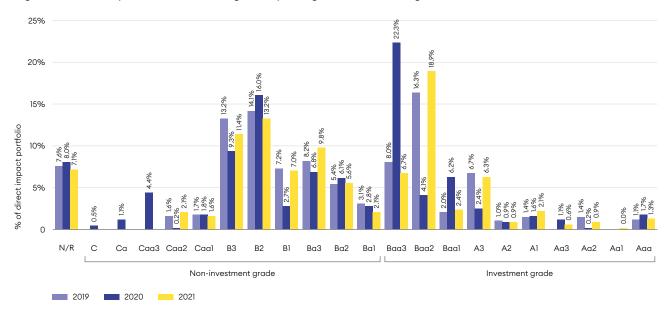
Risk analysis

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, forming part of the non-investment grade category. While fixed income funds are invested mostly in non-investment-grade markets (at 58% of direct impact portfolio), more than half of the outstanding investments of equity and mixed funds are considered investment-grade (from Baa3 to Aaa). Housing, water & communities funds also have a high proportion of their portfolio in investment-grade markets (69%) followed by multi-sector funds at 56%.





100% 90% 80% 70% 60% 50% % of direct impact portfolio 40% 30% 20% 40% 10% 0 All funds Housing, water Microfinance SME development Multi-sector & energy & agriculture & education & communities

Investment grade

Figure 58 - Country risk breakdown by impact sector peer group

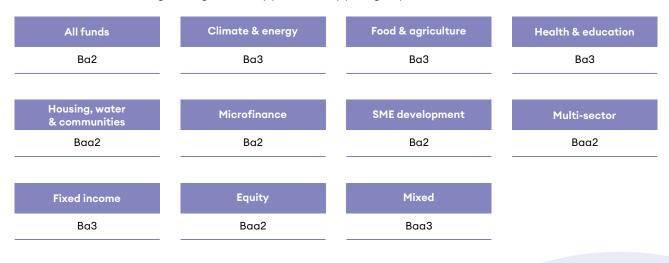
Assigning a sovereign risk rating to the PAIF market based on country exposures shows that the median portfolio sovereign risk is Ba2 on Moody's scale.⁵¹

Non-investment grade

Non-rated

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

Table 13 - Median sovereign rating of country portfolios by peer group



⁵¹ 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. While SME development funds' reserve increased significantly in 2021 (10.2% of debt portfolio) compared to 2020 (0.5%), health & education funds' loan loss reserves are today more in line with the average at 4.0%. In 2021, food & agriculture funds had the highest loan-loss reserves levels at 12.2%.

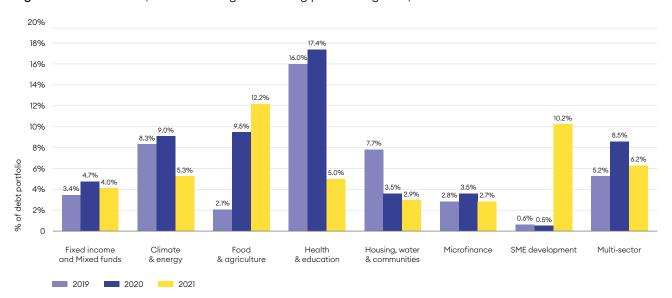


Figure 59 - Default risk (measured using outstanding provisioning level)

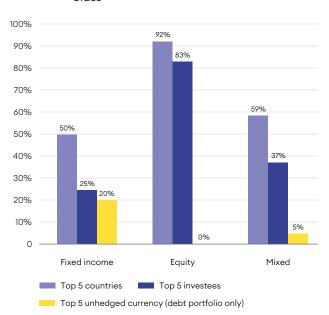
Portfolio concentrations

We measure portfolio concentration across three metrics in the study: the top 5 countries, the top five investees, and the top 5 unhedged currency exposure. The latter is only applicable to fixed income and mixed funds, with the assumption that equity funds do not hedge their investments.

These concentration ratios are trending upwards for all funds over the past three years of observation. Top five country concentration ratios have increased from 52% in 2019 to 53% in 2020 and 57% at the end of 2021. Likewise, top 5 investees have increased from 29% in 2019 to 30% in 2020 to 36% in 2021, signaling a tightening in terms of diversification.

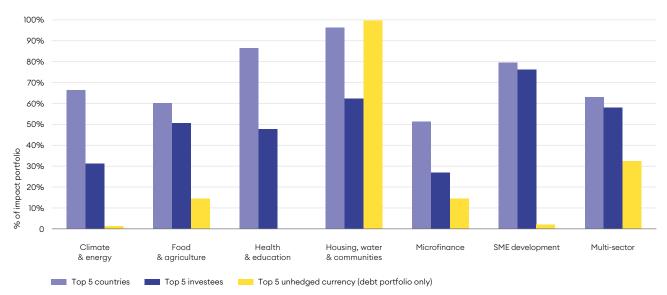
Focusing on asset class peer groups, concentration indicators are much higher for equity funds than for fixed income funds. As explained before, equity funds tend to exhibit lower diversification than debt funds, and employ a more focused approach in terms of investing.

Figure 60 – Concentration indicators by primary asset class



Breaking this down by impact sector, housing, water & communities funds as well as heath & education funds have the highest concentration levels in terms of top 5 countries. Across all impact sector peer groups, top countries account for at least 50% of the portfolio outstanding. The share of the top 5 investees ranges from one fourth to three fourth across all impact sectors, with microfinance and climate & energy funds having the lowest concentration levels.

Figure 61 - 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. Ratios today are approximately around the 50% and 30% mark respectively for country and investee concentrations.

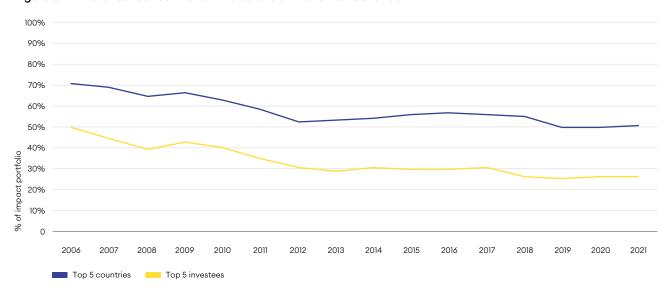


Figure 62 - Historical concentration indicators of microfinance funds

Loan-loss provisions and write-offs

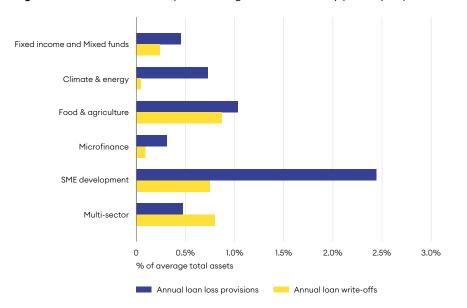
As briefly highlighted before, loan-loss reserves outstanding as a percentage of the credit portfolio of fixed income and mixed funds decreased to 4.0% as of end 2021, compared to 4.7% one year before, but still above levels recorded for 2019 (3.4%). While this ratio measures the potential risk profile of credit portfolios, it does not quantify the impact of yearly provisioning levels on the net return of funds.

However, looking at yearly provisions and write-offs on the level of a fund's total assets enables us to mount a view on how these metrics affect net returns each year.

Annual loan-loss provisions and loan write-offs during 2021 amounted to 0.46% and 0.24% of average assets

for the whole sample. After a hike in 2020 linked to the global pandemic, 2021 ratios have decreased significantly. We observe large differences across the different sector peer groups and when segmenting the analysis by investee types. SME development (2.44%) and housing, water & communities (2.16%) funds recorded more net loan-loss provisions in 2021. For other sectors, annual loan-loss provisions significantly increased in 2020 but returned to 2019 levels today, except for climate & energy funds which have seen their provision level constantly decreasing since 2019. In terms of annual write-offs, here again, the SME development funds show an increase compared to 2019 and 2020. Other sectors all display a decreasing trend with regards to both these risk ratios.

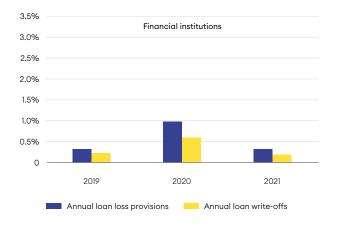
Figure 63 - Annual loan loss provisioning and write-offs by primary impact sector

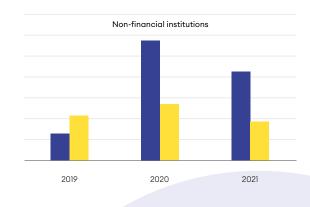


When considering funds in two buckets according to how much capital flows primarily to financial institutions vs. non-financial institutions, we see that funds more exposed to financial institutions (50%+) display lower provision and write-off ratios in 2021. Funds investing primarily through non-financial SMEs, corporations or

projects respectively recorded an equivalent of 2.11% of provisions and 0.94% of write-offs on average assets. Trends are however decreasing compared to 2020, signaling an upward adjustment in the portfolio quality of PAIFs.

Figure 64 - 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.⁵² Write-off levels in 2020 also surpassed those of 2010. In 2021, both metrics decreased significantly compared to 2020, with annual loan write-offs even lower than 2019 levels.

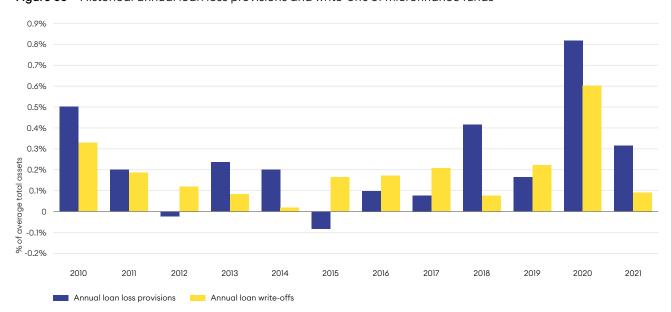


Figure 65 - Historical annual loan loss provisions and write-offs of microfinance funds

⁵² Emerging market stocks and government bonds dropped by 14.6% and 5.2% respectively in 2018.

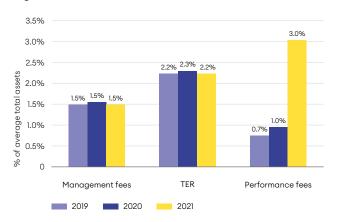
Fees & costs

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. Both these ratios are proxies derived 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.

Management fees, which include all management, investor relation and distribution costs, averaged 1.5% in 2021 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 2.2% of average assets. Both ratios have been stable during the past three yearly studies.

Figure 66 - Fees and costs



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 3% and can be linked to the median level of carried interest and hurdle rates observed for equity funds of 20% and 8%, respectively. Within the sample, 23 fund managers also reported that performance fees were both linked to financial and impact targets. Overall, performance fees significantly increased in 2021, due to a few high measures. The median value amounts to 0.18%.

