FMO EX-POST EFFECTIVENESS STUDY: LOCAL CURRENCY FINANCING OF (M)SME FINANCIAL INSTITUTIONS IN CENTRAL AMERICA

Final Report

FMO – The Netherlands Development Finance Company

May 15, 2015

The information and views set out in this report are those of Dalberg Global Development Advisors and do not necessarily reflect the official opinion of the Netherlands Development Finance Company (FMO).

TABLE OF CONTENTS

Acronyms 3
Preface 4
I. Sub-assignment: Executive Summary 5
II. Sub-assignment: Methodology 7
III. Sub-assignment: Results 9
1. Diversification Comparison 9
2. Pricing Comparison 13
IV. Sub-assignment: Recommendations 18
V. Main Assignment: Executive Summary 19
VI. Main Assignment: Methodology 25
VII. Main Assignment: Results 29
1. Overall Results 29
2. FAMA's Results 30
3. Lafise's Results 40
4. Locfund's Results 48
5. Locfund Investees' Results 51
6. Assessment of the effects of different LCY instruments and different conditions on intermediaries' incentives and performance with regard to improving access to finance for (M)SMEs 64
VIII. Main Assignment: Recommendations 65
Annex A: Literature Review 68
1. Main Assignment: (M)SME Sector Development via Supply-Side Approaches 68
2. Sub-assignment: Pricing and Diversification Strategy for LCY Risks 73
Annex B: Bibliography 76
Annex C: Methodology Questions 79
Annex D: Interview Tracker 86
Annex E: Client Mapping 88
Annex F: ToR 110

ACRONYMS

ALM:	Asset Liability Management
CABEI:	Central American Development Bank for Economic Integration
CAGR:	Compound Annual Growth Rate
CAR:	Capital Adequacy Ratio
CD:	Capacity Development
DFI:	Development Finance Institution
EIB:	European Investment Bank
FI:	Financial Institution
FMO:	The Netherlands Development Finance Company
MFI:	Microfinance Institution
MSE:	Micro and Small Enterprise
(M)SME:	(Micro,) Small and Medium sized enterprise
PSD:	Private Sector Development
R&D:	Research & Development
RoE:	Return on Investment
SME:	Small and Medium Enterprise
TA:	Technical Assistance

PREFACE

1. Context

The Netherlands Development Finance Company (FMO) aims to support the private sector in developing countries and emerging markets in Asia, Africa, Latin America, and Central and Eastern Europe. FMO does this by providing loans, participations, guarantees, and participating in other investment promotion activities. FMO had a committed portfolio of EUR 6.6 billion as of December 2013. FMO's goal is to contribute to the structural and sustainable socio-economic development in these countries and, together with the private sector, obtain healthy returns.

FMO's mandate and solid financial profile allows it to invest in higher risk markets, either with its own capital or on behalf of the Dutch Government. Apart from financing activities from its own balance sheet, FMO also manages several Private Sector Development (PSD) programs on behalf of the Dutch Government. In 2006, the Dutch Government established a separate but linked PSD program called MASSIF to contribute to developing and strengthening the financial infrastructure in developing countries to better serve entrepreneurs and consumers at the lower end of the financial market.

MASSIF had a total committed portfolio of 120 projects for a total amount of EUR 325 million as of December 2013. MASSIF invests through a variety of instruments, from local currency debt and mezzanine structures to direct equity and investment funds. Asia and Africa together make up two thirds of the MASSIF portfolio, while the remaining third is allocated to global operating funds and financial institutions in Latin America, Eastern Europe, and Central Asia. MASSIF also offers capacity development grants to strengthen its investees by financing risk management systems, product development, and other capacity building projects.

MASSIF is a pioneer in local currency financing. Between 2008 and 2012, the average percentage of local currency debt out of total debt for the MASSIF portfolio was 71%, and its equity is also in local currency. MASSIF provides financial intermediaries with local currency financing, allowing these intermediaries to offer local currency products to their (M)SME clients.

Currently the Dutch Ministry of Foreign Affairs is assessing the relevance and effectiveness of its funding to the private sector. The Ministry has asked FMO to complete 22 separate evaluations of its activities. In this context, Dalberg has been commissioned to conduct an evaluation of MASSIF's local currency (LCY) financing of selected micro, small, and medium sized enterprise (M)SME financial institutions in Central America.

2. Objectives

This study is divided into a sub-assignment and a main assignment. The methodologies, results and recommendations for the two studies have been described in separate sections of the report in order to make the division of the report easier.

The objectives of the sub-assignment are: to (i) compare MASSIF's and Locfund's currency diversification strategies, and (ii) compare MASSIF's and Locfund's pricing methodologies.

The objectives of this study's main assignment are: to (i) assess the effectiveness and additionality of MASSIF's local currency financing in strengthening the receiving financial institutions (FIs); and (ii) assess the effectiveness and additionality of MASSIF's local currency financing in expanding and improving the provision of financial services to M(SME)s.

I. SUB-ASSIGNMENT: EXECUTIVE SUMMARY

OBJECTIVES AND SCOPE

The sub-assignment of this evaluation has two objectives: (i) to compare MASSIF's and Locfund's currency diversification strategies, and (ii) to compare MASSIF's and Locfund's local currency financing pricing methodologies.

MASSIF is a Private Sector Development Program set up by the Dutch government in 2006 and managed by FMO (The Netherlands Development Finance Company). It is a fund which operates globally with a total committed portfolio consisting of over 120 projects, with an outstanding amount of EUR 325 million by the end of 2013. Financing activities of the fund include the provision of equity, subordinated loans and medium to long term credit to banks with an SME focus, microfinance institutions, other nonbank financial institutions (such as leasing companies) and small enterprise investment funds. MASSIF is considered a pioneer in local currency financing**.** Between 2008 and 2012, the average percentage of local currency debt out of total debt for the MASSIF portfolio was 71%.

Locfund is a USD 30 million local currency debt fund which provides financing to Tier II/III microfinance institutions in Latin America and the Caribbean. It was established in 2007 by Bolivia Investment Management with strong support from FMO and IDB-MIF, making use of FMOs' Local Currency (LCY) knowledge to develop a model that allows Locfund to provide LCY loans while its liabilities are in USD.

RESULTS

The lessons learnt through this comparison of MASSIF's and Locfund's pricing and diversification strategies have two important caveats. The first is that given their different geographic mandate, the direct price comparison has been limited to seven countries. Secondly, lack of data limited the analyses of Locfund's FX gains/losses and of MASSIF's LCY profitability to the 2007/2008-2012 period. Given that FX results for 2014 have been negative, it is likely that our analyses suffer from a positive bias.

In terms of diversification, while MASSIF diversifies its portfolio across a higher number of currencies than Locfund, the correlation among MASSIF's currencies (exchange rate calculated in EUR) is higher than the correlation among Locfund's currencies (exchange rate calculated in USD). Given its mandate to lend globally, between 2007 and 2012 MASSIF lent in 38 currencies, across four continents. Locfund, instead, can only diversify among LAC countries. Over the same time period it lent in 12 currencies. However, despite this higher diversification, MASSIF's currencies have a higher average correlation among each other (0.28) than Locfund's currencies. This difference is mainly due to the base rate used, given that for MASSIF the exchange rates were calculated against the EUR, while for Locfund they were calculated against the USD.

This difference in correlation also results in more volatile gains/losses from foreign exchange movements for MASSIF. The gains or losses from foreign exchange movements for MASSIF between 2007 and 2012 have ranged from -5.0% to +8.2% annually (and the losses reached -17% in 2014). For Locfund, the gains or losses over the same time period have ranged from -2.3% to +1.8% annually (data for 2013 and 2014 was not available).

The pricing approach and methodology of the local currency component of MASSIF's and Locfund's loans is different but, from the transactions that we could analyze, one institution's pricing is not

systematically higher or lower than the other's. The difference in pricing has two sources. First, for the seven countries where a comparison was possible, MASSIF and Locfund always used a different variable rate benchmark. In six of the seven countries, MASSIF used a higher benchmark rate. Second, Locfund's pricing also includes a "devaluation premium," which is not included in MASSIF's pricing. As a result of this devaluation premium, Locfund's local currency component of the pricing becomes higher than MASSIF's in four of the seven countries analyzed, despite MASSIF using a higher variable benchmark rate. In the remaining three, MASSIF has a higher price.

Finally, when putting both parts of the equation together, the pricing that represents the revenues and the exchange rate movement that represents the costs, it appears that MASSIF's local currency pricing is appropriate. MASSIF's yearly profit from its local currency exposure calculated as a percentage of the portfolio (calculated by subtracting the gains/losses due to the foreign exchange movement from the foreign exchange premium) had a median of 3.7% between 2007 and 2012. This appears to be in line with the objective of sustainably providing local currency financing over a long-term horizon. This is particularly true in light of the fact that MASSIF's 2014 FX results have been negative. Even though we do not have the necessary data to calculate the 2014 LCY profitability, it is very likely this has also been negative. Having a mildly positive median profit is important in order to build a buffer against years with poor results.

On the other hand, a conclusion on whether Locfund's local currency pricing is appropriate cannot be made due to lack of data. Specifically, given lack of data, it has not been possible to estimate the profit for Locfund.[1] Locfund did not provide the evaluation team with the details of the revenue it has generated exclusively through the local currency components of its pricing structure (variable benchmark and "premium for unexpected devaluations"). An initial hypothesis could be that the local currency pricing component (and, specifically, the devaluation premium) is necessary to compensate for the high operational cost and credit risk of offering smaller loans to tier 2 and tier 3 financial institutions.

RECOMMENDATIONS

On the basis of the results summarized above, we have identified the following four recommendations:

- **Recommendation for MASSIF:** continue focusing on maximizing the diversification of the portfolio, stabilizing returns and increasing the ability to take LCY risks. One possibility could be to adjust country limits and introduce investment limits for specific groups of correlated currencies.
- **Recommendation for MASSIF and Locfund:** set up a working group, including TCX, to periodically discuss and share lessons learnt on the cases for choosing to deviate from the TCX benchmarks, and the rationale for this deviation. Also adjust the benchmark being used, if necessary. This working group could also include other major DFIs.
- **Recommendation for MASSIF:** continue using the same pricing methodology.
- **Recommendation for Locfund:** going forward, increase its capabilities and strengthen its tools to transparently keep track of key performance indicators. Specifically, keep track of the data necessary to calculate its revenue due to local currency exposure so that its profit due to LCY exposure can be calculated and assessed.

[1] Locfund does not keep track of the revenue generated exclusively by the local currency components of the pricing structure.

