



Financial Inclusion Includes financial return

Assets under management of investments in inclusive finance have grown over the last decade to US\$502 billion, according to a study by GIIN. Once coined as ‘impact investing’ in 2007 by The Rockefeller Foundation, investments that aim to deliver both a financial and a social return are on the rise. Another, more recent, description of investments aiming to generate both financial and social return is ‘financial inclusion’. According to the World Bank, financial inclusion aims to provide individuals and businesses access to useful and affordable financial products and services in a responsible and sustainable way.

Most often, these financial services are provided in emerging and frontier markets where, according to the Principles for Investors in Inclusive Finance¹, two billion adults are excluded from formal financial services. Alongside, the World Bank identified financial inclusion to enable seven of the 17 social development goals as defined by the United Nations².

Besides acknowledging the social impact, financial return can’t be neglected to efficiently deploy money as a tool to improve the lives of billions of people in rural and underbanked areas in developing countries.

Financial inclusion as an appealing asset class fits into the recent pension agreement between the parliament, employers and trade unions on the reform of the Dutch pension system. As the pension agreement puts risk adjusted absolute return to the fore front, required equity buffers become irrelevant. This fits nicely into the investment characteristics of financial inclusion.

PENSION AGREEMENT PAVES THE WAY

Early July a major hurdle was overcome by representatives of employees and employers in The Netherlands in the discussion to propel the current pension system from liability driven to cashflow driven. Current elements in the pension system as the funding ratio (dekkingsgraad) and required equity (vereist eigen vermogen) will become irrelevant. Illiquid investments, such as financial inclusion, won’t need the capital buffer anymore that is currently imposed by the required equity. Therefore, investments can be tailored towards a well-diversified portfolio focused on a stable absolute return. This paves the way for the broader adoption of investments in financial inclusion in pension portfolios. Let’s focus on those absolute return characteristics in relation to the risks involved.

A CLEAR STANDARD

For the purpose of this white paper we limit the type of investment category to fixed income as this represents the majority of Microfinance Investment Vehicles, also called Private Debt Impact Funds (PDIFs). PDIFs are widely recognized to provide exposure to private loans in developing countries.

A good starting point to measure the performance of PDIFs is the Symbiotics Microfinance Index (SMX)³. With a track record going back to 2004, the SMX has become the industry benchmark. It tracks and equally weights global fixed income funds which target financial inclusion institutions in developing countries. The fact that the SMX measures the performance after the deductions of fees of investable funds differentiates the index from regular market cap equity or fixed income indices from popular index providers like MSCI or JP Morgan.

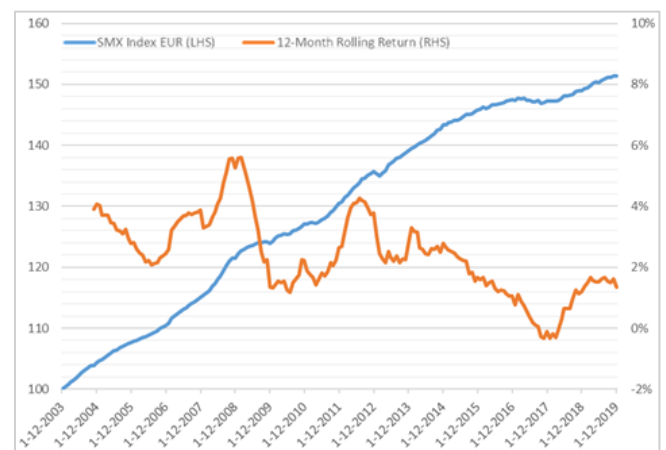
Annual financial return

Since the launch of the SMX index the annual return %, measured in euro, has been 2.6. A chart of the compounded return is shown in figure 1. Currently, the SMX index consists of eight (8) constituents. These constituents provide EUR-share classes and hedge their foreign currency exposure as much as possible. Currencies that can’t be hedged directly into euros are hedged by a proxy or, as an exception, the currency risk is left open.

