

Research Monthly

Microfinance

Microfinance – an attractive portfolio diversifier

Private Banking

Since its inception, microfinance has developed from a poverty alleviation initiative to an emerging asset class. Based on its distinctive characteristics, the sector has been regarded for many years as resilient to economic downturns, and decoupled from movements in the financial markets. Prior to 2008, crises were experienced as a regional or sub-regional phenomenon. But the ongoing commercialization and integration of microfinance in the financial sector has increased the cyclicity, and hence the vulnerability, of the sector to global downturns. The 2008 economic and financial crisis demonstrated that the sector was no longer immune to global economic shocks. This was mainly true for the Eastern Europe and Central Asia (ECA) and Latin America (LAC) regions, as both regions were hit more severely than those regions that were less integrated in the global economy¹. Triggered by a one-year lag in the impact of the global crisis, the sector experienced a downturn in 2009. We examined the correlation of microfinance investment vehicles with other asset classes right after the crisis in 2010 (see our Research Quarterly, Microfinance: "Uncorrelated but not disconnected," of 21 April 2010) and identified a low to negative correlation with other asset classes, making microfinance investments look like a good portfolio diversifier.

The sector started to recover in the second half of 2010, but was overshadowed by negative headlines from South Asia and Nicaragua, leading to a more critical public perception of about microfinance and the state of affairs in the sector. Based on mixed results from the sector and an environment of troubled developed economies, we have decided to recalculate the correlations.

Table 1: Selected assets correlation (2004–2011, July)

	1M Libor (USD)	MSCI World Equity index	MSCI EM Financial Equity index	Barcap Global Aggregate Bond index	CS EM Financial Bond index	S&P GSCI index
SMX Microfinance (USD)	0.60	-0.16	-0.13	-0.01	-0.20	-0.03
1M Libor (USD)	1.00	-0.07	-0.04	-0.01	-0.23	-0.07

Source: Symbiotics, Bloomberg, Credit Suisse

Highlights

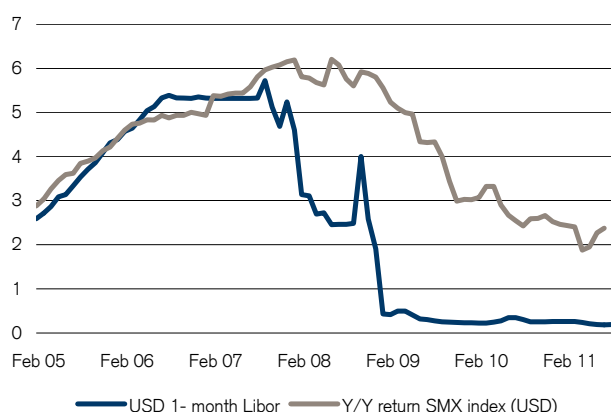
- Microfinance investments primarily attract social impact investors.
- Furthermore, microfinance investments are attractive from a diversification standpoint, due to their risk-return characteristics as they are uncorrelated with other asset classes, such as equities, bonds and commodities.
- The sector has learned its lessons from the crisis, and most regions have recovered from the lows of 2009. But economic recovery is still lagging in some areas.
- A broadly diversified and carefully chosen selection of microfinance institutions helps to reduce risks.

Table 1 shows the correlation since 2004 of the monthly returns of the Symbiotics (SMX) Microfinance index, which we take as a reference for microfinance investment vehicles' (MIVs) performance on aggregate, with the MSCI World equity index, the MSCI Emerging Market (EM) Financial B equity index, the Barcap Global Aggregate Bond index, the Credit Suisse EM Financial Institutions Bond index, the S&P GSCI Commodity index and USD 1-month Libor. Compared to our last calculation in April 2010, the results are rather similar, with correlation being low to negative with commodities, equities and bonds. Microfinance investments continue to look like a good portfolio diversifier. As can be seen in Table 1, the highest correlation is between microfinance investments' total returns and money market rates, represented by the USD 1-month Libor rate, and illustrated in Figure 1. It is relatively high at 0.6 over the respective period.