II. SUB-ASSIGNMENT: METHODOLOGY

1. Scope

The secondary evaluation aims to assess Locfund's vs. MASSIF's pricing and diversification strategies. Instead of hedging currency risks via derivatives, FX currency risks for both funds are mainly mitigated through diversification by country of the local currency loan portfolio. For the assessment of the differences in diversification strategies, we compared Locfund's portfolio (which is focused exclusively on LAC) with MASSIF's entire portfolio. For pricing, we compared Locfund's portfolio with MASSIF's portfolio in LAC in order to compare pricing for countries in the same region.

2. Approach

For the assessment of the differences in diversification strategies, we compared Locfund's portfolio (which is focused exclusively on LAC) with MASSIF's entire local currency financing portfolio. For pricing, however, we compared Locfund's portfolio with MASSIF's portfolio in LAC in order to compare pricing for the same countries in the region. In the next paragraphs, we explain the methods for answering each of the questions included in the ToR.

How does the MASSIF currency risks (diversification) model perform compare to the Locfund model?

To answer this question, we followed three steps:

1. **We analyzed the diversification methodology.** Specifically, we analyzed the policies describing the criteria and limits to exposure by geography. If relevant, we also tried to understand in which situations Locfund or MASSIF were required to use a hedging product and how this affected the risk exposure as well as the pricing.
2. **We assessed the correlations among the currencies in the MASSIF and Locfund portfolios.** Specifically, we assessed in which portfolio the correlations were higher and the reasons explaining the higher correlations.
3. **We measured the FX gains and losses in the MASSIF and Locfund portfolios over the last 5-7 years to understand the performance of their diversification strategies.** Specifically, we analyzed the gains and losses due exclusively to the currency exchange rate evolution and also the net gains and losses, i.e., the difference between the FX premium charged to clients and the gains and losses due to the exchange rate evolution.

How does Locfund's methodology and pricing (LCY base rate + margin) compare to TCX quotes / pricing provided to similar (or in some cases the same) clients? Is Locfund's pricing more competitive than TCX pricing, and if so, does Locfund's pricing still provide adequate compensation for the currency risk? What can be learned from Locfund's strategies vis-à-vis TCX pricing (which is also used as a reference to determine MASSIF pricing)?

To answer this question, we conducted two analyses, one focused on comparing the pricing methodologies and the second focused on comparing the actual pricing:

1. **We analyzed the pricing methodologies of MASSIF and Locfund in order to identify all the components of the pricing structure.** Once the structure was clear, we identified the components that were specifically related to FX risks. We were then able to compare MASSIF's and Locfund's

FX pricing methodologies. While they both use local benchmarks, we also assessed whether the benchmarks used are effectively the same (and how they compare to TCX).

2. **The second analysis compared Locfund's and MASSIF's prices for each country within LAC, and when possible, for the same clients.** Our comparative analysis focused on the pricing components dictated by the FX risk, helping us validate our findings from the pricing methodology.

III. SUB-ASSIGNMENT: RESULTS

1. DIVERSIFICATION COMPARISON

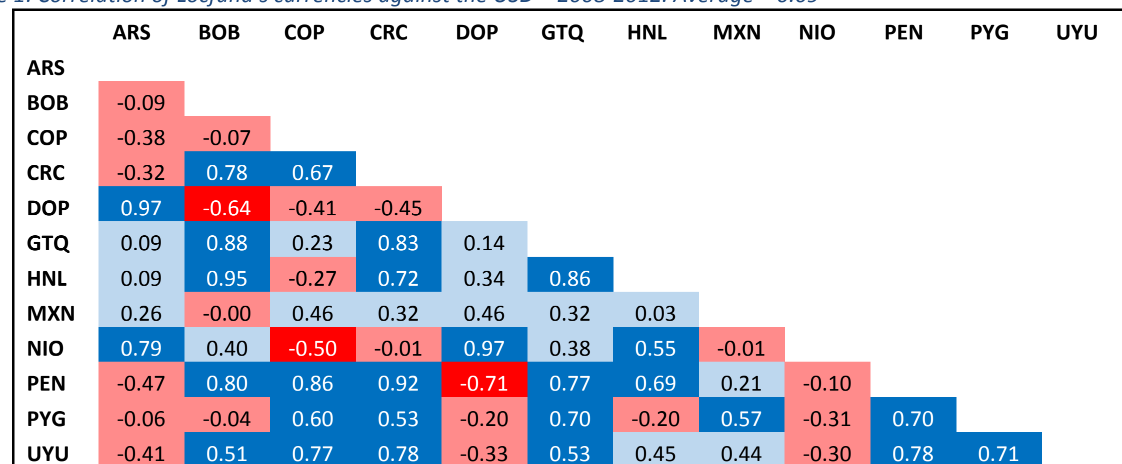
MASSIF's and Locfund's methodologies for managing currency risks are similar as both are based on diversification. According to MASSIF's Internal Guide, the fund does not hedge its currency positions, but instead diversifies the currencies within its portfolio. Specifically, the maximum exposure to any one currency can be 20% of the fund's total committed portfolio.[2] Similarly, Locfund's Investment Policy states that the maximum exposure by country can be 10%,[3] with the possibility of increasing to 15% when incorporating an FX hedging instrument.

Even if MASSIF has a higher currency limit (20%) than Locfund (10%), **MASSIF's portfolio exposure per currency is lower than Locfund's.** For example, in 2012 MASSIF had an average exposure per currency of 4.8%, with the highest exposure being 9.2% to the Indian Rupee. In contrast, in 2012 Locfund had an average exposure of 7.4%, with the highest exposure being 18.7% (with special permission by the Board) to the Bolivian Boliviano. This difference is likely attributable to the fact that Locfund focuses exclusively on Latin America and the Caribbean (LAC), while MASSIF is a global fund.

MASSIF has a higher diversification given its mandate to lend globally. Between 2007 and 2012 it lent in 38 currencies, across four continents. Locfund, instead, can only diversify among LAC countries. Over the same time period it lent in 12 currencies. However, it is important to note that Locfund identified four currency sub-regions within LAC (South American, Central America, Mexico, and the Caribbean). Even if portfolio limits are not attributed to sub-regions, their existence serves as a guide for Locfund's diversification strategy.

Despite the difference in geographical scope between MASSIF and Locfund, the currencies included in the MASSIF fund have a higher average correlation (when the exchange rate is calculated in EUR) than the currencies included in Locfund (exchange rate calculated in USD). In the following tables we calculated the correlations for all the currencies included in each fund in the 2008-2012 period. For MASSIF we used the exchange rate against the Euro, for Locfund we used the exchange rate against the US Dollar (given its funding is in US Dollar). The average correlation for currencies in Locfund is 0.09, for currencies in MASSIF it is 0.28.

Figure 1: Correlation of Locfund's currencies against the USD – 2008-2012. Average = 0.09

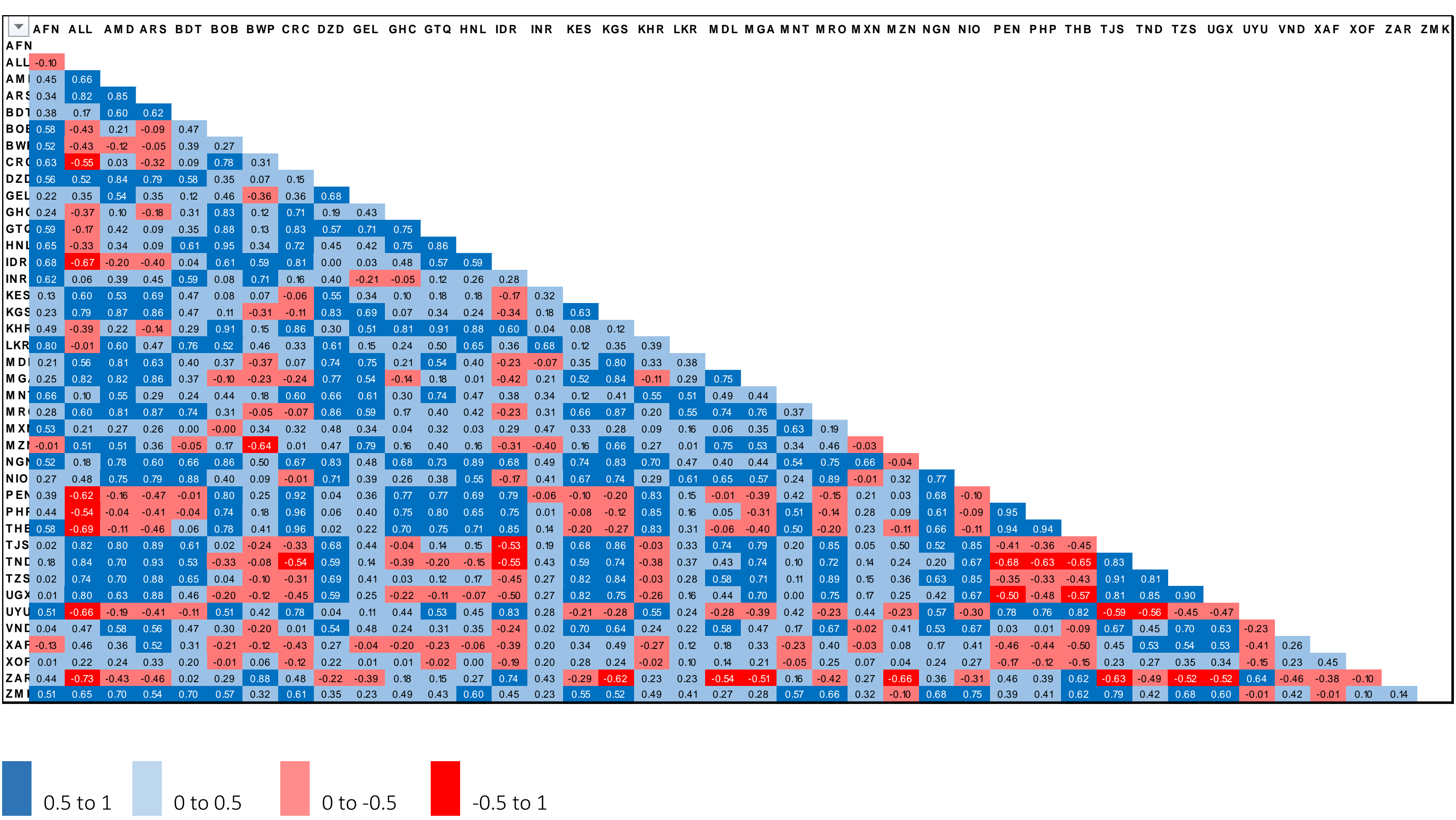


	ARS	BOB	COP	CRC	DOP	GTQ	HNL	MXN	NIO	PEN	PYG	UYU
ARS												
BOB	-0.09											
COP	-0.38	-0.07										
CRC	-0.32	0.78	0.67									
DOP	0.97	-0.64	-0.41	-0.45								
GTQ	0.09	0.88	0.23	0.83	0.14							
HNL	0.09	0.95	-0.27	0.72	0.34	0.86						
MXN	0.26	-0.00	0.46	0.32	0.46	0.32	0.03					
NIO	0.79	0.40	-0.50	-0.01	0.97	0.38	0.55	-0.01				
PEN	-0.47	0.80	0.86	0.92	-0.71	0.77	0.69	0.21	-0.10			
PYG	-0.06	-0.04	0.60	0.53	-0.20	0.70	-0.20	0.57	-0.31	0.70		
UYU	-0.41	0.51	0.77	0.78	-0.33	0.53	0.45	0.44	-0.30	0.78	0.71	

[2] MASSIF, Internal Guide (2012), p. 3.