Also shown in figure 1 is the 12-month rolling return. This most interesting chart shows that in the worst 12-month period, the 12-month return would dip just below 0%. In the best performing 12-month period the return would almost reach 6%. As said, these returns are achieved after the deduction of management fees charged by the asset managers, thus net performances are used.

Another interesting feat is the smoothness of the compounded return. Especially in the years 2008-2010, when the global financial crisis emerged, returns remained positive. The worst 12-month return in the crisis years was 1.17%, as can be seen in figure 1. To a significant extent such stable returns are contributable to the relatively low default rates.

Figure 1 - Annual return SMX index (€), 2004-2019: 2.6%



Source: ACTIAM, SMX, as per end of December 2019

¹ Principles for Investors in Inclusion Finance (PIIF) 2016: <https://www.unpri.org/download?ac=4533>

² SDGs: <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

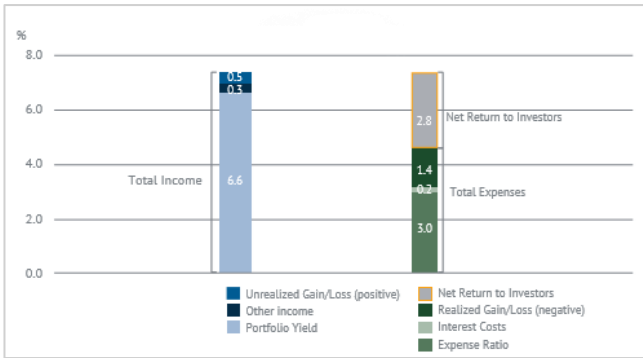
³ Syminvest: <https://www.syminvest.com/>

Breaking down financial return

Net return after costs, losses and fees is what matters for investors. The breakdown of the financial return is obviously the difference between portfolio income and gains/losses on one side and on the other side the cumulation of costs and fees.

As PDIFs make use of private debt structures; such structures are labour intensive and explain the relatively high expense ratio. Nevertheless, we also observe that expense ratios are trending down. According to the study and seen in figure 2 the net return to investors is 2.8%. Noteworthy is that the net returns in the study slightly differ from the SMX index because performances in the study are measured in USD, have a larger sample base and are performed over a shorter time horizon.

Figure 2 - Breakdown financial return PDIFs

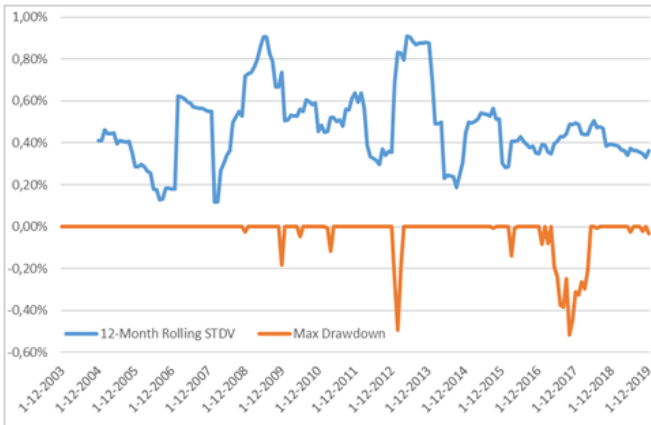


Source: GIIN

RISKS IN FINANCIAL INCLUSION

‘No return without risk’. Risk in financial inclusion comes in different shapes and forms than regular fixed income risks. But to start with basic risk indicators like standard deviation and drawdowns, financial inclusion has attractive risk characteristics.

Figure 3 - Rolling standard deviation and maximum drawdown SMX index (€), 2004-2019



Source: ACTIAM, SMX, as per end of December 2019

For the whole 2004-2019 period, the standard deviation of the SMX index (EUR) was 0.62%. To get a better feel for fluctuations or outliers in volatility a 12-month rolling standard deviation is shown in figure 3 (blue line). This figure shows the maximum volatility experienced in any 12-month period remains well below 1%.