These overall costs vary by impact sector and, naturally, by asset class. Equity funds, which displayed a huge growth in total assets during 2021 will skew the result given that the denominator in our formula (average assets over two years) will be higher than in the past. Regardless, comparing fixed income and mixed strategies with equity funds is not effective given that equity funds generally charge fees on the level of committed capital, at least in the early years following the vintage of the fund, rather than on the actual asset size of the vehicle. However, using the same denominator across all our funds, we see that mixed funds have the highest costs in 2021, whereas equity funds are at lower levels than in previous years, with 1.42% of management fees and 1.88% of TER. The median for both values is higher at 2.18% and 2.58%, respectively.

In terms of impact sector, climate & energy funds witness the lowest costs (TER of 1.7%) while funds focused on food & agriculture (5.3%) and housing, water & communities (4.6%) sit on the higher end.

Figure 67 - Fees and costs by primary asset class

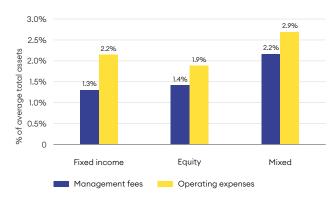
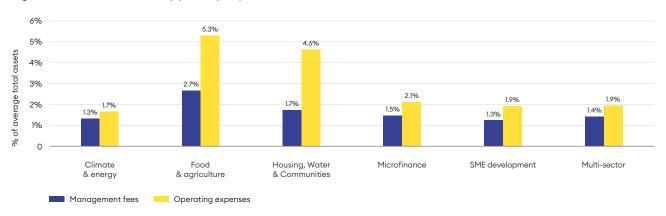


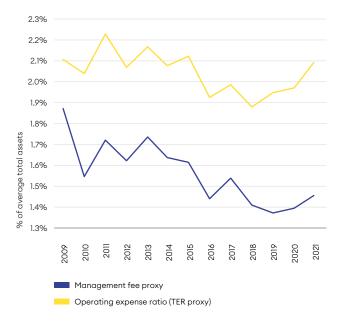
Figure 68 - Fees and costs by primary impact sector



Costs for microfinance funds

Since 2007, management fees have been trending downward for microfinance funds, decreasing by close to 50 basis points, from an initial level of 1.9% to 1.5% today. Meanwhile, TER has been relatively stable within a bandwidth of 1.9% and 2.2% depending on the years, and the latter from 2.2% a decade ago to 2.1% 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 69 - Historical fee proxies of microfinance funds



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 United Kingdom, Belgium and Luxembourg. Distribution to retails investors remains scarce in the space, with only 18 participant funds being licensed to target this clientele. Focusing on retail investors, the principal markets seem to be the Netherlands, the United States, Canada, France, Germany and Luxembourg.

Table 14 – Subscription and redemption frequencies for open-ended funds

	Subscription (% of funds)*	Redemption (% of funds)*		
Daily	9%	6%		
Weekly	2%	2%		
Bimonthly	4%	0%		
Monthly	54%	38%		
Quarterly	23%	38%		
Triannual	0%	4%		
Semestrial	0%	4%		
Annually	9%	9%		

^{*} These percentages are relative to the number of responses and may not fully reflect the market's liquidity.

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 (23%). These periodicities also seem to be common practice in terms of redemption (38% of funds for both frequencies), associated with a median notice period of 60 days.

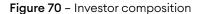
Some funds do offer daily or weekly subscription and redemption possibilities (also with shorter redemption notice periods), bringing such funds closer to the liquid mutual fund markets.

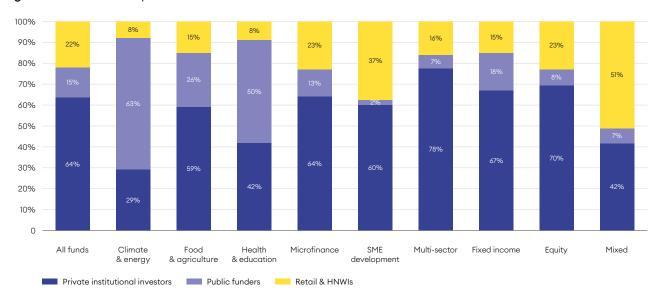
Investor breakdown

In terms of volume, PAIFs from the sample source 64% of their funding from institutional investors, followed by 22% from private retail and qualified individuals (highnet-worth individuals – HNWIs) and the rest (15%) from public funders. Collectively, the funds source USD 14.8 billion through private institutional investors, USD 5.1 billion through retail and HNWIs and USD 3.4 billion through public funders.⁵³

Breaking this down by primary impact sector, we observe that climate & energy and health & education

vehicles generate more public funding (63% and 50%, respectively). Many of these fund structures make use of blended finance mechanisms with concessional investor tranches financed generally by the public sector in view of crowding-in private capital. For other sectors, private institutional investors represent about two thirds or more of the funds' capital base. These investors are also the prime source of financing for equity and fixed income funds, whereas mixed funds source 51% of their money from retail and HNWIs.





⁵³ For definitions of the different types of investors, refer to Table 2 on section 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 13% of microfinance funds' capital at the end of 2021. Private

institutional investors have also witnessed the strongest growth, with a CAGR of 22% since 2006 (on a moving sample), and a yearly growth of 25% in 2021. In 2021, the public sector allocation into the capital structure of PAIFs slightly decreased (-2.9%), whereas the share of retail & HNWIs decreased at a higher rate of 7%.

Figure 71 - Historical investor composition of microfinance funds

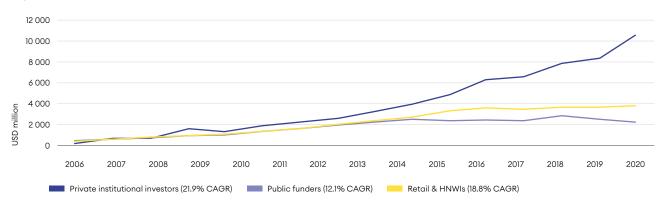


Table 15 - Yearly funding growth by investor type in microfinance funds

Yearly growth*	2015	2016	2017	2018	2019	2020	2021
Private institutional investors	11.4%	13.0%	25.9%	4.1%	13.3%	2.8%	24.8%
Public funders	11.7%	-6.9%	2.5%	-1.3%	16.9%	-14.9%	-2.9%
Retail & HNWIs	15.5%	21.5%	-3.5%	7.1%	6.5%	-3.4%	-7.0%

^{*}Yearly growth is calculated each year on a constant sample of repeat fund participants year-on-year.

Financial performance

2021 was a recovery year for the global economy following a volatile 2020 due to the onset of the COVID-19 pandemic. Still, new variants halted the ease of lockdowns, while surging inflation levels towards year-end were also factors of concern. The latter, which witnessed record increases since the 1980s is forecasted to rise even further in 2022 and is currently accompanied by rising interest rates to temper its effects, bringing further uncertainty in financial markets. Overall, growth forecasts are expected to slow down in 2022 and 2023 when compared to 2019 according to the International Monetary Fund (IMF).⁵⁴

Despite the challenging outlook, the year 2021 did build on worldwide economic recoveries and fiscal policy supports. Stock markets fared well, more so than bond markets. Developed market stocks returned 21.8% in 2021, while emerging/frontier market stocks also grew, albeit at a lower rate of 4.3%. Emerging market government bonds witnessed negative performance (-1.5%) while investment-grade global government bonds performed negatively as well (-2.3%).⁵⁵ These performance patterns help contextualize the positioning of PAIFs in terms of net returns generated for their investors in 2021.

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, at the end of 2021, cash levels represent 10% of total assets for fixed income funds, yields average 7.3% of portfolio levels, operating expenses average 2.2% of total assets and provisioning levels reached 0.5% in 2021. 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).

⁵⁴ International Monetary Fund (2022). World Economic Outlook, October 2022.

⁵⁵ Growth figures indicated here are based on market indices sourced from Bloomberg:

Developed market stocks: MSCI World Net Total Return USD Index

Emerging/Frontier market stocks: MSCI Frontier Emerging Markets Net Total Return Index

Emerging market government bonds: J.P. Morgan EMBI Global Total Return Index

Global IG government bonds: FTSE WGBI Curr-Hedged USD

2021 - rebounding from the pandemic

For unleveraged funds, the median 2021 returns in USD amounted to 2.4% for fixed income, 4.2% for mixed and 6.8% for equity funds, hence overperforming the 2020 values across all asset strategies. Returns were slightly lower for fixed income funds for EUR and CHF share classes, at respectively 2.1% and 1.9% at the median, and 7.3% in EUR for mixed funds.

For leveraged funds, the equity tranche returns amounted to 2.3% in USD and 0.9% in EUR. Noteholders received on average 3.5% on their loaned capital in USD.

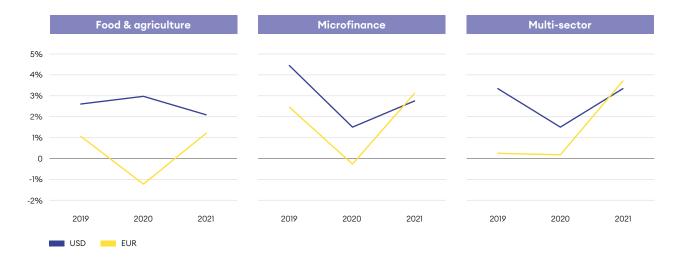
Table 16 - Financial returns

		2019			2020			2021	
Unleveraged funds	USD	EUR	CHF	USD	EUR	CHF	USD	EUR	C
All funds	4.10%	2.11%	4.10%	1.50%	-0.07%	0.21%	2.59%	3.05%	2.0
Fixed income	4.10%	2.04%	4.10%	1.50%	0.18%	0.26%	2.40%	2.14%	1.
Equity	5.90%			5.49%			6.80%		
Mixed	5.23%	2.70%		-0.58%	-4.40%		4.19%	7.25%	
Leveraged funds	USD	EUR	CHF	USD	EUR	CHF	USD	EUR	C
Coupon returns	5.00%			3.25%			3.50%		
Equity tranche (ROE)	3.90%	4.80%		0.52%	8.01%		2.34%	0.90%	

Within unleveraged fixed income funds, multi-sector funds positively drove returns in USD and EUR, at 3.1% and 3.7%, Food & agriculture funds were below the median of all unleveraged funds, returning 2.1% in USD, and 1.2% in EUR.

For mixed strategies, climate & energy funds witnessed a null performance in USD and a negative performance in EUR (-0.9%). Microfinance funds fared better in that respect, returning 4.2% and 7.6% in USD and EUR.

Figure 72 - Unleveraged, fixed income funds



On the side of equity, we started tracking two commonly reported financial performance indicators this year. In addition to surveying yearly performances, we requested equity (and mixed) funds to report on their internal rate of return (IRR) since inception, as well as

their total value to paid-in (TVPI) multiple. The median IRR since inception stood at 4.9% (vs. 12.7% for the simple average) and the median TVPI multiple at 1.13x (vs. 1.84x for the simple average). Both charts below contextualize these findings by funds' vintage year.