[3] Locfund, Investment Policy (2009), p. 3.

Figure 2: Correlation of MASSIF's currencies against the EUR – 2008-2012. Average = 0.284



	AFN	ALL	AMD	ARS	BDT	BOB	BWP	CRC	DZD	GEL	GHC	GTQ	HNL	IDR	INR	KES	KGS
AFN																	
ALL	-0.10																
AMD	0.45	0.66															
ARS	0.34	0.82	0.85														
BDT	0.38	0.17	0.60	0.62													
BOB	0.58	-0.43	0.21	-0.09	0.47												
BWP	0.52	-0.43	-0.12	-0.05	0.39	0.27											
CRC	0.63	-0.55	0.03	-0.32	0.09	0.78	0.31										
DZD	0.56	0.52	0.84	0.79	0.58	0.35	0.07	0.15									
GEL	0.22	0.35	0.54	0.35	0.12	0.46	-0.36	0.36	0.68								
GHC	0.24	-0.37	0.10	-0.18	0.31	0.83	0.12	0.71	0.19	0.43							
GTQ	0.59	-0.17	0.42	0.09	0.35	0.88	0.13	0.83	0.57	0.71	0.75						
HNL	0.65	-0.33	0.34	0.09	0.61	0.95	0.34	0.72	0.45	0.42	0.75	0.86					
IDR	0.68	-0.67	-0.20	-0.40	0.04	0.61	0.59	0.81	0.00	0.03	0.48	0.57	0.59				
INR	0.62	0.06	0.39	0.45	0.59	0.08	0.71	0.16	0.40	-0.21	-0.05	0.12	0.26	0.28			
KES	0.13	0.60	0.53	0.69	0.47	0.08	0.07	-0.06	0.55	0.34	0.10	0.18	0.18	-0.17	0.32		
KGS	0.23	0.79	0.87	0.86	0.47	0.11	-0.31	-0.11	0.83	0.69	0.07	0.34	0.24	-0.34	0.18	0.63	
KHR	0.49	-0.39	0.22	-0.14	0.29	0.91	0.15	0.86	0.30	0.51	0.81	0.91	0.88	0.60	0.04	0.08	0.12
LKR	0.80	-0.01	0.60	0.47	0.76	0.52	0.46	0.33	0.61	0.15	0.24	0.50	0.65	0.36	0.68	0.12	0.35
MDL	0.21	0.56	0.81	0.63	0.40	0.37	-0.37	0.07	0.74	0.75	0.21	0.54	0.40	-0.23	-0.07	0.35	0.80
MGA	0.25	0.82	0.82	0.86	0.37	-0.10	-0.23	-0.24	0.77	0.54	-0.14	0.18	0.01	-0.42	0.21	0.52	0.84
MNT	0.66	0.10	0.55	0.29	0.24	0.44	0.18	0.60	0.66	0.61	0.30	0.74	0.47	0.38	0.34	0.12	0.41
MRO	0.28	0.60	0.81	0.87	0.74	0.31	-0.05	-0.07	0.86	0.59	0.17	0.40	0.42	-0.23	0.31	0.66	0.87
MXN	0.53	0.21	0.27	0.26	0.00	-0.00	0.34	0.32	0.48	0.34	0.04	0.32	0.03	0.29	0.47	0.33	0.28
MZN	-0.01	0.51	0.51	0.36	-0.05	0.17	-0.64	0.01	0.47	0.79	0.16	0.40	0.16	-0.31	-0.40	0.16	0.66
NGN	0.52	0.18	0.78	0.60	0.66	0.86	0.50	0.67	0.83	0.48	0.68	0.73	0.89	0.68	0.49	0.74	0.83
NIO	0.27	0.48	0.75	0.79	0.88	0.40	0.09	-0.01	0.71	0.39	0.26	0.38	0.55	-0.17	0.41	0.67	0.74
PEN	0.39	-0.62	-0.16	-0.47	-0.01	0.80	0.25	0.92	0.04	0.36	0.77	0.77	0.69	0.79	-0.06	-0.10	-0.20
PHP	0.44	-0.54	-0.04	-0.41	-0.04	0.74	0.18	0.96	0.06	0.40	0.75	0.80	0.65	0.75	0.01	-0.08	-0.12
THB	0.58	-0.69	-0.11	-0.46	0.06	0.78	0.41	0.96	0.02	0.22	0.70	0.75	0.71	0.85	0.14	-0.20	-0.27
TJS	0.02	0.82	0.80	0.89	0.61	0.02	-0.24	-0.33	0.68	0.44	-0.04	0.14	0.15	-0.53	0.19	0.68	0.86
TND	0.18	0.84	0.70	0.93	0.53	-0.33	-0.08	-0.54	0.59	0.14	-0.39	-0.20	-0.15	-0.55	0.43	0.59	0.74
TZS	0.02	0.74	0.70	0.88	0.65	0.04	-0.10	-0.31	0.69	0.41	0.03	0.12	0.17	-0.45	0.27	0.82	0.84
UGX	0.01	0.80	0.63	0.88	0.46	-0.20	-0.12	-0.45	0.59	0.25	-0.22	-0.11	-0.07	-0.50	0.27	0.82	0.75
UYU	0.51	-0.66	-0.19	-0.41	-0.11	0.51	0.42	0.78	0.04	0.11	0.44	0.53	0.45	0.83	0.28	-0.21	-0.28
VND	0.04	0.47	0.58	0.56	0.47	0.30	-0.20	0.01	0.54	0.48	0.24	0.31	0.35	-0.24	0.02	0.70	0.64
XAF	-0.13	0.46	0.36	0.52	0.31	-0.21	-0.12	-0.43	0.27	-0.04	-0.20	-0.23	-0.06	-0.39	0.20	0.34	0.49
XOF	0.01	0.22	0.24	0.33	0.20	-0.01	0.06	-0.12	0.22	0.01	0.01	-0.02	0.00	-0.19	0.20	0.28	0.24
ZAR	0.44	-0.73	-0.43	-0.46	0.02	0.29	0.88	0.48	-0.22	-0.39	0.18	0.15	0.27	0.74	0.43	-0.29	-0.62
ZMK	0.51	0.65	0.70	0.54	0.70	0.57	0.32	0.61	0.35	0.23	0.49	0.43	0.60	0.45	0.23	0.55	0.52

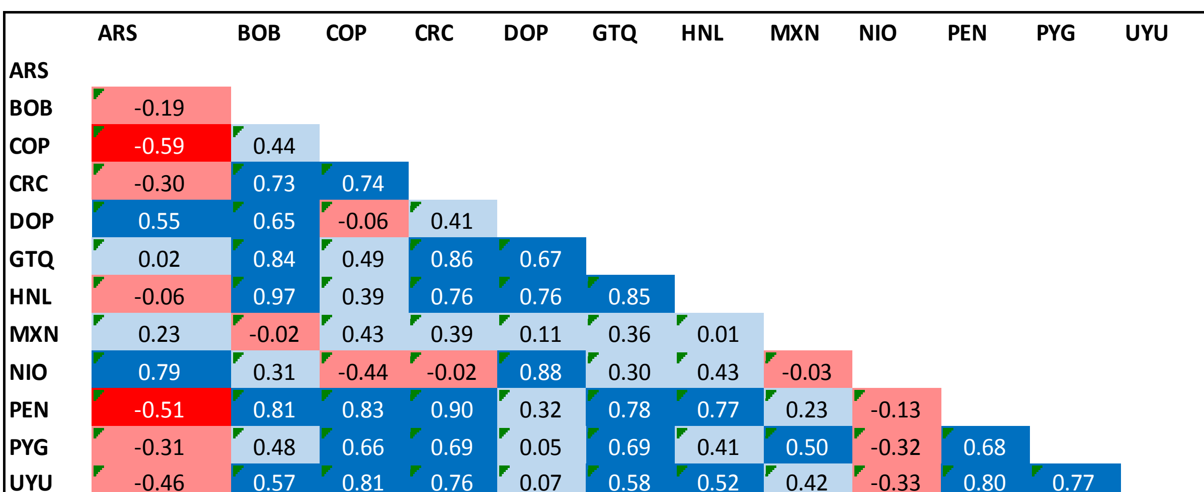
	KHR	LKR	MDL	MGA	MNT	MRO	MXN	MZN	NGN	NIO	PEN	PHP	THB	TJS	TND	TZS	UGX	UYU	VND	XAF	XOF	ZAR	ZMK
LKR	0.39																						
MDL	0.33	0.38																					
MGA	-0.11	0.29	0.75																				
MNT	0.55	0.51	0.49	0.44																			
MRO	0.20	0.55	0.74	0.76	0.37																		
MXN	0.09	0.16	0.06	0.35	0.63	0.19																	
MZN	0.27	0.01	0.75	0.53	0.34	0.46	-0.03																
NGN	0.70	0.47	0.40	0.44	0.54	0.75	0.66	-0.04															
NIO	0.29	0.61	0.65	0.57	0.24	0.89	-0.01	0.32	0.77														
PEN	0.83	0.15	-0.01	-0.39	0.42	-0.15	0.21	0.03	0.68	-0.10													
PHP	0.85	0.16	0.05	-0.31	0.51	-0.14	0.28	0.09	0.61	-0.09	0.95												
THB	0.83	0.31	-0.06	-0.40	0.50	-0.20	0.23	-0.11	0.66	-0.11	0.94	0.94											
TJS	-0.03	0.33	0.74	0.79	0.20	0.85	0.05	0.50	0.52	0.85	-0.41	-0.36	-0.45										
TND	-0.38	0.37	0.43	0.74	0.10	0.72	0.14	0.24	0.20	0.67	-0.68	-0.63	-0.65	0.83									
TZS	-0.03	0.28	0.58	0.71	0.11	0.89	0.15	0.36	0.63	0.85	-0.35	-0.33	-0.43	0.91	0.81								
UGX	-0.26	0.16	0.44	0.70	0.00	0.75	0.17	0.25	0.42	0.67	-0.50	-0.48	-0.57	0.81	0.85	0.90							
UYU	0.55	0.24	-0.28	-0.39	0.42	-0.23	0.44	-0.23	0.57	-0.30	0.78	0.76	0.82	-0.59	-0.56	-0.45	-0.47						
VND	0.24	0.22	0.58	0.47	0.17	0.67	-0.02	0.41	0.53	0.67	0.03	0.01	-0.09	0.67	0.45	0.70	0.63	-0.23					
XAF	-0.27	0.12	0.18	0.33	-0.23	0.40	-0.03	0.08	0.17	0.41	-0.46	-0.44	-0.50	0.45	0.53	0.54	0.53	-0.41	0.26				
XOF	-0.02	0.10	0.14	0.21	-0.05	0.25	0.07	0.04	0.24	0.27	-0.17	-0.12	-0.15	0.23	0.27	0.35	0.34	-0.15	0.23	0.45			
ZAR	0.23	0.23	-0.54	-0.51	0.16	-0.42	0.27	-0.66	0.36	-0.31	0.46	0.39	0.62	-0.63	-0.49	-0.52	-0.52	0.64	-0.46	-0.38	-0.10		
ZMK	0.49	0.41	0.27	0.28	0.57	0.66	0.32	-0.10	0.68	0.75	0.39	0.41	0.62	0.79	0.42	0.68	0.60	-0.01	0.42	-0.01	0.10	0.14	

[4] Methodological note: the period 2008-2012 was used as Locfund was only created at the end of 2006. Correlations might differ when measured for different periods.