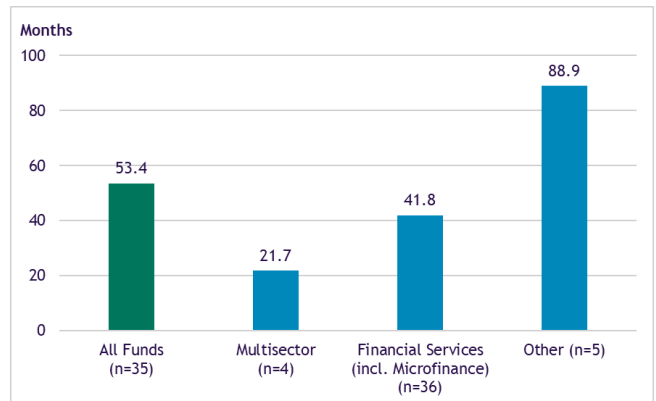
Another way to measure downside risk is a view on the maximum drawdown (orange line in figure 3). This indicator also shows a limited downside risk which accumulates to a maximum drawdown of only 0.51% over the 2004-2019 period. Just as impressive is the maximum number of months before a record high in cumulative return is achieved. The maximum period without a fresh record high is 12 months.

These are standard risk indicators which are truly experienced in real portfolios but may be less suitable for measuring risk in investments in financial inclusion. In his 2010 dissertation⁴, Becker states that “the volatility of returns is not an adequate measure of risk”. This because the underlying investments in PDIFs are made in an illiquid market. There is little to no secondary market in private loans originated by financial institutions. With the absence of a secondary market, the valuation of private loans is usually based on amortization and not on mark-to-market principles. Therefore, stale prices hide some of the risk involved in investing in financial inclusion. On the other side, the lack of liquidity of investments in financial inclusion is rewarded by a premium, the illiquidity premium.

Another form of risk not quite measured in standard deviation is credit risk. Default risk is a risk of every fixed income instrument and financial inclusion is no different. In a 2019 study by Symbiotics⁵ covering more than 50 PDIFs, the average write-off in 2018 for PDIFs was 0.2%. Outstanding loan loss provisions in 2018 were on average 3.7%, up from 2.8% in 2017.

Interest rate risks also should be taken into account for fixed income investments. According to the cited research study by GIIN and Symbiotics⁶, the maturity of the average loan portfolio of PDIFs investing in the financial services sector was almost 42 months, which is 3.5 years. Just for comparison, the average maturity of emerging market debt, measured by the J.P. Morgan EMBI Global Core Index, is almost 13 years⁷. This shows that the interest rate risk of investments in financial inclusion is much lower than in the more accessible and liquid market of emerging market debt.

Figure 4 - Portfolio maturity by sector



Source: GIIN, 2016

⁴ Integrating New Asset Classes into an Asset Allocation Framework Using Scenario Methodologies in the Case of Microfinance; Philipp Moritz Becker 2010

⁵ 2019 Symbiotics MIV Survey: <https://symbioticsgroup.com/wp-content/uploads/2020/02/symbiotics-symbiotics-2019-miv-survey.pdf>

⁶ GIIN / Symbiotics 2018; The financial performance of impact investing through private debt: https://thegiin.org/assets/PDIF%20Standalone%20Chapter_US%20format.pdf

⁷ Data April 2020

An added advantage that PDIFs have over other fixed income investments is that credit risk and interest rate risk of different regions and countries in these frontier markets are pretty much uncorrelated. This brings us to the next element of correlation and portfolio efficiency, where risk and return come together.

WHERE RISK AND RETURN COME TOGETHER

There is no better place to bring risk and return together as in a tangible investment portfolio. As a stand-alone portfolio in loans provided to financial institutions the ACTIAM Financial Inclusion Fund (AFIF) serves well to highlight the real added value to investors. With a track record going back to 2014 the fund has over 5 years of risk and return history.