Figure 73 - IRR since inception by vintage buckets

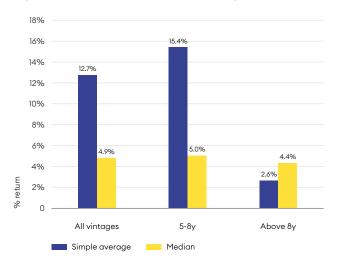
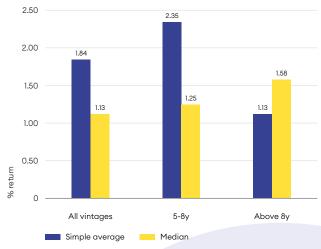


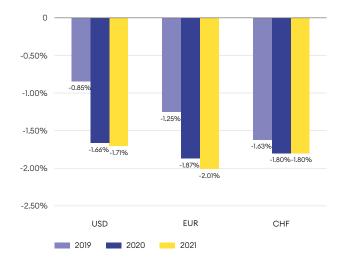
Figure 74 - TVPI since inception by vintage buckets



Maximum drawdown

Looking at maximum drawdown figures⁵⁶ 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 -1.71% for USD, -2.01% for EUR and -1.80% for CHF share classes. As of the end of 2019, these values stood at -0.85%, -1.25% and -1.63% respectively, evidencing the relative instability brought by the COVID-19 pandemic over the last couple of years.

Figure 75 - Maximum drawdown, last five years



Funds using FX hedging instruments against their local currency exposures (meaning highly hedged funds) show drawdown figures in 2021 of -1.20%, -1.85% and -1.12% 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. It will be interesting to continue monitoring these trends in subsequent years given varying levels of macro-economic challenges in different periods.

Looking back at microfinance fund returns

In the microfinance fund segment, 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. The global pandemic then put downward pressure on net returns in 2020 before resuming favorably in 2021.

For microfinance fixed income funds, net returns in 2021 underperformed the SMX - MIV Debt Index⁵⁷ in USD (2.22% vs 3.14% for the index) and EUR (2.01% vs 2.15%), but overperformed it in CHF (1.95% vs 1.54%).

⁵⁶ 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.

⁵⁷ 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 are available on Tameo Analytics, the market intelligence platform of Tameo: https://app.tameo.solutions.

Figure 76 - Historical USD returns of microfinance funds

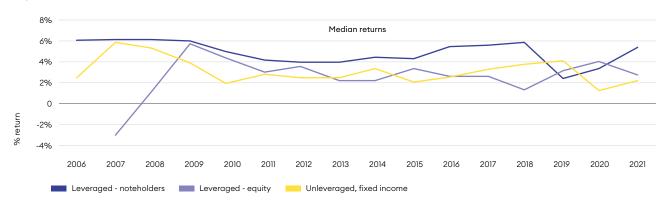
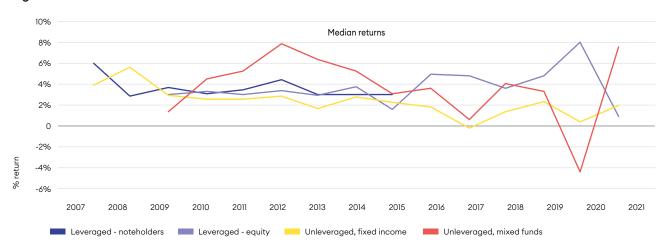


Figure 77 - Historical EUR returns of microfinance funds

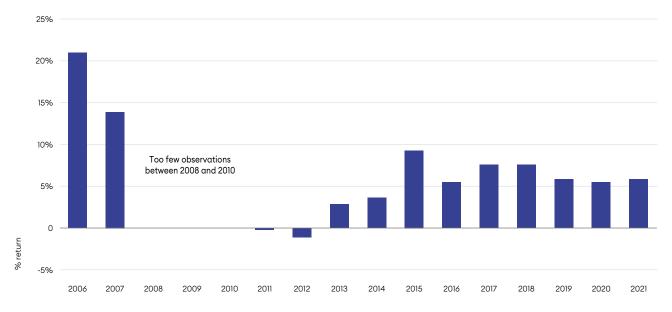


For equity microfinance funds, median returns stood at 5.90% in USD in 2021, with high volatility over the years

linked to this business model, but somewhat stabilizing in the last couple of years.

| 2022 PAIF REPORT FUND FINANCIAL METRICS |

Figure 78 - Historical USD returns of equity microfinance funds

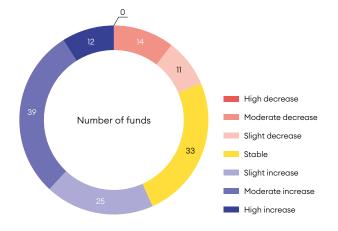


Return forecasts

With the spillovers of the COVID-19 pandemic remaining valid today, the full, long-term effects of the COVID-19 pandemic on PAIF performance remain hard to predict. Looking ahead to end of this year, two-thirds of funds expect an increase in their performance in 2022: 12 respondents expect a high increase, of which 6 are equity and mixed funds (4 and 2, respectively). Nearly half of funds appear to indicate slight to moderate increases in returns for 2022, while one-fourth expect stable returns and only 19% expect any sort of decrease, be it slight or moderate.

Across all impact sectors, at least 50% of funds expect an increase in performance as we head towards the end of 2022. Funds in SME development and climate & energy are the most optimistic (70% of them expect a return increase) whereas microfinance funds are more conservative with 24% of funds expecting a further decrease in performance in 2022.

Figure 79 - Return forecasts







Fund impact metrics



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Intentionality

Across the sustainable finance spectrum, intentionality to drive positive change is a key distinctive characteristic of PAIF investment philosophy. According to Impact Frontiers, investors can classify the impact of their portfolio looking at two dimensions, being the social and environmental impact of their investees and their own actions to contribute to impact. On the first dimension, PAIFs strategies look at investees that not only act to avoid harm but also aim to have a sustainable outcome. In terms of their own contribution, PAIFs are sending clear signals that impact matters.

This is translated in the decision-making process, communications with investees and impact reporting for example. With their focus on emerging and frontier markets, they also help grow new or undersupplied capital markets and may decide to actively engage at the investee- or industry-level. These strategies imply a double or triple bottom line objective, integrating social, environmental, and financial return considerations. They may or may not consider below market risk-adjusted returns in their investment decisions.



Photo by Hui Nguyen on Unsplash

⁵⁸ Impact Frontiers, Investor Contribution Strategies, https://impactfrontiers.org/norms/investor-contribution/

Figure 80 - PAIFs strategies

INVESTOR'S CONTRIBUTION		IMPACT OF UNDERLYING INVI	ESTEE
	Act to avoid harm		
		Benefit stakeholders	
			Contribute to solutions
Signals that impact matters			
Engage actively			
Grow new/undersupplied capital markets Provide flexible capital			
Signals that impact matters			
Engage actively			
Grow new/undersupplied capital markets Provide flexible capital			
Signals that impact matters			
Engage actively			
Grow new/undersupplied capital markets			
Provide flexible capital			
Signals that impact matters			
Engage actively			
Grow new/undersupplied capital markets			
Provide flexible capital			PAIF
Signals that impact matters			strategies
Engage actively			
Grow new/undersupplied capital markets			
Provide flexible capital			
Signals that impact matters			
Engage actively			
Grow new/undersupplied capital markets			
Provide flexible capital			

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, also demonstrating intentions to benefit people and the planet. Many have even started implementing SDG considerations at the core of their impact investment activities. Generally, 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. Most PAIFs map their social and environmental goals against the SDGs at the fund level (38%) or the investee level (35%), while some fund managers provide even more granularity by mapping it at the transaction level (21%).

Figure 81 – Mapping of funds' social/environmental goals against the SDGs

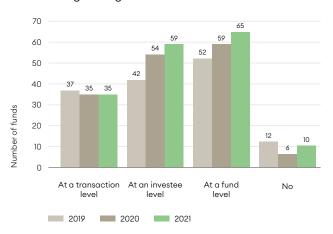
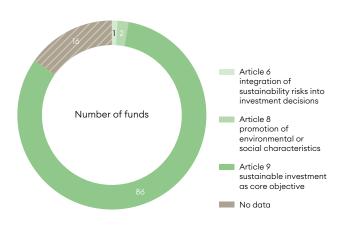


Figure 82 - SFDR category of the PAIFs



With the growth of sustainable and impact investing strategies, new regulations on sustainable investment claims are emerging globally, with the most advanced example being the Sustainable Finance Disclosure Regulation ("SFDR"). Introduced in 2021 by the European Commission, the SFDR regulates mandatory sustainability disclosures for asset managers and other financial institutions. The new regulation classifies financial products according to their sustainability risk considerations and sustainability objectives. More specifically, the new regulation looks at the transparency of the promotion of environmental or social characteristics (Article 8) and at the transparency of sustainable investments (Article 9) in pre-contractual disclosures. A fund complying with the Article 9 of the SFDR has sustainable investment as its objective, and not surprisingly, the majority of PAIFs bounded by the SFDR regulation in the survey (105 funds) reported being compliant with Article 9.

Impact management and governance

PAIFs' impact intentionality at the onset guides their operational impact narrative. These strategies stand out from mainstream investments because they integrate these filters and drivers in their decision-making process, added value and monitoring work. The funds typically 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.

In terms of screening investment opportunities, almost all PAIFs (147 of them, or 92% of respondent funds) integrate ESG norms 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 (94% of funds).

Figure 83 – Integration of ESG screening into investment decision process

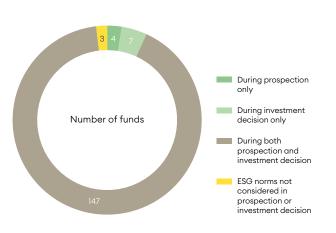
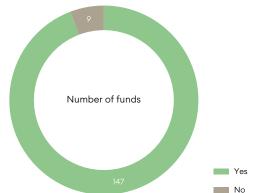


Figure 84 - Exclusion policy



Regarding ESG compliance monitoring, the frequency is similar to impact performance monitoring, with most funds undertaking such work on an annual basis (51%) and a third of them (32%) several times per year. 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 (125 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 (50 funds), or even to request early repayment (plus covering losses) of existing loans, although this is rarer (3 funds). They can also choose not to go beyond a verbal or written warning or notice (36 funds). Only a couple of equity funds (7 funds) mentioned they are ready to divest in cases of non-compliance.