The conclusion that the correlation of MASSIF's currencies is higher than the correlation of Locfund's currencies can appear counterintuitive. Given the higher number of currencies within MASSIF's portfolio (38 against 12 for Locfund), a lower correlation for MASSIF could have been expected. **However, the difference in currencies correlations between the funds is mainly due to the difference in the base rate used.** Specifically, the correlations for MASSIF have been calculated with exchange rates against the Euro while correlations for Locfund have been calculated with exchange rates against the US Dollar. Because over this time period LAC currencies have been more correlated when benchmarked against the Euro, MASSIF's correlation is higher.

This difference between a Euro and a US Dollar benchmark can also be observed by calculating the correlation among Locfund's currencies using a Euro benchmarking. The average correlation in this case is 0.37, well above the 0.09 of the average correlation using a US Dollar benchmark.

Figure 3: Correlation of Locfund's currencies against the EUR – 2008-2012. Average = 0.37



	ARS	BOB	COP	CRC	DOP	GTQ	HNL	MXN	NIO	PEN	PYG	UYU
ARS												
BOB	-0.19											
COP	-0.59	0.44										
CRC	-0.30	0.73	0.74									
DOP	0.55	0.65	-0.06	0.41								
GTQ	0.02	0.84	0.49	0.86	0.67							
HNL	-0.06	0.97	0.39	0.76	0.76	0.85						
MXN	0.23	-0.02	0.43	0.39	0.11	0.36	0.01					
NIO	0.79	0.31	-0.44	-0.02	0.88	0.30	0.43	-0.03				
PEN	-0.51	0.81	0.83	0.90	0.32	0.78	0.77	0.23	-0.13			
PYG	-0.31	0.48	0.66	0.69	0.05	0.69	0.41	0.50	-0.32	0.68		
UYU	-0.46	0.57	0.81	0.76	0.07	0.58	0.52	0.42	-0.33	0.80	0.77	

Locfund's lower average correlation results in a lower volatility of its gains/losses from foreign exchange movements. The following figures represent the gross gains/losses over the period 2007-2012 for both funds due to foreign exchange movements. The gains or losses in each single year have been substantially higher in MASSIF (ranging from -5.0% to +8.2% of the loan portfolio) than for Locfund (ranging from -2.3% to 1.8% of the loan portfolio). In addition, the profit for MASSIF in 2013 have reached almost 10%, followed by a profit of 7% in 2014, illustrating the underlying FX-volatility. (unfortunately this data was not available for Locfund). Also the median performance over the six year period has been better for Locfund than for MASSIF: the median performance for Locfund due to the FX gains and losses was 1%, while for MASSIF it was -1.4%.

Figure 4: Gains / losses from FX movement as a % of the portfolio in local currency - MASSIF

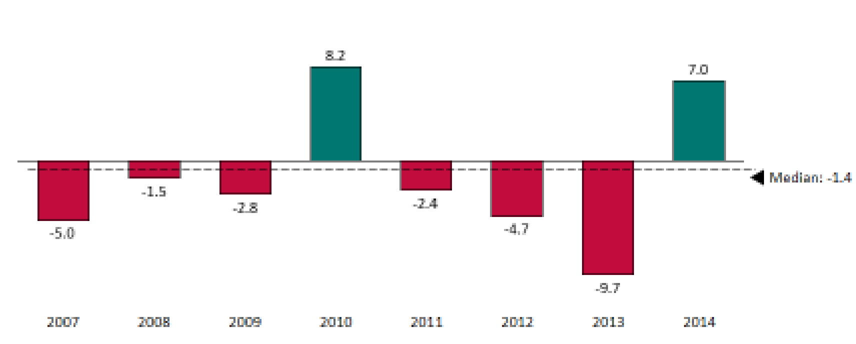


Figure 5: Gains / losses from FX movement as a % of the portfolio in local currency - Locfund

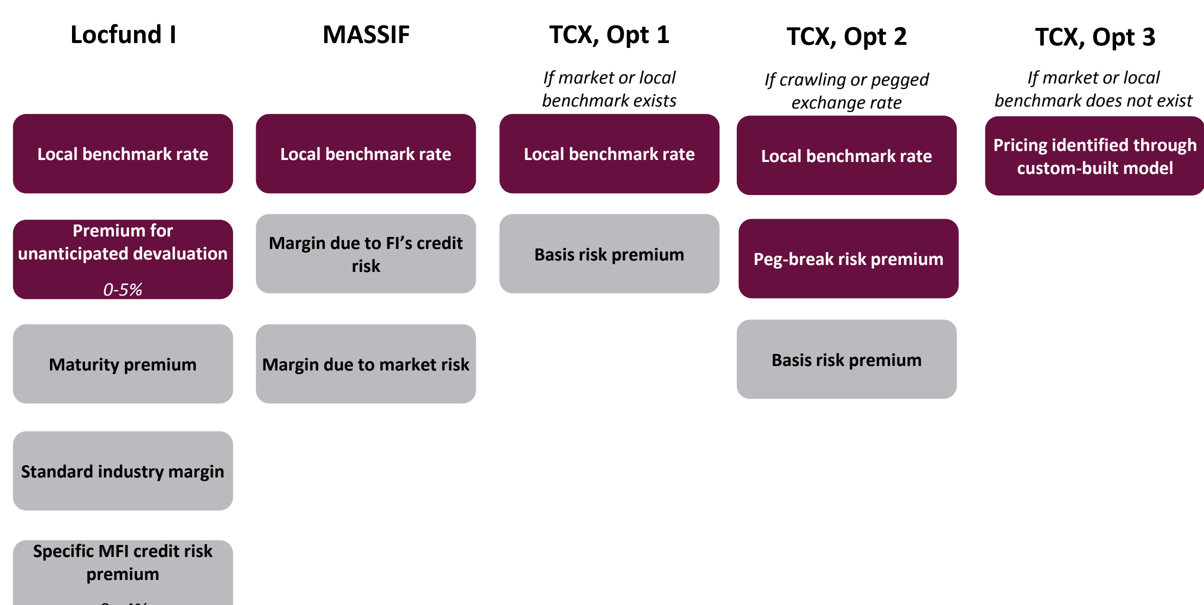
2. Pricing Comparison

This section focuses on comparing the pricing methodologies for MASSIF, Locfund and TCX. Before starting the comparison, four methodological notes are necessary. First, to ensure consistency, our comparison only includes MASSIF's transactions that took place in countries where also Locfund transactions took place (i.e., we did not include transactions outside of Latin America and the Caribbean). Second, we only considered transactions with variable rates pricing. Even though MASSIF currently offers fixed rates LCY pricing as well, it only started doing so in 2014. Given this timeframe, it was difficult to obtain relevant data for the evaluation. Locfund I, instead, only offered variable rates.[5] Third, we note that, as stated by its management team, Locfund's policy of buying hedges (when the exposure to a given currency is above 10% of the total portfolio) does not impact the loan's price. Fourth, it should be mentioned that MASSIF's pricing usually follows The Exchange Fund (TCX)'s pricing. Specifically, MASSIF's pricing policy states that its LCY loan pricing should be aligned to TCX's pricing, but that "deviations are allowed according to the "comply-or-explain" principle."[6] MASSIF can deviate from TCX's pricing when:

- TCX cannot provide a workable benchmark rate, or
- MASSIF believes a better benchmark rate exists on the market.

The following table lays out the main components of the pricing methodologies for MASSIF, Locfund and TCX.

Figure 6: Pricing methodology components for Locfund, MASSIF and TCX



Specifically, we focused our comparison on the pricing components that are directly related to the foreign currency risk (colored in purple in Figure 6). As illustrated in Figure 6, TCX has three different pricing methodologies depending on the country. Option 1 is for countries where a mature currency hedging market exists or a reliable (i.e., not easily manipulated and published frequently) local benchmark exists. Option 2 is for countries that have a crawling peg or pegged exchange rate (e.g.,

[5] Locfund I offers variable rates only in US Dollars.

[6] MASSIF, Pricing Policy (2014), p. 2.

Nicaragua). Option 3 is for countries where a market or a local benchmark does not exist (e.g., Laos, Cambodia).

Across all three institutions, the main component of the local currency pricing is a variable local benchmark rate. However, MASSIF and Locfund tend to use different benchmark rates. As mentioned above, MASSIF should align to TCX's benchmark and can deviate from that only in a handful of cases. Instead, MASSIF and Locfund use different benchmark rates. In fact, when comparing the benchmark rates in the countries where both MASSIF and Locfund had an operation during the 2007-2012 period,[7] the two funds never used the same benchmark. As shown in Figure 7, Locfund tends to use equal or shorter-term benchmark rates.

Figure 7: Variable benchmark rates used by MASSIF and Locfund

	MASSIF benchmark rate	Locfund benchmark rate
Argentina	Interbank offered rate, 180 days	Certificate of deposit average, 30 days
Bolivia	Nominal average banks-deposits rate, 180 days	Effective average banks-deposits rate, 180 days
Guatemala	Weighted average of all interest rates on deposits, 180 days	Certificate of deposit average, 180 days
Nicaragua	Average banks-deposits rate, 180 days	Certificate of deposit average, 90 days
Peru	Average of the 90-180 day deposit rate and the 180-360 day deposit rate	Interbank Offered Rate, 180 days
Uruguay	Average interest rate for corporate borrowers, 365 days	Certificate of Deposit average, 365 days

In addition to using a different benchmark rate, there is a difference between MASSIF's and Locfund's pricing methodologies because Locfund also includes a "premium for unanticipated devaluations." This premium is calculated on the basis of the "Currency Risk Rating" published by the Economist Intelligence Unit and reflects the potential risk that a currency will go through an unexpected devaluation.