Figure 5 - Risk and return characteristics of several asset classes (gross return)

		Return (annualised, compounded)	Volatility (annualised, compounded)	Sharpe ratio	AFIF (€) correlation
ACTIAM	AFIF (€)	5.22%	0.92%	6.11	NA
Euribor	3M Euribor (€)	-0.22%	0.04%	4.82	0.30
European Bonds	iBoxx Euro Overall Total Return Index	2.41%	3.32%	0.85	0.39
Global Equity	MSCI World (100% hedged to €)	7.36%	11.16%	0.70	-0.11
Hedge Funds	HFRX Global Hedge Fund Index (€)	-1.74%	3.92%	-0.34	0.02
Emerging Markets	J.P. Morgan GBI Global (€)	4.26%	6.71%	0.70	0.41

* Returns for ACTIAM Financial Inclusion Fund are calculated by adding the applicable management fee to the net return, thus for comparison reasons creating a gross return series
Source: ACTIAM, as per end of December 2019

In figure 5 above AFIF is taken as a reference for investments in financial inclusion. Also, it should be noted that AFIF was a closed end fund until October 2019 and charged a 1.4% management fee. After October 2019, the fund opened up to professional investors and lowered the management fee to 1.25%.

Immediately the sharpe ratio stands out as a measure where risk and return come together. The table in figure 5 displays the sharpe ratio of several asset classes. With a sharpe ratio of 6.1 financial inclusion beats every return seeking asset class by a landslide. Of course, the sharpe ratio is heavily influenced by the standard deviation risk measure. Earlier in this paper standard deviation has been labelled as an imperfect measure of investment risks in financial inclusion. Nevertheless, these are real figures achieved by the out of sample performance of a real investment portfolio.

Returns are the other input variable for the sharpe ratio. For its calculation, management fees have been added to the net returns of AFIF to make them comparable to the gross returns of the market indices displayed in figure 5.

Also noteworthy in figure 5 is the correlation of AFIF with other asset classes. The highest correlation of 0.4 is seen with emerging market debt. This should not come as a surprise as both AFIF and emerging market debt investments are exposed to similar macro-economic factors in developing and frontier countries. The lowest correlation is -0.1 is with global equity.

With all correlations below 0.5, financial inclusion serves well as a return yielding diversifier in a broad investment portfolio. The question is to what extent should financial inclusion be added to a well-diversified portfolio? To answer this question a purely quantitative approach does not suffice. Taking a pure quantitative approach will over-allocate financial inclusion because of its low correlations with other asset classes and attractive risk return characteristics, as measured in the sharpe ratio. As said before, stale pricing as a result of illiquidity contributes to the attractively low correlations and high sharpe ratio. Still, this a what investors in financial inclusion have been benefitting from since 2014.

Another approach to decipher the appropriate allocation to financial inclusion is to take a more qualitative approach. Becker⁸ in his dissertation in 2010 uses a scenario methodology to generate forward looking input parameters for portfolio optimization. According to Becker, a risk averse investor should add 2-5% of financial inclusion debt to the portfolio. This stands in sharp contrast to quantitatively derived allocations of up to 45% that Becker mentions.

STANDARDIZING VALUATION CRITERIA COULD BENEFIT INVESTORS AND BORROWERS

While comparing with the SMX-index seems an easy task, it sure has its limitations. For the lack of a more transparent index, the SMX-index represents asset managers who potentially use a different policy for key valuation issues. Using a mark-to-market approach, write-offs only on credit events or administrating provisional unrealized losses can make a difference in the valuation of illiquid assets. Other PDIFs only provide insights on the net asset value of the fund on a quarterly instead of a monthly basis. What costs are borne by the fund or the asset manager and how is currency risk hedged? In that respect the stakeholders in financial inclusion have an opportunity, or even a duty, to advance transparency and create a more comparable universe of PDIFs. Regulators, industry interest groups and asset managers should address these issues in order to lower the barriers for institutional investors and make the asset class more professional alike other (illiquid) fixed income asset classes. Standardizing valuation criteria could make the asset class more accessible and thus broaden the investment opportunities, while in the meantime creating more impact in rural and underbanked areas for those who remain excluded from financial services.