Figure 85 - Compliance monitoring

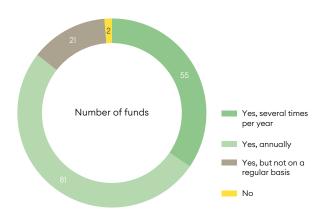
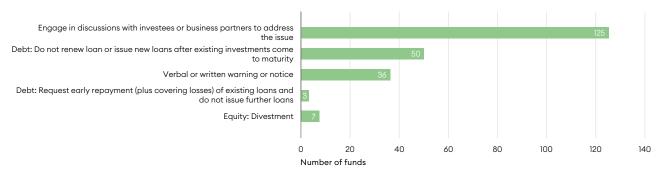
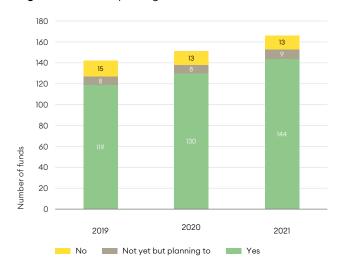


Figure 86 - Consequences of non-compliance with ESG procedure



In the same way as for the impact performance reporting, the vast majority of funds (144, or 87%) report on ESG indicators to their investors.

Figure 87 - 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 (14 of them, or 9% 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 88 – Use of preferential terms for investees demonstrating strong ESG commitment

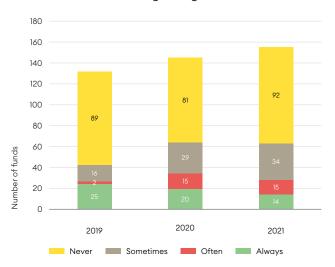
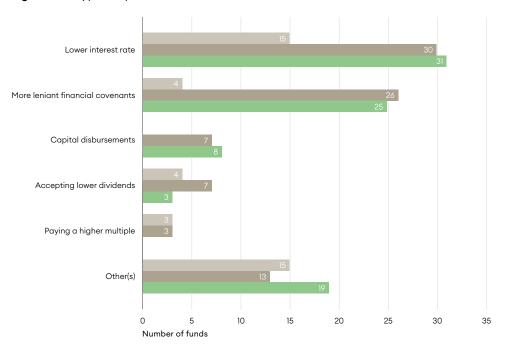


Figure 89 - Types of preferential terms



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 (131 and 9 of them, respectively, which is 84% 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 90 - Inclusion of social or environmental covenants/undertakings within investment agreements

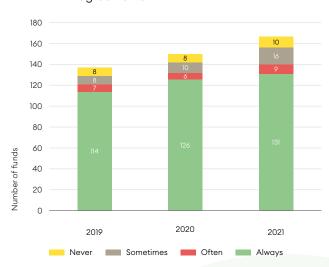
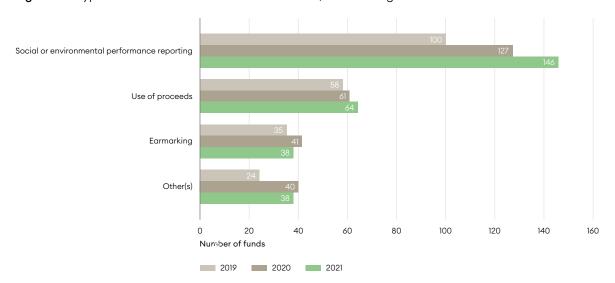


Figure 91 - Types of social or environmental covenants/undertakings



This year, we also looked at sustainable exit strategies as key in the impact management process of equity and mixed funds. Fund managers often need to balance both impact and financial considerations at the end of the planned investment horizon or when an exit opportunity occurs. In line with their double or triple bottom line objectives, the majority of PAIFs reported that financial returns and impact targets were equally important while considering exit opportunities (31 funds or 57% of respondents), or that they were operating on a case-by-case basis with no streamlined process in terms of exit strategies (21 funds or 39%). Several best practices are used to avoid a mission drift and preserve the impact of the investee after exit, including an assessment of the fit of new investors, the alignment with co-investors or the investee on an exit plan, and legal or third-party certifications considerations, as well as flexible investment horizons.

Figure 92 - Sustainable exit strategy

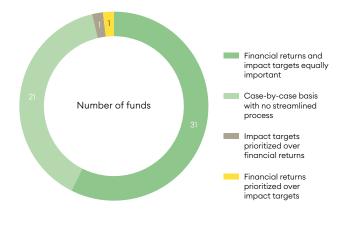
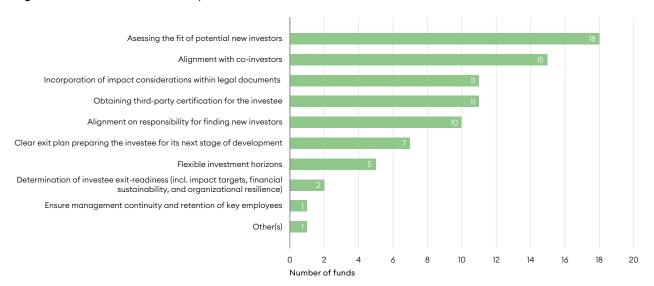


Figure 93 - Sustainable exit best practices



Impact measurement and transparency

In line with the intentions to signal that impact matters, a key characteristic of PAIFs is the incorporation of impact measurement and reporting in the funds' activities and processes.

Concerning the frequency of impact performance monitoring, 47% 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 (92%) 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 94 - Impact performance monitoring

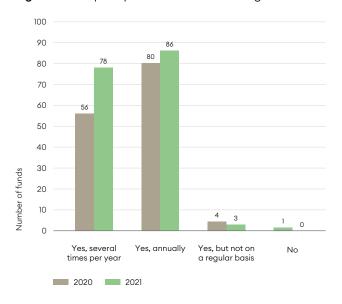
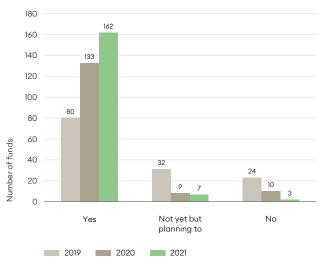


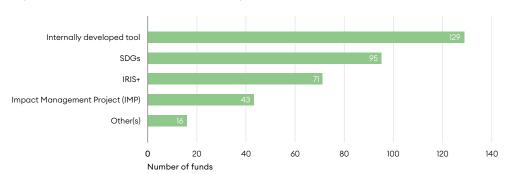
Figure 95 - Impact performance reporting to investors



When looking at the tools or frameworks to manage and measure their impact performance, PAIFs have historically used internally developed tools, generally put forward by their specialized investment management companies. As mentioned, integrating SDGs in the investment narrative and mapping them to specific strategies or transactions has become an

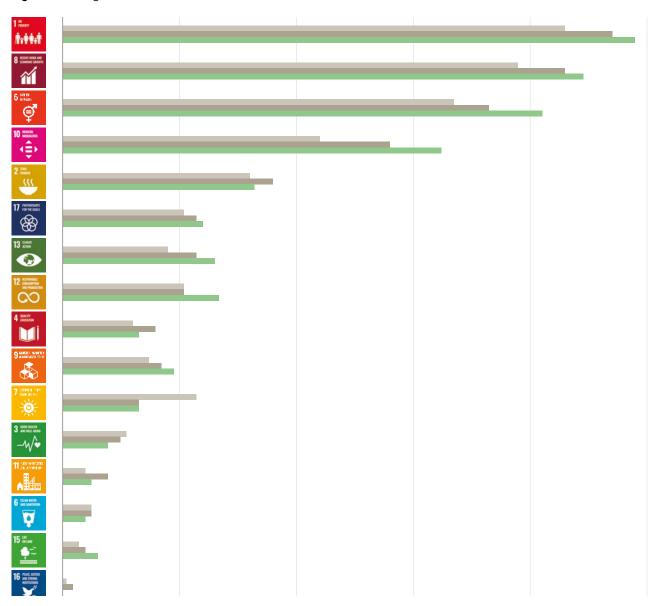
important topic for the impact investment community. It is thus not surprising that the SDGs are becoming the reference industry tool to manage and measure fund impact performance. PAIFs also frequently cite the GIIN's IRIS+ tool and the Impact Management Project as mapping tools that they use.

Figure 96 - Tools or frameworks to manage and measure the impact performance of the fund



When asked about the different SDGs targeted, the top five SDGs mentioned by survey participants were SDG 1 (98 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 6, SDG 14 and SDG 16 as targets less often.

Figure 97 - Targeted SDGs



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.

And finally, alongside more traditional financial targets, some PAIFs are setting impact targets against which they can benchmark the performance of the fund.

More than 90 PAIFs reported setting impact targets at the fund level, and many funds have also set impact targets more granularly at the investee (52 funds) and transaction (16 funds) level. Most funds reported that their achievements so far were in line with their targets (37 funds) or that is was too early to draw conclusions on their impact performance compared to their targets (37 funds). Several PAIFs also reported exceeding their targets (18 funds), while only 3 funds mentioned performing below their impact targets.

Figure 98 - Use of impact targets

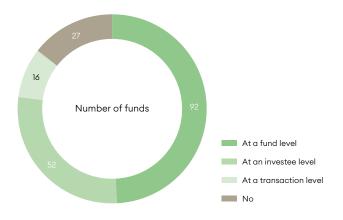
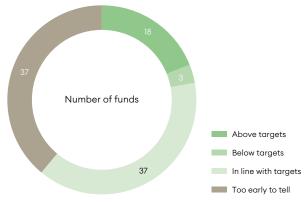


Figure 99 - Performance relative to impact targets



On top of voluntary disclosures to investors, new regulations of sustainability claims by investment managers are being introduced by regulators. As the first level of the EU SFDR regulations came into force in 2021, we started to integrate in the survey specific questions on how fund managers subject to the regulation plan to comply and which types of challenges they are encountering to implement it.

In the context of the SFDR, fund managers must report on several principal adverse impacts (PAIs) on sustainability factors. For the funds that fall under the article 9, they must also report on sustainability indicators that measure the achievement of their sustainable investment objective.⁵⁹ When they had already planned to report on a set of KPIs, fund managers provided examples for both environmental

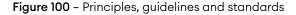
⁵⁹ European Supervisory Authorities (ESAs), Final Report on draft Regulatory Technical Standards (February 2021)

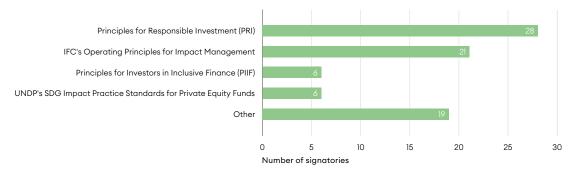
and social characteristics. On the social indicators side, these include KPIs at the investee level (e.g., number of people employed), as well as KPIs at the end-client level (e.g., number reached and percentage of women and rural end-beneficiaries). KPIs more specific to the microfinance sector include average loan sizes, percentage of investees having an exclusion list or offering financial literacy training. For environmental indicators, fund managers mentioned the tons of CO2 emissions avoided, MWh of renewable energy produced, or the number of hectares farmed sustainably.