As a result of the use of different benchmark rates and of Locfund's "premium for unanticipated devaluations," the pricing of the local currency component of MASSIF's and Locfund's loans is different. Specifically, we compared the pricing of loans in seven different local currencies. In three of the seven, the local currency component of the price was higher for MASSIF. In the remaining four, it was higher for Locfund. Further disaggregating the subcomponents of the pricing, it appears that MASSIF usually uses a higher variable benchmark rate. This is true in six out of seven countries. However, Locfund's "premium for unanticipated devaluations" tends to compensate for the lower benchmark.

[7] And for which information for both Locfund and MASSIF was available.

Figure 8: Local currency pricing for countries in which both MASSIF and Locfund have transactions

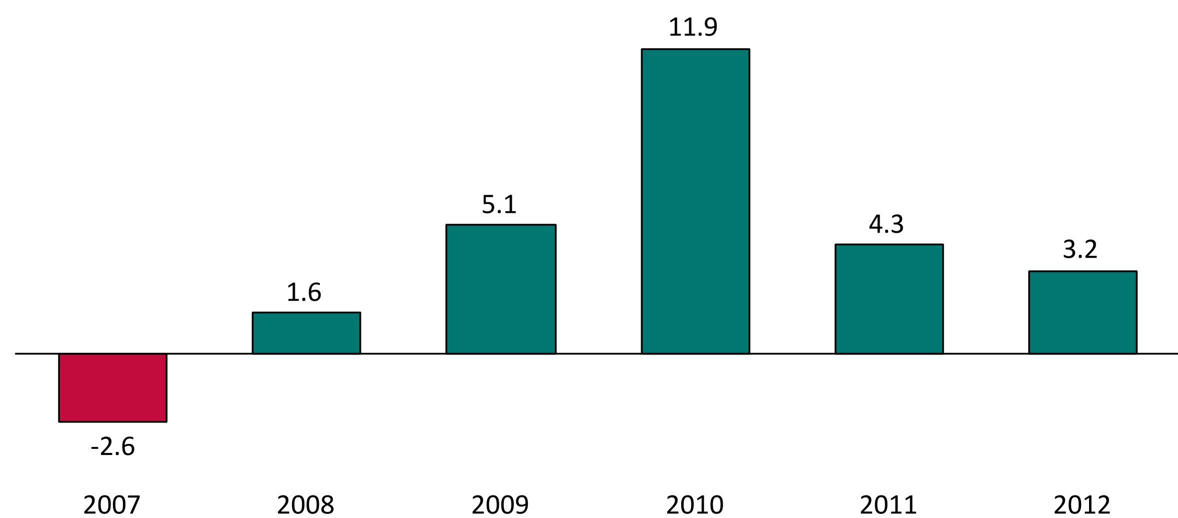
	Bolivia		Guatemala		Honduras		Mexico		Nicaragua		Peru		Uruguay	
	MASSIF	Locfund	MASSIF	Locfund	MASSIF	Locfund	MASSIF	Locfund	MASSIF	Locfund	MASSIF	Locfund	MASSIF	Locfund
Total	3.4%	2.5%	5.4%	11.2%	8.8%	10.0%	9.7%	8.8%	3.9%	7.0%	3.1%	4.6%	13.0%	6.3%
Devaluation premium		1.9%		3.5%		2.0%		4.0%		5.0%		2.0%		1.0%
Benchmark		0.6%		7.7%		8.0%		4.8%		2.0%		2.6%		5.3%

Devaluation premium   Benchmark

Benchmark value at disbursement of Locfund loan in each country (due to data availability).

The local currency component of MASSIF's pricing appears to be appropriate given the local currency risk that the fund is exposed to. As illustrated in Figure 9, MASSIF's yearly profit from the local currency exposure as a % of the portfolio, had a median over this time period of 3.7%. This has been calculated by subtracting the gains/losses due to the foreign exchange movement from the foreign exchange premium (which is the difference between the local benchmark and the EURIBOR). The pricing appears to be in line with the objective of sustainably providing local currency financing over a long-term horizon. This is particularly the case given that, as we have seen in the previous sections, MASSIF's 2014 FX results have been negative. Even though we do not have the necessary data to calculate the 2014 LCY profitability, it is very likely this has also been negative. Therefore, it appears to have been important to build a buffer during positive years such as 2008-2012 in order to be protected during years with negative results.

Figure 9: MASSIF yearly profit due to the local currency exposure as a % of the total portfolio



No specific currency accounts for a majority of the profit obtained through local currency exposure. In the following table we have broken down the data in the bar chart above, by currency. Specifically, we calculated, for each currency, what the yearly profit has been due to the local currency pricing component, as a percentage of the total portfolio. As can be seen in the following table, no single currency accounts for a majority of the profit.

Figure 10: MASSIF yearly profit by currency, due to the local currency exposure as a % of the total portfolio

	2007	2008	2009	2010	2011	2012
AFN	-	(0.30)	(0.06)	(0.09)	(0.12)	(0.02)
ALL	-	0.09	0.10	0.12	0.14	0.14
AMD	0.01	0.08	0.09	0.10	0.12	0.12
ARS	-	0.47	0.52	0.57	0.68	0.68
BDT	(0.61)	0.35	0.38	0.42	0.50	0.50
BOB	(0.36)	0.49	0.54	0.60	0.71	0.71
BWP	-	0.01	0.01	0.01	-	-
CRC	0.00	(0.04)	0.07	0.27	0.11	0.05
DZD	-	(0.02)	(0.03)	0.05	-	-
GEL	0.08	0.19	0.13	0.08	-	-
GHC	(0.00)	-	-	-	-	-
GTQ	(0.04)	0.23	(0.28)	0.95	0.45	0.04
HNL	(0.16)	0.09	0.22	0.76	0.51	0.03
INR	0.44	(0.71)	0.49	1.42	(0.64)	0.00
KES	(0.12)	(0.40)	0.15	0.11	0.01	0.01
KGS	0.00	(0.04)	0.01	-	0.38	0.12
KHR	(0.42)	0.29	(0.12)	0.50	0.04	0.10
LKR	(1.18)	0.53	0.42	1.61	0.45	(0.27)
MDL	0.29	0.81	(0.48)	0.42	0.30	(0.16)
MGA	-	-	(0.03)	0.10	0.07	0.03
MNT	-	(0.07)	(0.23)	1.04	(0.08)	0.06
MRO	-	-	-	-	-	-
MXN	-	-	-	-	-	-
MZN	0.01	-	(0.07)	0.03	0.25	-
NGN	-	-	0.06	0.14	0.09	0.29
NIO	(0.14)	0.10	(0.06)	0.20	0.01	(0.04)
PEN	(0.03)	0.17	(0.05)	0.05	-	-
THB	0.01	(0.01)	-	-	-	-
TJS	(0.02)	0.06	(0.02)	-	0.09	0.10
TND	(0.02)	(0.00)	-	-	-	-
TZS	0.11	0.04	0.14	0.07	-	-
UGX	(0.15)	(0.06)	0.12	(0.08)	0.03	-
UYU	-	-	1.06	0.67	0.65	0.47
VND	(0.41)	0.11	(0.11)	0.10	-	-
XAF	-	-	-	-	-	-
XOF	0.07	(0.01)	0.15	0.11	0.03	-
ZAR	0.01	(0.84)	1.93	1.55	(0.50)	(0.00)
ZMK	-	-	-	0.01	(0.00)	0.28
TOTAL	**(2.65)**	**1.61**	**5.06**	**11.90**	**4.26**	**3.24**

Finally, given the lack of data, it was not possible to draw a lesson on whether Locfund's local currency pricing is appropriate. Specifically, it was not possible to calculate the revenue generated

exclusively by the local currency components of the pricing structure (the benchmark rate and the premium for unexpected devaluations). This is because Locfund has not been able to provide the evaluation team with the historical data for the devaluation premiums which have been charged. In addition, in order to understand whether room exists for reducing Locfund's pricing, an analysis of the fund's operating costs is required. This falls outside of the scope of this engagement. However, an initial hypothesis could be that the local currency pricing component (and, specifically, the devaluation premium) is necessary to compensate for the high operational cost and credit risk of offering smaller loans to tier 2 and tier 3 financial institutions.[8]

[8] This might imply that Locfund is subsidizing its operational cost and credit risk cost through its local currency pricing components.

IV. SUB-ASSIGNMENT: RECOMMENDATIONS

We have identified four key learnings, subject to the caveats regarding geography and time period indicated in the results section, each with its corresponding recommendations.

1. **Correlations are higher among emerging market currencies when the exchange rate is calculated against the Euro than when they are calculated against the US dollar.** As a result, the average correlation of the currencies within MASSIF's portfolio is at a medium level.
   - **Recommendation for MASSIF:** continue focusing on maximizing the diversification of the portfolio. One possibility could be to adjust country limits and introduce investment limits for specific groups of correlated currencies.

2. **MASSIF and Locfund always use different variable rate local benchmarks for their pricing.** In most occasions Locfund uses a lower variable rate.
   - **Recommendation for MASSIF and Locfund:** set up a working group, including TCX, to periodically discuss and share lessons learnt on the cases for choosing to deviate from the TCX benchmarks, and the rationale for this deviation. Also adjust the benchmark being used, if necessary. The discussions can focus on which would be the most appropriate benchmark to reflect exchange rate fluctuations, as well as questions such as: which benchmark is more commonly used in a specific market and therefore has a lower distortive effect? Which benchmark is more attractive and beneficial for local financial institutions?

3. **The local currency component of MASSIF's pricing appears to be appropriate given the local currency risk that the fund is exposed to.** As mentioned, MASSIF's profit from the local currency exposure had a yearly median of 2.5% of the portfolio. This is in line with the objective of sustainably providing local currency financing over a long-term horizon.
   - **Recommendation for MASSIF:** continue using the same pricing methodology.

4. **Given the lack of data, it has not been possible to draw a lesson on whether Locfund's local currency pricing is appropriate.**
   - **Recommendation for Locfund:** increase its capabilities and strengthen its tools to transparently keep track of key performance indicators. Specifically, keep track of the data necessary to calculate its revenue due to local currency exposure (variable benchmark rate and "premium for unexpected devaluations") so that its profit due to LCY exposure can be calculated and assessed. Use the results from this analysis to confirm or disprove the hypothesis described in the "Pricing Comparison" section and evaluate whether the pricing methodology should change.