WHAT TO LOOK FOR IN SELECTING THE RIGHT PRIVATE DEBT INVESTMENT FUND?

Breaking down numerical information as calculated in financial return, different risk measures, peer group comparisons and portfolio construction is pretty straight forward in financial analysis. It provides you with a list of PDIFs that have performed well on these statistics in the recent past. The challenge is to select the PDIF that going forward will best fit the needs of the investor. There are three (3) forward looking elements that will help assure the quality of the future performance of PDIFs.

Governance

Governance of the PDIF itself should rest with the participants. Within the PDIF an extra layer of governance is provided when the roles of investment advisor and fund manager are separated. This ensures that each can specialize and concentrate on the different aspects of being an investment advisor sourcing the deals and the fund manager selecting those deals that fit stringent portfolio criteria. Separating these roles prevents deal blindness as the investment committee of the fund manager selects and rejects loans based on financial and non-financial criteria without taking into consideration the 3-6 months of hard work to source these loans. An added value to separating the roles of investment manager and fund manager is that each will do its own risk, return and social impact analysis, thus improving the quality of decisions.

Fee breakdown

Another forward-looking element is the total fee charged, as managed fees are a fixed percentage of the invested assets. However, transparency in the composition of the total cost incurred is of the essence. Constructing loans in developing countries comes with travel expenses, monitoring fees as well as due diligence and legal expenses. PDIFs that pass these costs on to investors should be transparent about this. Also, in some cases, an upfront fee is paid by Financial Inclusion Institutions. It goes without saying that investors should benefit from this source of income instead of the investment advisor or fund manager. Therefore, the only compensation for both the investment advisor and the fund manager should be based on a transparent management fee.

Track record

It goes without saying that a sound track record is another forward-looking element that needs careful consideration. Track records come in different shapes and forms. Naturally, the financial track record should cover at least one (1) full economic cycle and preferably even major economic and political events. Proven liquidity for investor to subscribe or redeem under these challenging economic and political events is another crucial element not to underestimate in evaluating PDIFs. But also proven credibility and expertise on how non-financial criteria impact the lives of millions of underbanked people in developing countries is part of the track record to be evaluated. Establishing such a track record is a team effort performed by people. For investors to gain confidence in the future performance of the PDIF the stability and expertise of the team should also be assessed.

A good example of the importance of all of these forward-looking performance indicators is by evaluating the performance of PDIFs and the liquidity for investors during the storm of the unexpected emergence of the Covid-19 virus.

FINANCIAL INCLUSION POST COVID-19

In March a black swan hit financial markets in an unprecedented way. With public equity and fixed income markets in a roller coaster decline in March followed by a steep recovery, Covid-19 will most likely leave a negative footprint in private markets as well. Especially developing and frontier markets will feel the pain, without currently knowing the extent of it all. But certain factors don't bode well for their economies as a whole and financial inclusion in particular.

Covid-19 will have an effect on investments in financial inclusion. While drawdowns remained very limited in the 2008-2010 economic crisis, a higher loss rate is expected as a result of Covid-19. Diversification will probably not be as effective as the current impact of Covid-19 is truly global and deep. It is safe to assume that across the globe, financial institutions large and small are confronted with the consequences along the same lines. Quantifying the effects on a portfolio level is still difficult as Covid-19 is not yet under control and the private nature of the investment market causes a delay in pricing the risk of Covid-19.

From an investor point of view new investment opportunities will emerge. As interest rates rise, the need for funding might increase the size of the total market for investments in financial inclusion. This will only contribute to financial inclusion becoming an asset class of its own even more.

Looking forward the attractive long-term risk and return characteristics of investments in financial inclusion remain in place. Certainly, in the Netherlands financial inclusion as an asset class could become more attractive due to the new pension agreement. While beating regular fixed income asset classes on a risk return basis, most of the value of investing in financial inclusion is found in the diversifying characteristics as well as the non-financial value added to millions of underbanked people in emerging economies.

In these difficult and challenging times, consequences need to be addressed. Therefore, a bright future for investing in financial inclusion lies ahead!

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