And finally, the majority of fund managers reported encountering challenges to implement the SFDR (64 funds), with only 11 funds answering that they do not encounter any challenges. Challenges that were often mentioned related to the interpretation of the regulation, availability of data and calculation methods (for both the PAIs and sustainable indicators), and the reporting burden for both the fund managers and their investees who are often not well equipped for this level of data

collection. This seems to be particularly prevalent for several environmental indicators, including scope 3 emissions. Also, the proxy data available was deemed of limited relevance and poor quality.

On top of mandatory disclosures, investment managers are adopting multiple principles, voluntary reporting guidelines and standards to bring more transparency and common reporting frameworks to the sector. At the company level, participants adopted foremost the Principles for Responsible Investment (PRI; 28 companies), and the International Finance Corporation's (IFC) Operating Principles for Impact Management (21 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 RFF's Investor Guidelines for Responsible Investing in Digital Financial Services, the Equator Principles, and the ICMA's Green Bond Principles (GBP).





Additionally, several organizations and networks now facilitate promotion, discussion and knowledge sharing between fund managers, institutional investors, nongovernmental organizations (NGOs) and associations, as well as DFIs and other public entities. The GIIN (29 companies), the Social Performance Task Force (SPTF; 10 companies), and the European Microfinance Network (EMN; 9 companies), appear to be the organizations with

the highest membership and participation rate among survey respondents. Other organizations notably include the Emerging Markets Private Equity Association (EMPEA), the Swiss Sustainable Finance (SSF), the 2X Collaborative, the Asian Venture Philanthropy Network (AVPN), the Council on Smallholder Agricultural Finance (CSAF), and the Association for Private Capital Investment in Latin America (LAVCA).

Figure 101 - Organization memberships



Gender diversity at the investment manager level

In this third edition of the survey, we started to collect data on the share of women within investment managers' teams, as well as initiatives to foster gender diversity internally.

The table below presents the share of women at the organization level, as well as in the C-suite, board of

directors and investment committee across several organizations' sizes (in terms of FTEs). We observed that gender parity is good at the company level, for all organization sizes, with the share of women in a range between 44% and 51%. Not surprisingly, this is however lower in leadership positions, at 17% at the lowest in the investment committees of large companies.

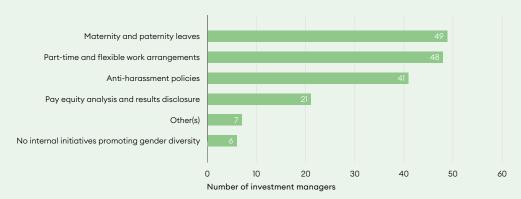
Table 17 – Share of women across the organization

	SHARE OF WOMEN			
FET buckets	Organization	C-suite	Board of Directors	Investment Committee (IC)
0 to 10 FTEs	44%	33%	32%	31%
10 to 50 FTEs	47%	29%	24%	33%
50 to 100 FTEs	50%	37%	28%	29%
100 to 200 FTEs	51%	40%	39%	
200+ FTEs	46%	33%	37%	17%

Investment managers also reported on gender diversity initiatives within the organization. The most cited were maternity and paternity leaves (49 companies), parttime and flexible work arrangements (48 companies), and anti-harassment policies (41 companies). Less companies (21) reported conducting a pay gap analysis

and disclosing the results. One investment manager also mentioned working on recruitment and retention policies as part of their gender strategy. And finally, 6 companies reported having no internal initiatives promoting gender diversity.

Figure 102 - Internal initiatives promoting gender diversity and inclusion



While looking closer at training policies in place to promote gender diversity and inclusion, it is striking that 27 investment managers reported having no gender diversity and inclusion training in place. On the other hand, for the fund managers that are providing gender diversity trainings to their employees, they often mention having defined guidelines on the frequency (annual; 14 companies) and duration of trainings (at least

30 minutes; 14 companies), as well as the percentage of employees trained (compulsory for all employees involved in the investment process; 9 companies). Two investment managers also mentioned including diversity and inclusion trainings in the onboarding process of new staff members. Very few companies (3) mentioned having an evaluation framework to measure the training outcomes at the individual level.

Figure 103 - Gender diversity and inclusion training policies



In terms of gender diversity teams and leadership within the organizations, 22 investment managers reported having no diversity team or leader. For the companies that had defined such roles within their organizations, they often mentioned that their responsibilities included reporting on diversity KPIs to senior management (23 organizations), the organization of trainings (20 organizations) and involvement in the recruitment process (15 organizations). Other responsibilities mentioned included the organization of coaching and mentoring sessions for men and women at senior and middle management level, as well as the update of the gender diversity strategy in compliance with international best practices.

Figure 104 - Responsibilities of gender diversity team or leader



Impact results

Measuring their impact is key for PAIFs to assess their performance in identifying and supporting companies and projects that aim to contribute to impactful solutions. We first look at how PAIFs deploy their capital 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). SMEs are the backbone of emerging and frontier markets' economies, fostering employment and growth. Thus, we also look at the jobs created or supported by PAIFs investments (investee level).

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 (43%), with only 2% 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. On the other hand, mixed funds seem to be the ones allocating the most to upper middle-income and high-income countries.

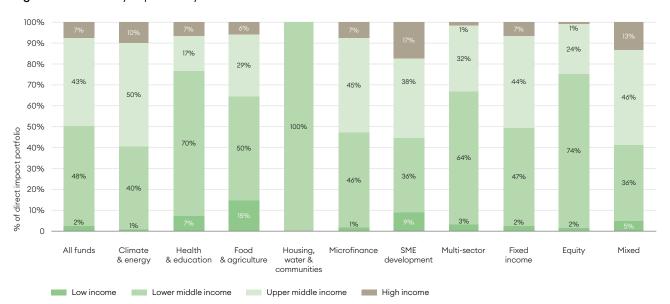
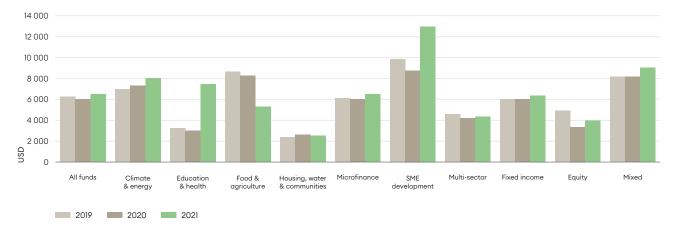


Figure 105 - Country exposure by income level

Across all these markets, the gross national income (GNI) per capita averages USD 6,544. Comparing this to the world average (USD 12,070) demonstrates the ability of PAIFs to channel capital to where the population and households have lower than average income levels.

SME development and climate and energy PAIFs have the highest GNI per capita recorded for their country portfolios, while housing, water & communities, and multi-sector the lowest.





Investee outreach

As observed, PAIFs mostly finance financial institutions and SMEs (section Investee types), and on average, directly contribute to the employment of 42,877 people (median stands at 14,863). Looking at gender parity in PAIF impact portfolio, we note that about three-fifths of employees are men (60%), but contrasts exist when looking at primary sectors of focus. SME development

funds seem to finance investees with more women on staff (at 44% of total employees), for instance, whereas food & agriculture investees have the highest share of men on staff (65%). In terms of number of employees, microfinance funds have the largest headcount at the investee level (average of 61,747 employees, median of 36,012), MFIs being known as labor-intensive employers.

Figure 107 – Number of people employed by fund investees

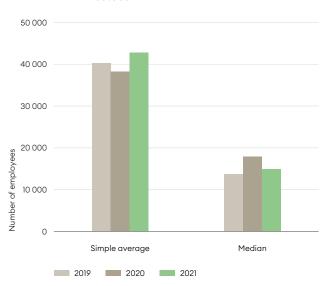
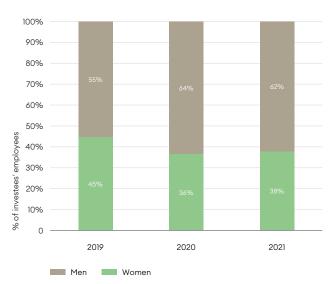


Figure 108 - Gender profile of investee employees



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 1.7 million end-clients, whereas the median observation stands at 129,738 end-clients, signaling the presence of high values that stem from

equity funds (average of 6.6 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 431,696 and 188,167 end-clients respectively).

Table 18 - Number of end clients financed

All funds	129 738	
Climate & energy	17 834	
Food & agriculture	238 413	
Education & health	29 271	
Housing, water & communities	38 213	
Microfinance	130 839	
SME development	414 083	
Multi-sector	84 627	
Fixed income	104 738	
Equity	2 679 090	
Mixed	111 007	

In terms of location and gender, 60% of end-clients are in rural areas and 59% are women. Outreach to women seems to be particularly prevalent for housing, water & communities (90%) and microfinance (64%) 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.

This year, we also started to ask the percentage of youth end-clients, as promoting youth employment and financial inclusion is key for development goals. However, we noticed that this indicator was not yet commonly measured, with only 14% of the funds reporting on this indicator. However, for those which measured their outreach to youth end-clients, they represented 11% of end-clients on average.

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

Rural	Urban & peri-urban	Women	Men & legal entities	Youth
60%	40%	59%	41%	11%
58%	42%	21%	79%	0%
86%	14%	36%	64%	11%
37%	63%	43%	57%	19%
71%	29%	90%	10%	
61%	39%	64%	36%	7%
58%	42%	61%	39%	30%
52%	48%	53%	47%	16%
	60% 58% 86% 37% 71% 61% 58%	60% 40% 58% 42% 86% 14% 37% 63% 71% 29% 61% 39% 58% 42%	60% 40% 59% 58% 42% 21% 86% 14% 36% 37% 63% 43% 71% 29% 90% 61% 39% 64% 58% 42% 61%	60% 40% 59% 41% 58% 42% 21% 79% 86% 14% 36% 64% 37% 63% 43% 57% 71% 29% 90% 10% 61% 39% 64% 36% 58% 42% 61% 39%

100% 90% 80% 70% 60% 50% 40% borrowers financed 30% 20% 10% 0 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 Rural Urban & peri-urban Women Men & Legal entities

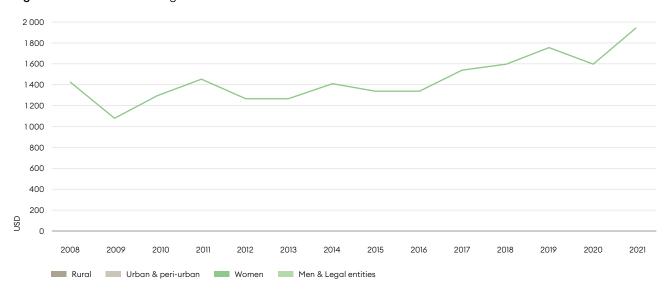
Figure 109 - Historical profile of microfinance fund end borrowers

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 1,943 and USD 1'680, 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 110 - Historical average loan size of microfinance funds



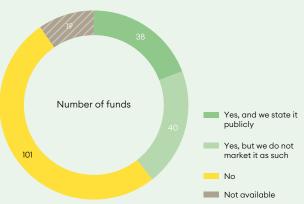
Gender Lens Investing approaches

An increasing number of fund managers adopting a Gender Lens Investing (GLI) approach, aiming to deliver a positive and quantifiable impact on the lives of women and girls. Gender-focused investment provide women and girls in emerging and frontier markets with access to leadership opportunities, quality employment, capital, technical assistance, as well as products and services that enhance their inclusion or economic participation (source: 2X Challenge). While many publications cover the topic by and large, there is still a need for increased data transparency on investment activity of impact funds with a GLI mandate, both on the financial performance and quantifiable gender impact. With the sponsorship support of the Gender Lens Initiative for Switzerland (GLIS), we aim to started fulfilling some of these data gaps within the world of PAIFs.