V. MAIN ASSIGNMENT: EXECUTIVE SUMMARY

CONTEXT AND OBJECTIVES

The main objectives of this report are to assess the effectiveness and additionality of MASSIF's local currency financing in Central America in (i) strengthening the financial institutions receiving the financing, and (ii) expanding and improving the provision of financial services to (M)SMEs. MASSIF is a Private Sector Development Program set up by the Dutch government in 2006 and managed by FMO (The Netherlands Development Finance Company). It has been set up to contribute, by means of a revolving fund, to constructing and improving the financial infrastructure in developing countries, aimed at serving entrepreneurs and consumers at the lower end of the financial market. The fund has a total committed portfolio consisting of over 120 projects, with an outstanding amount of EUR 325 million by the end of 2013. Financing activities of the fund include the provision of equity, subordinated loans and medium to long term credit to banks with an SME focus, microfinance institutions, other nonbank financial institutions (such as leasing companies) and small enterprise investment funds.

This study has been commissioned as part of a wider set of FMO evaluations. Currently the Dutch Ministry of Foreign Affairs is assessing the relevance and effectiveness of its funding to the private sector. The Ministry has asked FMO to complete 22 separate evaluations of its activities. This study has been commissioned as part of this set of 22 evaluations.

This study aims to assess the effectiveness of local currency (LCY) financing in Central America. Improving access to local currency financing can have positive effects on the economies of the region. (M)SMEs make an important contribution to the economies of Central America, accounting for more than 97% of all firms and employing almost half (44.5%) of the economically active population. A large financing gap still exists in the region. The credit gap for formal SMEs has been estimated at USD 235 billion in Latin America during the 2003-2010 period, with an even larger gap when informal (M)SMEs are taken into account. One of the main gaps is in the availability of local currency financing, which tends to have a positive effect on (M)SMEs as it reduces their exposure to currency exchange fluctuations.

MASSIF is a pioneer in local currency financing. Between 2008 and 2012, the average percentage of local currency debt out of total debt for the MASSIF portfolio was 71%. MASSIF provides financial intermediaries with local currency financing, allowing these intermediaries to offer local currency products to their (M)SME clients. Given this, the study will contribute in providing additional research and evidence on the effectiveness of local currency financing.

METHODOLOGY AND SCOPE

The study assessed MASSIF's LCY interventions against five criteria. (i) the ex-ante assessment of the intervention, (ii) its effectiveness at strengthening the receiving financial institution, (iii) its effectiveness at increasing and improving local currency financing for (M)SMEs, (iv) the impact it had on (M)SMEs, and (v) its additionality in strengthening the receiving financial institution. It is important to note that increasing the provision of (M)SME financing was not part of MASSIF's intervention's original goals. However, it is useful to assess these unintended benefits of LCY interventions to identify behavior patterns in the FIs. The study also includes observations on MASSIF's additionality in increasing and improving financing for (M)SMEs in LCY. However, additionality at MSME level was not an initial objective of MASSIF's transactions, and therefore, the evaluation team did not score this criteria.

In order to conduct this assessment, nine financial institutions were included in the scope:

- Financiera FAMA in Nicaragua, which has received direct LCY financing from MASSIF. Financiera FAMA is one the five largest microfinance institutions (MFIs) in Nicaragua and offers mainly working capital and fixed asset investments products.
- Banco Lafise in Honduras, which has received direct LCY financing from MASSIF. Banco Lafise is part of a wider banking group in Central America (LAFISE Group with USD 1.4B total assets), offering mortgages, commercial finance and consumer loans.
- The fund Locfund I in Bolivia, which has received financing and equity in USD directly from MASSIF. Locfund I extends LCY financing to MFIs in Latin America and the Caribbean (LAC), including LCY loans, as well as other instruments (e.g., local bonds, notes, syndicated loans) in the range of USD 250,000 – 1.5M.
- Six microfinance institutions that have received LCY financing from Locfund I and, therefore, indirectly from MASSIF. In order to ensure representativeness of Locfund's portfolio, the scope includes four NGOs: Acorde in Costa Rica, FDL and Pro Mujer in Nicaragua, and ODEF in Honduras, as well as two banks: Ademi and ADOPEM in the Dominican Republic.

All of these interventions were assessed against the five criteria identified above. For the assessment of the interventions, we followed the KfW development bank's guidelines for development effectiveness evaluations. The interventions are assessed on the basis of a 6-category rating scale: 1 "very good and good," 2 "satisfactory," 3 "overall sufficient," 4 "overall slightly insufficient," 5 "insufficient," and 6 "failure." Interventions assigned to categories 1 to 3 are considered successful. Measured by current standards these interventions have long-term positive financial and developmental impacts. Interventions assigned to categories 4 to 6 are considered not successful. The data for conducting this assessment was collected through a variety of methods. Specifically, we conducted phone interviews and a two-week field visit to Central America to speak with the management team of each of the institutions. In addition, we prepared a detailed data request, which all of the institutions completed.

Finally, it is important to note three caveats to our conclusions. First, our analysis and results reflect the sample of financial institutions included in the study. Three of the institutions are based in Nicaragua, which has an uncommon exchange regime (a crawling peg) and underwent a major financial crisis (*No Pago* movement) during the time-period analyzed in the study. Second, not all data was easily available. Especially for the data at the financial institution portfolio level and at the (M)SME level, some estimates were used together with qualitative assessments by the institutions' management teams. Third, most of MASSIF's and Locfund's interventions were relatively small compared to the size of the institutions. As a result, other trends and events (e.g., the institutions' strategic decisions, regulatory changes, other sources of funds) made it particularly difficult to attribute causality.

RESULTS

MASSIF's interventions were satisfactory at strengthening the financial institutions, and overall sufficient at increasing and improving financing for (M)SMEs. While strengthening financial institutions can be a direct result of MASSIF's financing, improving and increasing financing for (M)SMEs is one step further away in the theory of change. In other words, when MASSIF provides a financing to a financial institution, this financing directly goes to the FI's balance sheet and strengthens its risk profile. On the other hand, in order to improve and increase (M)SMEs' financing, MASSIF's financial intervention is not enough. In order to be effective the financial institution also needs a strategy directing MASSIF's funding towards improving and increasing (M)SME LCY financing. For some of the financial institutions' included in this study, this strategy was not in place nor implemented as a result of the intervention. In the following paragraphs we will summarize in more detail the results for each criteria.

Overall, the ex-ante relevance of the interventions has been assessed as satisfactory. Specifically, all the interventions were intended at improving the financial infrastructure in developing countries by providing local currency financing and/or uncommon financial products (e.g., a subordinated loan in the case of Lafise). However, the interventions were not all focused at serving (M)SMEs. Specifically, Lafise had a limited number of (M)SME clients and no robust plans for building up this client segment. Locfund, instead, was lending to microfinance institutions that, in turn, largely had a micro-entrepreneur client base. However, Locfund's mandate, and the type of interventions it structured, focused more on diversifying MFIs' funding base rather than on improving financing to (M)SMEs.

The effectiveness in strengthening financial institutions has also been assessed as satisfactory. The assessment was satisfactory or very good across all transactions, albeit for different reasons. The assessment was very good for FAMA because the LCY financing strengthened its risk profile thanks to improved ALM and CAR ratios. For Lafise it was satisfactory because the subordinated loan strengthened the CAR ratio. For Locfund investees it was satisfactory because the interventions mainly helped in diversifying the institutions' funding sources. The assessment was not very good for two reasons. First, for Lafise and most of Locfund investees, the intervention did not strengthen the currency ALM ratio as the institutions already had access to LCY financing. Second, MASSIF's products did not include a technical assistance component, which could have benefited its clients.

Similarly, the additionality in strengthening the financial institutions has been assessed as satisfactory. MASSIF's and Locfund's loans to FAMA, Pro Mujer and FDL were assessed as very good given that, at the moment of the interventions, LCY financing was very limited in Nicaragua and these were the only loans the institutions received in LCY. The assessment was satisfactory for the other institutions because although they all already had access to LCY financing, MASSIF's and Locfund's financing terms were better than the market (e.g., subordinated debt, longer tenor). It is important to mention that for all interventions the financial institutions' management teams recognized that MASSIF's and Locfund's loans contributed to some extent to mobilizing further financings.

The effectiveness in increasing and improving the financing to (M)SMEs has been assessed as overall sufficient. For FAMA, the assessment is satisfactory because the first LCY product was introduced in Nicaragua following MASSIF's intervention. For Lafise, the assessment is overall slightly insufficient, and for the majority of Locfund's investees, the assessment is overall sufficient. At the time of the interventions, the FIs already had LCY products and they did not introduce new products or modified existing ones as a result. The interventions however supported the continued growth of the LCY portfolios.

Additionality in increasing and improving the financing to (M)SMEs was not formally assessed given that it was not within MASSIF's interventions stated goals. Although not relevant for the purpose of this evaluation, during our field visits we found that none of the financial institutions within the study have strategically targeted new clients or new segments/sectors. Specifically, the receiving institutions did not introduce any new processes or mechanisms in order to target segments most in need of the LCY financing.

Finally, impact on (M)SMEs has been assessed as satisfactory. It is important to note that not enough data was available in order to complete this assessment for Lafise and for Locfund's investees. As specified in the inception report, because the financial institutions do not track (M)SME level data disaggregated by currency, it was not possible for the evaluation team to reach conclusions. However, we have assessed the intervention with FAMA as satisfactory as the institution's management argued that clients' non-performing ratios had been reduced thanks to the introduction of the LCY product.