¹ A. Laude, Microfinance An Emerging Asset Class in: Microcredit as a Tool of Ethical Financing for Sustainable Development (2011), p. 31 ff

Figure 1

Symbiotics Microfinance Index USD versus 1-month Libor



Source: Symbiotics, Bloomberg, Credit Suisse

As seen in Figure 1, the SMX index tends to move in the same direction as the USD 1-month Libor rates. The explanation for the correlation lies in the nature of the business. The constituents of the index are MIVs lending to microfinance institutions (MFIs), predominately in the form of short-term loans. The development of interest rates on these loans is therefore closely tied to the development of short-term reference interest rates, such as Libor and Euribor rates. As not all loans mature at the same time, the decline in the SMX returns is smoother than that of USD 1-month Libor. Additionally, the SMX still pays a premium over the risk-free rate.

Risk/rewards

The SMX index remained less volatile compared to all the indices included in our comparative study. Table 2 summarizes volatilities measured by the standard deviation of monthly returns of each index. Over the period of 2004–2010, the SMX has offered the lowest return volatility of 0.18%, similar to money-market volatility, followed by the Barcap Global Aggregate Bond index. Equity indices, the Credit Suisse Emerging Market Financial index and the Commodity index score lower in terms of return stability. In comparison to the Research Quarterly in April 2010, volatility went up by only 0.02% despite a major default having taken place in Nicaragua.

Table 2 also summarizes Sharpe ratios, which measure the risk-adjusted excess return of each asset class under review over 1-month Libor. The SMX index again scores highly over the observation period.

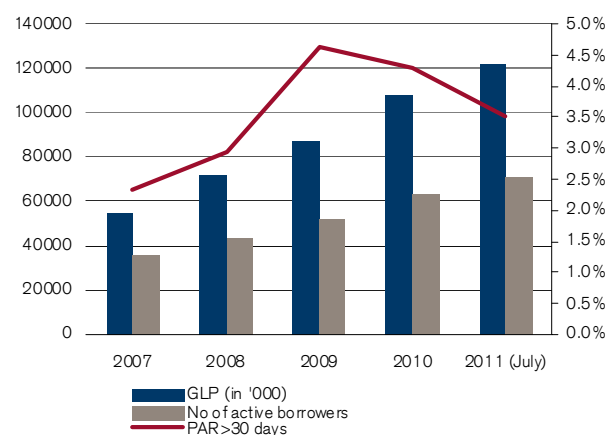
Table 2: Monthly return volatility and sharp ratios

	SD monthly returns	Sharpe ratio
1M Libor (USD)	0.16%	
SMX Microfinance (USD)	0.18%	0.77
MSCI World Equity	4.73%	0.04
MSCI EM Financial Equity	7.92%	0.15
Barcap Global Aggregate Bond	0.78%	0.24
CS EM Financial Bond Index	2.52%	0.14
S&P GSCI	7.31%	0.16

Source: Symbiotics, Bloomberg, Credit Suisse

Figure 2

SYM50: Average GLP, borrowers and PAR>30days



Source: Symbiotics (SYM50), Credit Suisse

The sector after the 2008 crisis

The crisis resulted in tightened liquidity, and many MFIs faced funding problems in markets where they were predominately financed by commercial banks. But overall, the liquidity crunch did not have the expected effects as funding costs did not increase for most MFIs, foreign exchange exposure decreased and the term of outstanding debt did not decline noticeably². The crisis helped shape the industry by slowing the exorbitant growth rates, which were not sustainable. In light of decreasing foreign funding, MFIs started looking for alternative funding sources either in local currencies or by offering saving deposits. The strong pre-crisis growth impacted credit discipline negatively so that in some countries borrowers pursued multiple lending strategies. This led to over-indebtedness and was reflected in a deterioration in loan portfolio quality.