Overview

In the survey sample, 78 funds (or 39%) reported adopting a GLI approach across the entire portfolio or partly, and either stating it publicly (38 funds) or not marketing it as such (40 funds).

Figure 111 - GLI approach



On average, these funds have 69% of their portfolio invested with a GLI approach, and have done 37 GLI transactions per fund, with an average ticket size of USD 2.4 million. However, these metrics vary across asset class and sectorial peer groups, with for instance a lower number of transactions and higher ticket sizes for equity funds (USD 4.1m).

Figure 112 - GLI portfolio

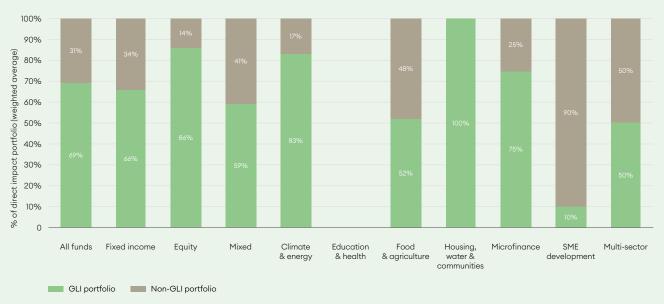
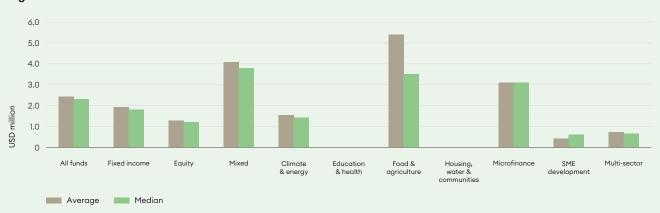


Figure 113 - Ticket size of GLI transactions



We looked at the sectorial, geographical, and business-stage exposure of the respondent funds' GLI portfolios. These are mostly in line with the total survey sample, with financial inclusion accounting for more than half of the GLI portfolio, and early-stage companies representing a small portion of the GLI portfolio (6%). However, there are some differences with the exposure for East Asia

and the Pacific being slightly higher (21% for respondent funds vs 11% in the total sample) and the Eastern Europe and Central Asia exposure being slightly lower (15% vs 27%). The exposure to the food & agriculture (28% vs 8%) and climate & biodiversity (15% vs 4%) sectors is also much larger, while there is no exposure to the SME development sector in the overall GLI portfolio.

Figure 114 - GLI portfolio by sector



Figure 115 - GLI portfolio by region

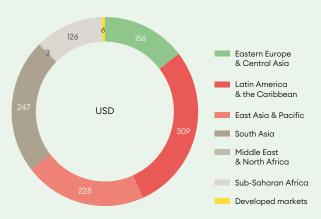
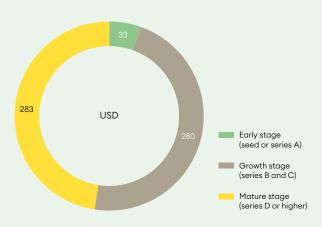


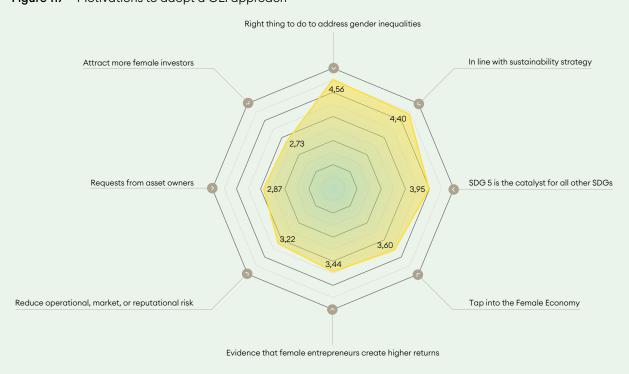
Figure 116 - GLI portfolio by stage of business



Motivations to adopt a GLI approach

They had different motivations to adopt a GLI strategy, with the highest ranked motivations (from 1 to 5, 1 being not important and 5 very important) being that it is simply the right thing to do to address gender inequalities, and that this is in line with their sustainability strategy. Interestingly, there is also a consensus that SDG 5 (Gender Equality) is a catalyst for all other SDGs, with the potential to unlock economic growth in emerging and frontier markets thanks to the women's economic participation and benefits in healthcare and education for instance. Other motivations related to opportunities to tap into the Female Economy and invest in female entrepreneurs to drive higher returns, and reduction of operational, market and reputational risks. On the other hand, motivations to adopt a GLI strategy not barely came from request of investors or to attract more female investors, with these two motivations being most often reported as neutral or not important.

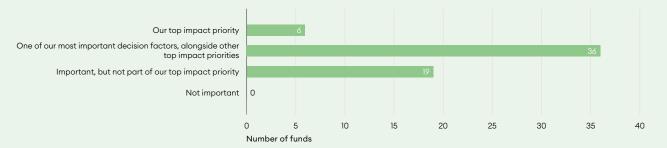
Figure 117 – Motivations to adopt a GLI approach



Gender-related considerations in the investment process

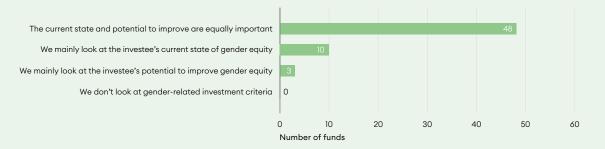
We then looked at gender-related considerations across the investment process for these fund managers that adopted a GLI approach. More than two thirds of the respondents (42 funds) stated that gender-related outcomes were either the top impact priority or one of the most important decision factors, alongside other top impact priorities such as climate action or financial inclusion.

Figure 118 - Importance of gender-related outcomes in investment process



In addition, both the current state and potential to improve weighted in the investment decision for a majority of funds (48 funds), while only a few looked solely at the current state (10 funds) or the potential to improve (3 funds).

Figure 119 - Importance of current state and potential to improve



In terms of GLI practices applied in the investment process, fund managers often reported performing a gender analysis during the due diligence (17 funds) and consistently including it in the documents submitted to the investment committee (12 funds). It is interesting

to see that gender criteria were also often used to positively screen investment opportunities (22 funds), but not as an investment requirement to invest in a company with only 7 funds reporting that investments should meet at least one criterion.

Figure 120 - Gender-related practices applied in the investment process



New initiatives such as the 2X Collaborative and its 2X Challenge are also fueling growth and driving standardization in the field. The 2X Collaborative is a global industry body aiming to help and engage the investment community to make gender-focused investments (source: 2X Collaborative). It builds on the success of the 2X Challenge, an initiative launched at the G7 Summit 2018 to mobilize public and private sector investments that provide women in developing countries improved access to leadership opportunities, quality employment, finance, enterprise support and products and services that enhance economic participation and access (source: 2X Challenge). Between 2018 and 2020, the initiative managed to unlock more than USD 11bn of commitments. In this context, the 2X Criteria were developed to identify investments that are 2X eligible (i.e., investments must fulfill at least one criterion), and since then have emerged as a global industry standard for GLI. As mentioned above, respondent funds in the survey may not use gender-related criteria as an

investment requirement, but still considering them in their due diligence. In fact, they mostly consider the share of women across the organization (15 funds), leadership positions and board of directors (9 funds each), as well as the share of women customers (12 funds) and whether the products and services offered disproportionally benefit women (11 funds). Fund managers less often look at the investees' founding teams (5 funds), and company ownership (3 funds), as well initiatives that specifically advance women in the workforce. And finally, it is interesting to note that only 4 respondent funds reported using the own genderrelated criteria, suggesting some harmonization within the industry although this was moderately reported as one of the main reasons to select a specific set of 2X Challenge criteria (15 funds). The impact potential (50 funds) and data availability (23 funds) seemed to be more important for respondent funds to select the gender-related criteria to consider in investment decisions.

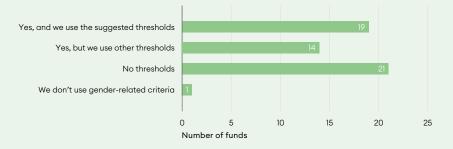
Table 20 - 2X criteria considered in the investment process

	Number of funds
Investee is predominantly owned by women	3
Investee is founded or co-founded by women	5
Investee has a significant share of women in senior management team	9
Investee has a significant share of women in board of directors	9
Investee has significant share of women in investment committee	0
Investee has significant share of women in the workspace	15
Investee has initiative in place to specifically advance women in the workforce	4
Investee offers products or services that specifically or disproportionally benefit women	11
Investee's customers are predominantly women	12
Women-led companies and/or women entrepreneurs play an important role in the investee's supply chain	1
Other own gender-related criteria	4
No gender-related criteria considered	1

For each of the 2X criteria selected, two thirds of the respondent funds either used their own thresholds (14

funds), or no thresholds at all (21 funds), while one third are using the recommend 2X thresholds (19 funds).

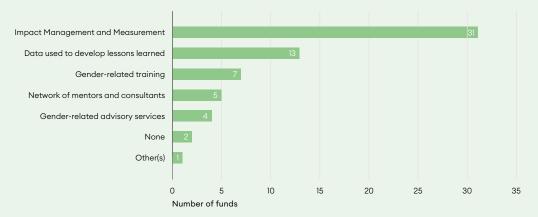
Figure 121 - Use of thresholds



And finally, in terms of portfolio management, fund managers often reported applying an impact management and measurement process for gender-related outcomes (31 funds) and using gender

disaggregated data and gender outcomes to develop lessons learned for future investments (12 funds). On the other hand, they less often provided gender-related training, mentorship and advisory services to investees.