	Overall	MASSIF's direct financing			MASSIF's indirect financing through Locfund
		FAMA	Lafise	Locfund	Locfund investees
1. Ex-ante assessment					
To what extent were anticipated effects of the MASSIF LCY financing in line with MASSIF objectives and aimed at resolving local constraints for access to financial services?	*Satisfactory (2)*	*Satisfactory (2)*	*Overall sufficient (3)*	*Satisfactory (2)*	*Satisfactory (2)*
How relevant were MASSIF inputs to the intermediary?		*Very good (1)*	*Overall sufficient (3)*	*Very good (1)*	*Satisfactory (2)*
2. Effectiveness at the FI level					
Does the LCY product bring (financial) benefits for the FMO client (the intermediary) which recover the charge for the LCY feature? Does LCY help to reduce risks at FI level and how?	*Satisfactory (2)*	*Very good (1)*	*Satisfactory (2)*	*Not relevant*	*Satisfactory (2)*
Are MASSIF/Locfund's LCY products well-structured, or could they be improved in certain ways to further benefit the client?		*Satisfactory (2)*	*Satisfactory (2)*	*Not relevant*	*Satisfactory (2)*
3. Additionality at the FI level					
To what extent has the MASSIF/Locfund LCY financing been financially additional? Were there commercial players in the domestic or international market which could have also provided appropriate financing on workable terms?	*Satisfactory (2)*	*Very good (1)*	*Satisfactory (2)*	*Very good (1)*	*Satisfactory (2)*
Was the financing additional in terms of risk taking? To what extent has MASSIF/Locfund LCY financing helped intermediaries to (simultaneously or subsequently) raise additional funds and/or strengthen the internal organization?		*Satisfactory (2)*	*Satisfactory (2)*	*Satisfactory (2)*	*Satisfactory (2)*
4. Effectiveness at the (M)SME financing level					
How has provision of financial services to (M)SMEs improved as a result of MASSIF's/Locfund's LCY financing? Did any side effects occur?	*Overall sufficient (3)*	*Satisfactory (2)*	*Overall slightly insufficient (4)*	*Not relevant*	*Overall sufficient (3)*
Are the loan benefits for the MASSIF/Locfund client passed over to their clients?		*Satisfactory (2)*	*Overall sufficient (3)*	*Not relevant*	*Overall sufficient (3)*
5. Impact on (M)SMEs					
Have (M)SME client performance ratios improved? Or have their ratings changed?	*Satisfactory (2)*	*Satisfactory (2)*	*Data not available*	*Not relevant*	*Data not available*

RECOMMENDATIONS

Finally, in this section we report the key insights and recommendations that have emerged from the study. These insights and recommendations should not be read individually, but should instead be approached holistically.

<table>
<tr><th></th><th>Insights</th><th>Recommendations</th></tr>
<tr><td>1</td><td>Financial institutions are strengthened through LCY financing interventions when
• They are based in a country with limited access to LCY financing and high local currency risk, and/or
• Have a low level of LCY financing on their balance sheet</td><td rowspan="2">A. Take a holistic portfolio approach to interventions and concentrate MASSIF's management and team efforts on
• Financial institutions based in countries where local currency financing at workable terms is relatively scarce and local currency risk is high, and/or
• Financial institutions that have a lower level of LCY financing to start with on their balance sheet, and/or
• Financial institutions in countries where LCY financing for (M)SMEs at workable terms is relatively scarce and local currency risk for (M)SMEs is high, and/or
• Financial institutions that have a limited offering of LCY products to (M)SMEs
B. Continue offering LCY financing to institutions that need it but do not meet these criteria, but dedicate a lower level of MASSIF's management and team efforts to them</td></tr>
<tr><td>2</td><td>The intervention is more effective at improving the provision of LCY financing to (M)SMEs when
• There is limited LCY (M)SME financing in the market and local currency risk for (M)SMEs is high, and/or
• When the institution provides limited LCY financing to (M)SMEs, and</td></tr>
<tr><td>3</td><td>The provision of LCY financing to (M)SMEs increases when the financial institutions receiving MASSIF's loans have a significant (M)SME client base, or have a clear plan for building one, and/or have a clear mandate of supporting (M)SMEs, or are contractually required by MASSIF/Locfund to do so as a condition of the funds</td><td>A. Focus on financial institutions that have a clear mandate/objective of targeting (M)SMEs, and that either already have a significant (M)SME client base or a robust plan for building one. Otherwise, offer technical assistant to help the FI develop a (M)SME financing strategy and business plan</td></tr>
<tr><td>4</td><td>The most appropriate product for strengthening financial institutions' risk profile depends on the specific characteristic of the financial institution</td><td>A. In case the financial institution is relatively large (e.g., tier 1 MFI) and does not have access to LCY financing at workable terms, offer a substantial senior LCY loan
B. In case the financial institution is relatively small (e.g., tier 2 or 3) and has a limited number of funding sources, diversify its funding by offering LCY financing (of any size)
C. In case the financial institution already has access to LCY financing at workable terms, evaluate the possibility of offering a subordinated loan or other loans not easily available on the market</td></tr>
<tr><td>5</td><td>Financial institutions benefit from technical assistance (TA) which focuses on</td><td>A. Start offering technical assistance to:</td></tr>
</table>

	understanding customers' LCY needs. This is useful to more effectively expand LCY financing by targeting the (M)SMEs that would most benefit from the LCY financing	• Help FIs that borrow in local currency to include new processes and mechanisms in order to target with LCY financing the (M)SMEs that would most benefit from it • Assist FIs in developing LCY products using a human-centered design approach.
6	LCY financing amount and benefits of longer tenor are not always on-lent to (M)SMES and the financing's benefits are not fully extended to (M)SME clients when there are no legal or operational mechanisms included in the financing agreement that incentivize the financial institutions to do so	A. Include clauses or mechanisms within the loan agreements to ensure that the financing is on-lent to (M)SMEs and the benefits are extended to the (M)SME clients

VI. MAIN ASSIGNMENT: METHODOLOGY

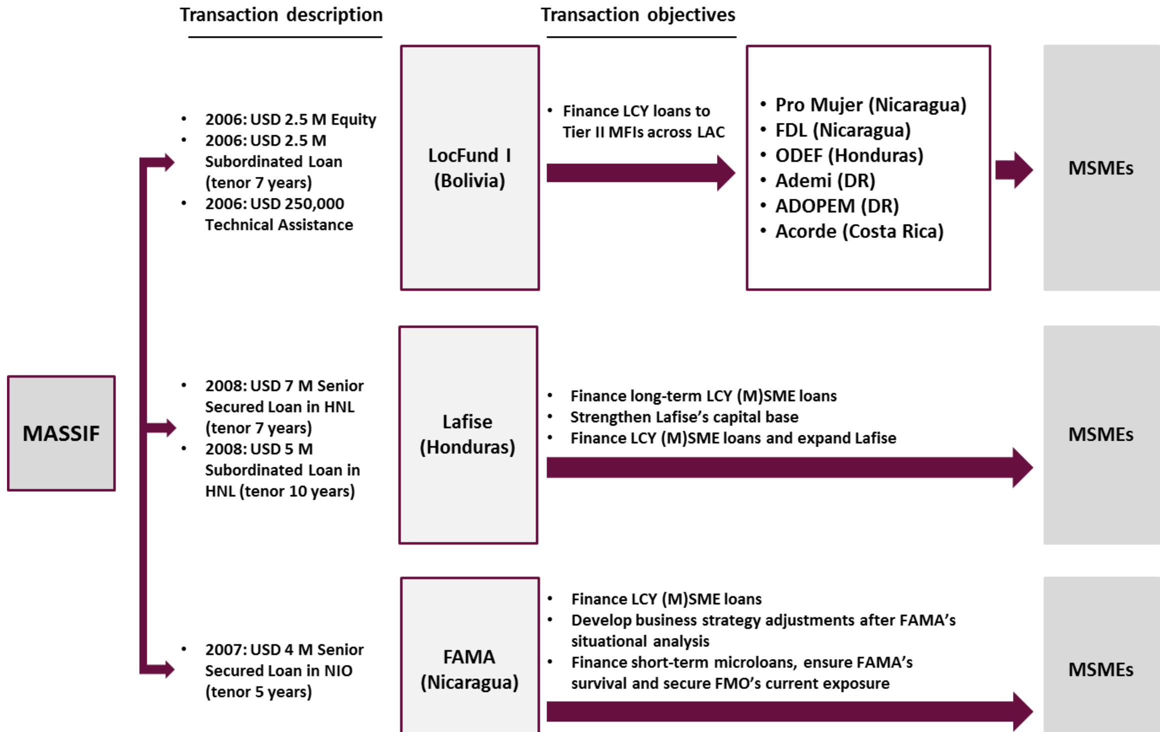
1. Scope

The main assignment aims to assess the effectiveness and additionality of MASSIF's local currency financing in strengthening the financial institutions and expanding/improving the provision of financial services to (M)SMEs. The evaluation did so by answering the specific questions included in the Terms of Reference (ToR). The scope of this study includes a total of nine financial institutions in Central America that have received either directly, or indirectly, local currency financing from MASSIF:

- Financiera FAMA in Nicaragua, (FAMA for short) which has received direct LCY financing from MASSIF. FAMA is one of the five largest microfinance institutions (MFIs) in Nicaragua and offers mainly working capital and fixed asset investment products.
- Banco Lafise in Honduras (Lafise for short), which has received direct LCY financing from MASSIF. Lafise is part of a wider banking group in Central America (LAFISE Group with USD 1.4B total assets), offering mortgages, commercial finance and consumer loans.
- The fund Locfund I in Bolivia (Locfund for short) which has received financing and equity, in US dollars, directly from MASSIF. Locfund extended LCY financing to MFIs in Latin America and the Caribbean (LAC), including LCY loans, as well as other instruments (e.g., local bonds, notes, syndicated loans) in the range of USD 250,000 to USD 1.5M.
- Six microfinance institutions that have received LCY financing from Locfund I and, therefore, indirectly from MASSIF. In order to ensure representativeness of Locfund's portfolio, the scope includes four NGOs: Acorde in Costa Rica, FDL and Pro Mujer in Nicaragua, and ODEF in Honduras, as well as two banks: Ademi and ADOPEM in the Dominican Republic.

The following figure represents which institutions and transactions are included in this assignment.