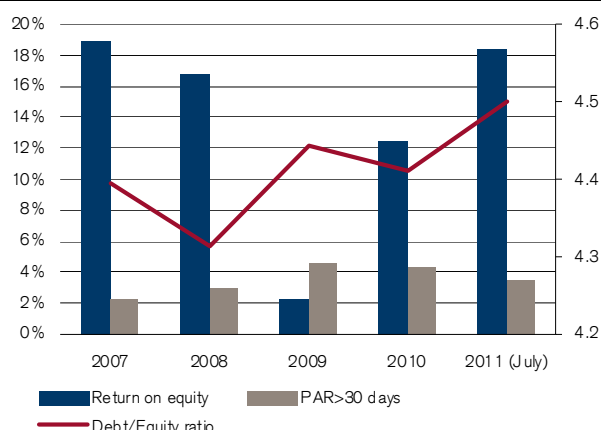
Figure 2 shows the development of the average gross loan portfolio (GLP), the average number of active borrowers and the average portfolio at risk for loans outstanding more than 30 days (PAR>30) for the SYM50, a benchmark provided by Symbiotics and consisting of 50 MFIs. The GLP and the number of active borrowers both grew during the respective period. The PAR>30 representing the portfolio quality started to increase from 2.3% in 2007 to its high of 4.6% in 2009 and then decreased to 3.5% in late July 2011. As illustrated in Figure 3, profitability also deteriorated and return on equity fell from 16.7 in 2008 to 2.3% in 2009, followed by a recovery to 18.4% in July 2011. Leverage remained more or less on the same level during the respective period.

The overall picture of the sector looks better due to its recovery in 2010, and numbers improved through July 2011. But the crisis hit the regions in different ways. Before the crisis, ECA was the fastest growing region in the sector and was hit hardest due to its proximity to Europe, job losses, increase in unemployment and lower remittances. ECA's microfinance sector is still recovering from the effects of the crisis. Many borrowers were over-indebted which led to a deterioration in

2 A. Gonzales: An empirical review of the actual impact of financial crisis and recessions on MFIs, and other factors explaining recent microfinance crisis (2011), p. 5

Figure 3

SYM50: Profitability, portfolio quality and capital structure



Source: Symbiotics (SYM50), Credit Suisse

the quality of loan portfolios. Many MFIs needed a financial restructuring plan in order to survive. Multiple lending is now being monitored and should lead to more sustainable mid-term growth in the region. Regions like Middle East and North Africa or South Asia, which are less integrated into the global economy, showed some resilience to the crisis. South Asia's MFIs even continued growing their GLPs and number of active borrowers during the financial crisis.

Outlook

The future returns and risks associated with microfinance investments will be influenced by several developments. The growth in global economies is likely to slow in both the developed as well as in developing countries. The various regions will be impacted by this in different ways, depending on the level of integration in the global economy. The portfolio growth of MFIs already slowed in 2009 and 2010 and therefore readjusted to a more sustainable pace of growth. The sector has emerged from the crisis in better shape and with a better understanding for its development going forward. Savings have become an important stabilizer in the crisis. MFIs, which are allowed to mobilize savings, were less exposed to funding issues. Most non-bank financial institutions are not allowed to mobilize savings but the crisis has triggered discussions on the topic. 2011 is likely to build on the positive trends that began in the latter half of 2010, and assets are expected to grow further. The risk of a potential oversupply of capital in some markets needs to be monitored in order to avoid overheating and prevent negative consequences from arising, such as multiple lending and over-indebtedness. The microfinance sector is maturing, and in some regions, reaching saturation. The ongoing integration into the formal financial sector by offering the same products or similar lending styles as traditional banks increases the likelihood of rising correlations with other asset classes.

Conclusions

Social impact investors are attracted by microfinance investments based on their dual – social and financial – returns. Additionally, microfinance offers attractive diversification and risk-return characteristics as the investments are relatively uncorrelated with other assets classes. In the past, returns have been stable and are expected to be higher than money market investments. Microfinance investments still look attractive as portfolio diversifiers, given the broad diversification of MFIs. Additionally, a diligent MFI selection helps mitigate the specific risks existing in some regions where economic recovery is lagging and oversupply has impaired the portfolio quality of MFIs. The ability of the sector to face challenges and successfully deal with them increases its chances to further develop as an emerging asset class and become an attractive alternative for portfolio diversification.

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Abb.	Description	Abb.	Description	Abb.	Description
CAGR	Compound annual growth rate	EPS	Earnings per share	P/B	Price-to-book value
CFO	Cash from operations	EV	Enterprise value	P/E	Price-earnings ratio
CFROI	Cash flow return on investment	FCF	Free cash flow	PEG	P/E ratio divided by growth in EPS
DCF	Discounted cash flow	FFO	Funds from operations	ROE	Return on equity
EBITDA	Earnings before interest, taxes, depreciation and amortization	IBD	Interest-bearing debt	ROIC	Return on invested capital

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