Figure 122 - Gender-related practices applied in the portfolio management process

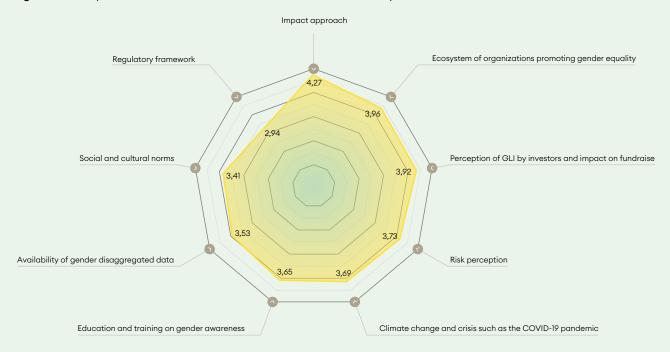


Projections

At the G7 Summit 2021, a new target of USD 15bn was set for the period 2021-2022 to continue to channel funds towards SDG 5. We asked fund managers to rate the importance of several factors to attract additional

investments in the space. What stood out is that the impact approach is very important, as well as the GLI ecosystem and investors' perception. We see a need to educate investors and engage conversations to raise awareness on the benefits of GLI investing.

Figure 123 - Importance of external factors to attract additional capital

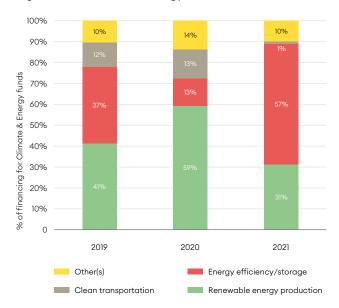


We also look at common sector-specific reporting metrics used by PAIFs in their disclosure of impact performance to investors, with more tracking and granularity for microfinance funds given the sector's historical track record and higher level of industry maturity.

Climate & energy

PAIFs in climate & energy allocate most of their portfolio to renewable energy production (72%), 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 173,530 megawatt hours (MWh) per year at a fund level. The annual energy savings and water savings or treatment from projects funded is 27,011 MWh per year and 115,054 cubic meters, respectively. The annual CO2 emissions reductions, avoidance or capture achieved from projects funded amount on average to 232,046 tons of CO2 per year. And finally, the total area under sustainable management amounts to 40,826 hectares.

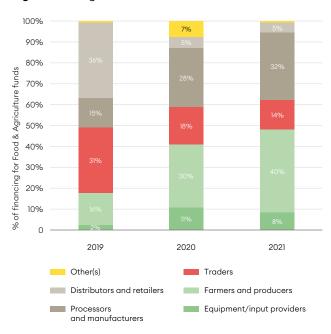
Figure 124 - Climate & energy subsectors financed



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 (8%), farmers and producers (40%), traders (14%), processors and manufacturers (32%) 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 416,146 hectares per fund.

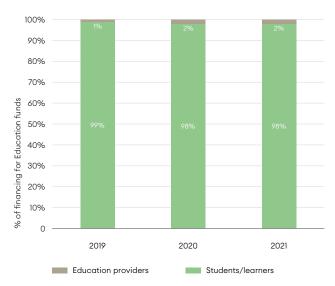
Figure 125 - Agriculture value chain actors financed



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. Nevertheless, two interesting indicators relate to the number healthcare facilities and number of patients screened, which stands, on average, at 1,878 facilities and 4.7m patients per fund.

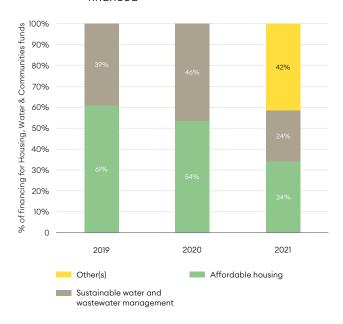
Figure 126 - Education actors financed



Housing, water & communities

Housing, water & communities sector funds typically channel their portfolio between affordable housing (34%) and sustainable water management (24%) strategies and objectives.

Figure 127 – 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.

Figure 128 - Portfolio breakdown of microfinance fund investees



Results indicate that investees allocate 52% of their gross loan portfolio to microenterprise loans, 22% to SME loans and 16% 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.

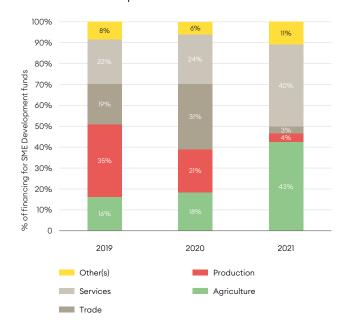
In terms of investee product offering beyond credit, half of them offer savings (57%), insurance (45%), other financial (63%) and non-financial services (49%). These products ultimately serve to fulfil the financial security of households, making them resilient in facing any shocks to their cash flows.

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 130,839 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. For the former, the study sample indicates that SMEs active in agriculture and services received most of the financing in 2021 (43% and 40%, respectively).

Figure 129 – Activity sector of SMEs financed by SME development funds











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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.























Investing with a gender lens to create better outcomes for business and society

About

The Gender Lens Initiative for Switzerland (GLIS) aims to enhance Switzerland's contribution to SDG 5, and to mobilize more capital from Swiss-based institutions for gender lens investing (GLI). The GLIS works to advance industry standards and market research, promote financial innovation and products with a gender lens, and raise SDG 5 and GLI awareness among key stakeholders and the public at large.

To accomplish its objectives, the GLIS has two teams of advisors: the Academic Research Committee (ARCO) and the Investment Solutions Committee (ISCO). The ARCO is in charge of the design, implementation, and quality of research related to GLI and gender issues in Switzerland such as the gender impact of GLI products, the gender-balance of financial institutions or the hurdles faced by female capital owners or investors. The ISCO focuses on verifying the gender impact of any financial product before it is featured in GLIS activities such as events showcasing publications GLI products. Furthermore, it aims to create strong partnerships to promote the norms and criteria necessary to invest with a gender lens approach.

The lack of market data is a barrier to further gender-lens investments.

Initial GLIS research, illustrated in our 2022 Annual Report, highlights this issue. Systematic market data on GLI would create broader investor awareness on the benefits of a GLI investment approach, and the range of available investment opportunities across regions, sectors, and asset classes.

- * Source: Biegel, S., Brown, M. and Hunt, S.M. (2021) Project Sage 4.0: Tracking Venture Capital, Private Equity, and Private Debt with a Gender Lens
- ** The growth in number of gender lens funds can be illustrated with data from the Sage Projects 1.0-4.0.

KPIs (current figures)

Incorporation year

March 2021

No. of staff (FTE)

1

No. of partner organizations

40

No. of committees

2

Type of partners

banks, asset managers, government agencies, foundations, NGOs and associations, academia

Events since inception

8

Average attendance per event

30

GLI products identified

304

GLI total assets

USD 6 billion*

Core SDG target



Indirect SDG targets









The growth in number of gender lens funds**







We invest for impact to drive inclusive progress and sustainable transitions.

Incofin is an AIFM-licensed, leading emerging markets focused impact investment manager specialised in financial inclusion, the agri-food value chain and safe drinking water.







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

USD 1.4 bn

assets under

management

183

As a "glocal" entity, Incofin built a team of more than 80 members spread over its headquarters in Belgium and local investment teams Colombia. India. Kenva Cambodia. That allows Incofin to maintain and grow an extensive and in-depth local market knowledge.























61%

female

entrepreneurs

USD 3,019 average loan size











Financing Efficient, Impact-Driven Agricultural Value Chains

About

INOKS Capital is a Swiss asset manager - authorised and prudentially supervised by FINMA - managing collective investment schemes alongside segregated mandates. We offer impactful capital solutions for companies generating tangible value primarily in the agriculture and food sectors. INOKS Capital aims to be the market leader in funding solutions for the real economy through its proprietary Impact Framework and investment methodology. For that purpose, we leverage a two-fold impact strategy based on responsible investing (ESG risk mitigation) and impact investing (positive impact generation).

Impact Investing Solutions in Line With the EU **Regulatory Framework**

INOKS Capital seeks to achieve attractive financial returns and sustainability performance. To ensure the latter, we implement a two-fold impact strategy in compliance with EU SFDR Regulation Art.9. The foundation of our impact and responsible investing is to:

- 1. Do good, by contributing to solutions that address specific sustainability challenges, and
- 2. Do no harm, by mitigating the potential negative effects on local communities and the environment.

We direct our investments towards the real economy to channel capital where it's most needed and produce tangible results along the whole value chain, from farm to fork.

Our proprietary Impact Framework ensures the conformity of our activities by defining the standards we adhere to, outlining how such standards are implemented throughout the investment cycle and the tools enabling staff to apply them to all transactions, as well as setting clear responsibilities to bring our impact strategy from theory to practice.

Additionally, INOKS Capital helps its investees achieve sustainability and maximise their scale of impact, notably through the Technical Assistance Program we launched in 2020.

We're actively engaged in constantly improving our own impact journey too, by partnering with The Global Impact Investing Network for instance. We also count among the first 75 adopters of the Operating Principles for Impact Management and the first group of signatories of the 2022 Global Investor Statement to Governments on the Climate Crisis, which urges governments to accelerate the transition towards a net-zero emissions economy.

Finally, our continuous growth is proof that achieving attractive returns and contributing to positive impact aren't mutually exclusive. INOKS's managed funds have been achieving positive returns for over a decade, with a low correlation to traditional asset classes and low levels of volatility.



KPIs (current figures)

Incorporation year: 2004 Headquarters: Geneva No. of offices: 4 No. of staff (FTE): 31 AuM (USD M): \$680 mio No. of PAIFs: 5 No. of investees: 31

Main geography of investment: emerging and frontier

Main impact sector: food security, poverty reduction, environmental quality, women empowerment Main asset class: alternative credit - capital funding







Creative, tailor made, highly efficient capital solutions

Agriculture

Engagement actions and technical assistance

DO GOOD

Impact investing

4 IMPACT THEMES









Poverty reduction

Food security

Environmental quality

Women empowerment



DO NO HARM

Responsible investing







Environmental Risk Mitigation

Social Risk Mitigation

Governance Commitment



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 (SSA). The Fund provides innovative financial products and technical assistance (TA) support to Partner Lending Institutions (PLIs) 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

REGMIFA is classfied as an Article 9 Fund according to the EU Regulation on sustainability-related disclosures in the financial services sector (SFDR)

Track record Technical Assistance

- 124 projects completed
- 52 PLIs
- EUR 8.6M committed
- 23 countries in SSA

Impact in 2021

- 115,665 end-borrowers reached
- 899 jobs supported at PLIs' level
- 61% of PLIs served had assets below USD 30 million when REGMIFA disbursed the first loan
- 39% female clients financed (vs. 43% male)
- 17% rural borrowers
- USD 1'579 average loan size of end-borrowers
- Contribution to 5 SDGs: No poverty, Zero Hunger, Gender Equality, Affordable and Clean Energy & Decent Work and Economic Growth



REGMIFA AT A GLANCE (June 2022)

Launched: 2010

Asset class: Fixed-income

Impact sectors: Microfinance, SME banking, LMIHs.

Total assets (USD): 180 million

No. of investees: 54 No. of countries: 20

Currency strategy: LC, fully hedged Investor-type: Public, Professional



Covid-19 Impact on End-Borrowers Survey

In 2021, REGMIFA participated in the second round of a leading industry initiative to assess the impact of the COVID-19 pandemic at the level of end-borrowers.

<u>Coverage</u>: 1,273 end-borrowers of 3 REGMIFA PLIs in 2021. 63% average female reached and an average household size of 7 people.

2021 Key Results on REGMIFA partners:

- On average, male clients are more likely to live in poverty (36%) compared to female clients (27%)
- In 2021, 92% of clients were concerned about COVID-19, same share as in 2020
- 18% fewer clients in 2021 reported worsened financial situation than a year before
- Fewer clients in 2021 were concerned about their ability to work compared to 2020 (40% vs. 65%)
- On average, client's incomes fell by 44% compared to pre-pandemic levels
- But 87% of clients were confident to make loan repayments as usual next month
- REGMIFA's partners were supporting an underserved market;
 78% of clients interviewed could not find a good alternative to the products received from the MFIs
- Compared to 2020, clients saw improvements in their financial situation, income, and food consumption in 2021

Financial Inclusion Index

REGMIFA participated in the 60 Decibels Microfinance Index.

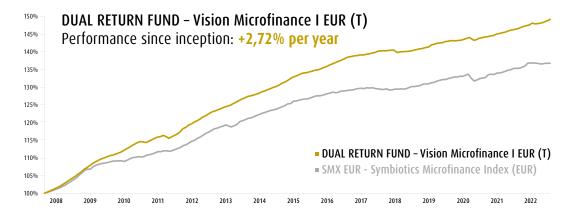
<u>Coverage</u>: 5 REGMIFA partners and 1,250+ end-clients interviewed

Key Results on REGMIFA partners:

- 91% end-clients used loans to finance an existing business
- 80%+ of respondents indicated higher business income linked to the loan obtained
- MFIs are mostly serving end clients previously underserved; 66% of respondents were accessing the type of loans offered for the first time
- Women are disproportionately affected by limited access to finance; 70% were accessing the type of loan for the first time vs. 64% men.
- 25% indicated that their number of **employees** increased because of the loan
- 88% end-clients reported an improvement in the quality of life due to the services received from the MFI
- 65% of end borrowers do not perceive their loan repayments as a burden
- Most end-borrowers in the sample benefitted from access to finance with significant improvements in quality of life, income, and financial resilience.



The Dual Return Fund – Vision Microfinance contributes to sustainable development by working towards a positive impact on several of the 17 United Nations Sustainability 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 69 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: 29.07.2022

info@visionmicrofinance.com



www.visionmicrofinance.com

alphamundi

SocialAlpha Investment Fund (SAIF)

SAIF is a Luxembourg SICAV-SIF dedicated to SDG solutions in emerging markets. 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.

Its sub-fund SAIF-Bastion is a capital preservation vehicle with quarterly liquidity. It provides loans to 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 1M-50M. Loans usually range from USD 250K to USD 2M per company, over 12-36 months with quarterly payments.

Impact

SAIF is registered under Article 9 of the SFDR, and its investments align most with 6 of the UN Sustainable Development Goals: No Poverty (1), Gender Equality (5), Clean Energy (7), Economic Growth (8), Reduced Inequalities (10), and Responsible Production (12). We measure our quantitative, qualitative and catalytic impact with IRIS+ indicators and 2X criteria, twice a year, and publish an annual Impact Report. AMG is a first adopter and signatory of the IFC Principles.

Results

The Fund delivered a net average annual USD IRR of 1.98% since it became fully invested in 2012, with fund co-investments delivering a net IRR of 11% across debt and equity since co-investment policy inception in 2013.

AlphaMundi Group (AMG) Highlights

Incorporation year: 2007

Headquarters: Geneva, Switzerland **No. of offices:** 3 including Bogota & Nairobi

No. of staff (FTE): 12 excluding foundation staff

AuM (USD M): USD 63M No. of PAIFs: 2 No. of investees: 25

Total Invested to date: USD 110M Total SMEs financed to date: 55 Total beneficiaries to date: 10M+

Main geography of investment: Latin America and

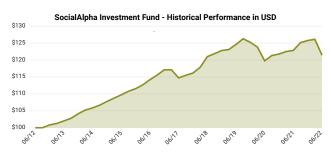
Sub-Saharan Africa.

Main impact sectors: Financial Inclusion, Renewable Energy, Sustainable Food, Affordable Housing.

Main asset class: private debt

Industry Recognition: listed by ImpactAssets 50 in 2021

and 2022.



	2013 FY	2014 FY	2015 FY	2016 FY	2017 FY	2018 FY	2019 FY	2020 FY	2021 FY	2022 FY
Annual Return	2.3%	3.7%	3.6%	4.2%	0.3%	5.5%	3.0%	-4.9%	2.6%	-1.1%
Cummulative Return	2.3%	6.1%	10.0%	14.6%	15.0%	21.3%	24.9%	18.8%	21.8%	20.5%



Asia Women Impact Fund (AWIF) envisions a future where all women in Asia are empowered to reach their full potential.

Investing with a gender lens

The Sasakawa Peace Foundation (SPF), a private Japanese foundation established in 1986 to enhance international cooperation has prioritized the advancement of women's empowerment as one of its main strategic goals to achieve its mission of stimulating greater societal progress. SPF was the first private foundation in Asia to create an impact fund with a dedicated focus on addressing gender issues. SPF's Asia Women Impact Fund (AWIF), established in 2017, invests up to US\$100m of SPF's endowment to investment vehicles that promote gender equality and women's economic empowerment.

KPIs (current figures)

Incorporation year 2017

Headquarters

Tokyo, Japan

Institution type

Endowment / Foundation

Impact sector

AWIF provides investment capital to investment vehicles that are aligned with SDG 5: Gender Equality and SDG 8: Decent Work and Economic Growth, notwithstanding other sector specific SDGs (e.g. Health, Education, Climate, Infrastructure etc.)

Focus geography

Major geographical exposure of investment vehicle should be in Asia.

Beneficiaries

At least the half of AWIF's beneficiaries should be women.

Asset Classes

AWIF invest towards investment vehicles that aim to Benefit Stakeholders and Contribute to Solutions (B and C investments under Impact Management Project Asset Classes)

Contact email

awif@spf.or.jp

For further information - https://www.spf.org/awif/

IMPACT INVESTMENT SPECIALISTS



Locfund Next



Financial Inclusion & Clean Energy

BIM Ltd. is an impact investments manager with 25 years of experience creating and managing 14 investment companies and specialized funds in 15 countries, seeking a positive impact beyond financial return. BIM currently operates in several areas, including microfinance, clean energy, venture capital, financial inclusion and capital markets.



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 globally through the provision of additional development finance to microenterprises and low-income households via qualified financial institutions. In pursuing this mission, MEF observes principles of sustainability and additionality, combining development and market orientation.

MEF is the 7th largest Microfinance Investment Vehicle (MIV) globally as per year-end 2021.

Demand-oriented impact fund with wide outreach

Operating as an efficient and demand-oriented microfinance debt fund, MEF seeks to respond to the needs of the market and of individual financial institutions. Supported by Innpact as General Secretary MEF is co-advised on its investments by four leading private investment advisors (BlueOrchard Finance AG, Incofin Investment Management, responsAbility Investments AG and Symbiotics SA).

MEF is a signatory of the Operating Principles for Impact Management, a key commitment given impact is at the core of its mission.

https://www.mef-fund.com/

MEF KPIs:

Asset class: Private debt Impact sector: Microfinance

Regional focus: Developing countries worldwide

Total assets (USD): 715 million

No. of investees: 143 MFIs in 42 countries Currency strategy: Hedged, with 53% 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:** 73%

Since inception MEF has supported low-income borrowers by providing over USD 2.6 billion to approximately 300 financial institutions active in the microfinance space in more than 60 developing countries worldwide.

MEF's impact in a nutshell, as of year-end 2021:









How we invest defines the world we want to live in

About Triodos Investment Management (Triodos IM)

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

Our Financial Inclusion strategy

Through our Financial Inclusion strategy, we finance values-driven organisations that use financial services to deliver sustainable development. 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.

Fund manager KPIs (current figures)

Headquarters: Zeist, the Netherlands

No. of staff (FTE): 220

AuM (USD M): 6.4 billion (31 December 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 financial instruments are tailored to the long-term 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 of our investment portfolio

as per 31 December 2021

47	78%	22
countries	female borrowers	equity investments with active board
111 financial institutions	18.6M savers reached	membership
17.8M borrowers reached	69% rural borrowers	

www.triodos-im.com









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	MSME	Micro, small and medium enterprise
CHF	Swiss franc	MWh	megawatt hour
CO2	carbon dioxide	NAV	net asset value
COVID-19	coronavirus disease 2019	NGO	non-governmental organization
D/E	debt-to-equity	P/B	price-to-book
DFI	development finance institution	PAIF	private asset impact fund
ESG	environmental, social and governance	ROE	return on equity
EUR	euros	SDG	Sustainable Development Goal
FX	foreign exchange	SME	small and medium enterprise
GDP	gross domestic product	SMX	Symbiotics Microfinance Index
GIIN	Global Impact Investing Network	TER	total expense ratio
GNI	gross national income	TVPI	total value to paid-in
HNWI	high-net-worth individuals	USD	U.S. dollars
IRR	internal rate of return		

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List of participants

Aavishkaar Capital

Accion

Acre Capital Management Limited

ACTIAM N.V.

AHL Venture Partners

ALIVE Ventures

AlphaMundi Group

Alterfin

Amadeus Capital Partners Bamboo Capital Partners Bank Im Bistum Essen

BIM Ltd.

Blue Earth Capital

BlueOrchard Finance Ltd

BOPA Investments

Camco Clean Energy

Caspian Advisors Private Limited

CO Capital

Cordaid Investment Management

Creation Investments Capital Management

CreSud SpA
Deetken Impact

Developing World Markets

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Impact Asset Management GmbH Impact Finance Management S.A.

IMPAQTO Capital

Incofin Investment Management Injaro Investments Limited

Innpact

INOKS Capital

Inpulse

Integra Venture Partners Pte. Ltd

Inversor

Invest in Visions GmbH
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iungo capital Kampani

Launch Africa Ventures

MicroVest Capital Management

Mikro Kapital

Netri Fundación Privada

NMI

NN Investment Partners

Nonprofit Enterprise and Self-sustainability Team Inc.

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Pamiga Philea

Privium Fund Management responsAbility Investments AG Revego Fund Managers

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SEAF

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Seedstars SIDI

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Triple Jump B.V.
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WWB Asset Management