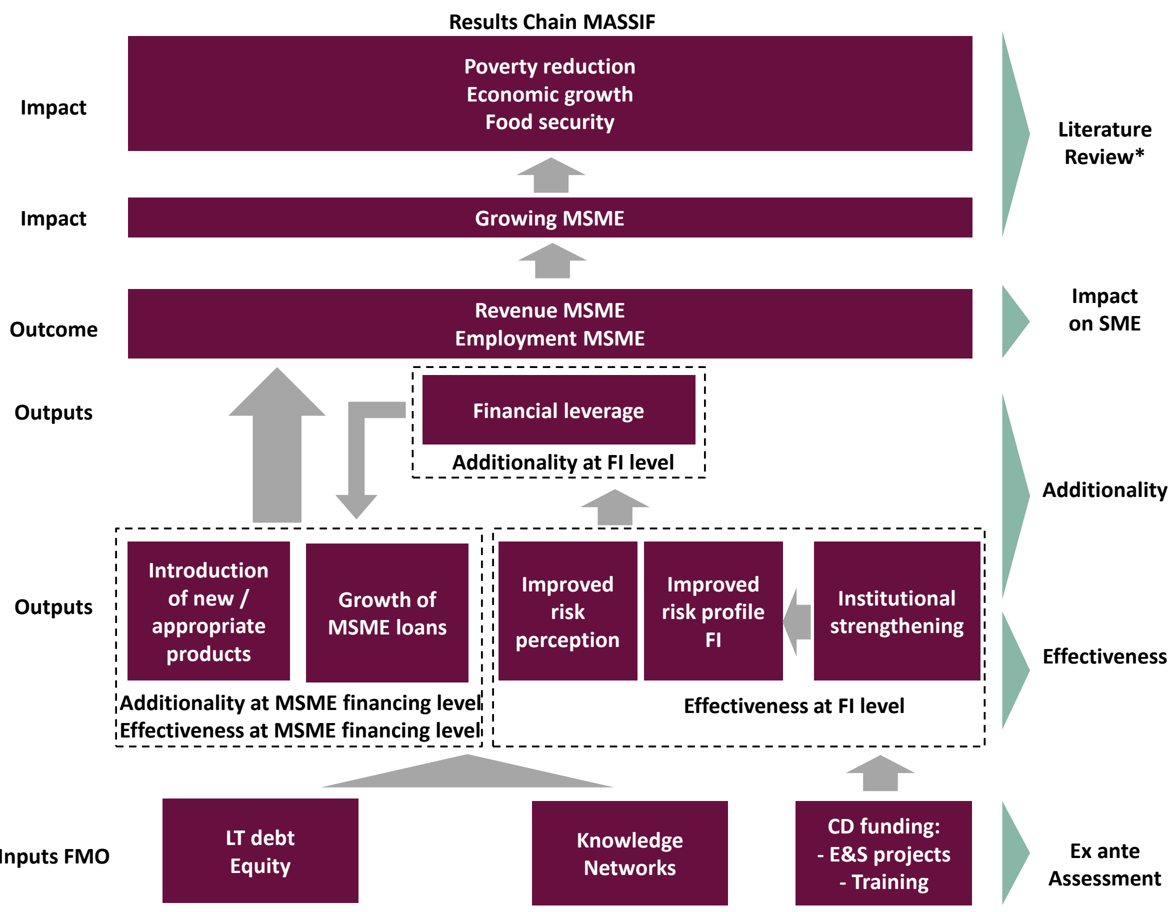
Figure 10: Financial institutions and transactions included in the scope



2. Approach

Specifically, we divided the ToR's questions into five groups, which represents the five criteria of the evaluation: (i) Ex-ante assessment, (ii) Effectiveness at the FI level, (iii) Effectiveness at the (M)SME financing level, (iv) Impact on (M)SME, and (v) Additionality at the FI level. It is important to note that increasing the provision of (M)SME financing was not part of MASSIF's intervention's original goals. However, it is useful to assess these unintended benefits of LCY interventions to identify behavior patterns in the FIs. We also provide comments on additionality at the (M)SME financing level, although this was not part of MASSIF's interventions' objectives. As shown in Figure 11, each of the evaluation's components is closely related to the components of MASSIF's theory of change.

Figure 11: Theory of Change



* The Literature Review will serve to describe the linkage between increasing access to finance for MSMEs and the impact on poverty reduction, economic growth, and food security.

For each one of the ToR questions, we identified a set of specific qualitative and quantitative indicators, listed in "Annex C: Methodology Questions." For this purpose, the transactions were segmented in three groups:

- MASSIF's financing to banks and microfinance institutions (i.e., FAMA and Lafise)
- MASSIF's financing to funds (i.e., Locfund)
- Locfund's financing to MFIs (i.e., FDL, Pro Mujer, ODEF, Ademi, ADOPEM, and Acorde).

This segmentation aims to capture MASSIF's different strategies of (i) providing LCY financing directly to FIs and (ii) providing USD financing to a fund that provides LCY financing to FIs. In this

second instance, MASSIF is one step further away from the end clients, which increases the potential difficulty of obtaining data and explaining causality. Despite this differentiation, the evaluation team identified overarching lessons learned regarding the effectiveness of local currency financing independently of whether it is provided by MASSIF or Locfund.

For the assessment of interventions, we followed the KfW development bank's guidelines for development effectiveness evaluations. The interventions are assessed on the basis of a 6-category rating scale, being 1 "very good and good," 2 "satisfactory," 3 "overall sufficient," 4 "overall slightly insufficient," 5 "insufficient," and 6 "failure." Interventions assigned to categories 1 to 3 are considered successful. Measured by current standards these interventions have long-term positive developmental impacts. Interventions assigned to categories 4 to 6 are considered not successful. They do not fully meet the minimum performance standards. In a first step, the criteria of ex-ante assessment, effectiveness at the FI level, effectiveness at the (M)SME financing level, impact on (M)SME, and additionality at the FI level are rated individually and then an overall assessment is given. The evaluation team did not make a judgment as to which indicators within each criteria carried more or less weight in order to avoid introducing a subjective component.

Rating	Description
1. Very good or good	According to pertinent evaluation indicators, the intervention meets all requirements to a high or very high degree. The evaluation is positive without reservations.
2. Satisfactory	The intervention either meets all pertinent indicators equally in a satisfactory manner, or it fully compensates weaknesses in some areas by extraordinarily positive effects in other areas.
3. Overall sufficient	There may be major deficiencies in some areas as long as they are compensated by higher-than-average positive effects in other areas. However, there may not be any deficiencies in any one area that are so serious that – irrespective of all other intervention impacts – they alone would lead to an unfavorable overall classification (categories 4 – 6).
4. Overall slightly insufficient	Overall, the intervention falls slightly short of the minimum requirements. This may be due to a slight shortfall in respect of all rating indicators or to serious deficiencies in certain areas which are not compensated for in other areas.
5. Insufficient	The intervention clearly fails to meet the minimum requirements, but the further use of the intervention still offers a more favorable solution than the termination of the intervention.
6. Failure	For the most part, the intervention is not useful, or the negative effects are so serious or outweigh the positive effects to such an extent that the intervention has either already been terminated or such a step is necessary due to its uselessness or in order to limit the damage.

Finally, please note that while the evaluation team attempted to collect the information necessary to calculate all of the indicators listed below, this was not always possible for all transactions. The evaluation team included an ambitious number of indicators in Annex C to ensure that some

information was available for at least a subset. In previous similar engagements, the evaluation team found that it is more likely to obtain qualitative information as well as "off-the-shelf" quantitative information (e.g., balance sheet information) than quantitative information that requires manipulation from the financial institutions (e.g., (M)SME portfolio breakdown). In Annex C we have used cursive *(italic)* for the indicators that were less likely to be available.

VII. MAIN ASSIGNMENT: RESULTS

1. OVERALL RESULTS

<table>
<tr><th rowspan="2"></th><th rowspan="2">Overall</th><th colspan="3">MASSIF's direct financing</th><th>MASSIF's indirect financing through Locfund</th></tr>
<tr><th>FAMA</th><th>Lafise</th><th>Locfund</th><th>Locfund investees</th></tr>
<tr><td colspan="6">1. Ex-ante assessment</td></tr>
<tr><td>To what extent were anticipated effects of the MASSIF LCY financing in line with MASSIF objectives and aimed at resolving local constraints for access to financial services?</td><td rowspan="2">Satisfactory (2)</td><td>Satisfactory (2)</td><td>Overall sufficient (3)</td><td>Satisfactory (2)</td><td>Satisfactory (2)</td></tr>
<tr><td>How relevant were MASSIF inputs to the intermediary?</td><td>Very good (1)</td><td>Overall sufficient (3)</td><td>Very good (1)</td><td>Satisfactory (2)</td></tr>
<tr><td colspan="6">2. Effectiveness at the FI level</td></tr>
<tr><td>Does the LCY product bring (financial) benefits for the FMO client (the intermediary) which recover the charge for the LCY feature? Does LCY help to reduce risks at FI level and how?</td><td rowspan="2">Satisfactory (2)</td><td>Very good (1)</td><td>Satisfactory (2)</td><td>Not relevant</td><td>Satisfactory (2)</td></tr>
<tr><td>Are MASSIF/Locfund’s LCY products well-structured, or could they be improved in certain ways to further benefit the client?</td><td>Satisfactory (2)</td><td>Satisfactory (2)</td><td>Not relevant</td><td>Satisfactory (2)</td></tr>
<tr><td colspan="6">3. Additionality at the FI level</td></tr>
<tr><td>To what extent has the MASSIF/Locfund LCY financing been financially additional? Were there commercial players in the domestic or international market which could have also provided appropriate financing on workable terms?</td><td rowspan="2">Satisfactory (2)</td><td>Very good (1)</td><td>Satisfactory (2)</td><td>Very good (1)</td><td>Satisfactory (2)</td></tr>
<tr><td>Was the financing additional in terms of risk taking? To what extent has MASSIF/Locfund LCY financing helped intermediaries to (simultaneously or subsequently) raise additional funds and/or strengthen the internal organization?</td><td>Satisfactory (2)</td><td>Satisfactory (2)</td><td>Satisfactory (2)</td><td>Satisfactory (2)</td></tr>
<tr><td colspan="6">4. Effectiveness at the (M)SME financing level</td></tr>
<tr><td>How has provision of financial services to (M)SMEs improved as a result of MASSIF’s/Locfund’s LCY financing? Did any side effects occur?</td><td rowspan="2">Overall sufficient (3)</td><td>Satisfactory (2)</td><td>Overall slightly insufficient (4)</td><td>Not relevant</td><td>Overall sufficient (3)</td></tr>
<tr><td>Are the loan benefits for the MASSIF/Locfund client passed over to their clients?</td><td>Satisfactory (2)</td><td>Overall sufficient (3)</td><td>Not relevant</td><td>Overall sufficient (3)</td></tr>
<tr><td colspan="6">5. Impact on (M)SMEs</td></tr>
<tr><td>Have (M)SME client performance ratios improved? Or have their ratings changed?</td><td>Satisfactory (2)</td><td>Satisfactory (2)</td><td>Data not available</td><td>Not relevant</td><td>Data not available</td></tr>
</table>

2. FAMA'S RESULTS

2.1. NICARAGUA CONTEXT

In 2007, the financial sector in Nicaragua consisted of the Central Bank, the second tier bank FNI (Fondo Nicaraguense de Inversiones), 6 private banks, 1 finance company, and 3 regulated microfinance institutions (Findesa, Procredit and from 2007, FAMA). The top three banks controlled around 72% of the assets. The capital market in Nicaragua was relatively small. Ten brokers were active on the local stock exchange and mainly dealt in government bonds.

Microfinance was provided by both regulated institutions such as FAMA and unregulated institutions. In 2002, Nicaragua passed a microfinance law that set a ceiling on interest rates. The ceiling was established on a monthly basis based on the average interest rate in the system, which amounted roughly to 25% on an annual basis. In 2011, Nicaragua passed another microfinance law that established the National Commission for Microfinance as an industry oversight body, defined microfinance, allowed interest rates to be set freely, and established consumer protection law, among other developments.

When assessing MASSIF's intervention in FAMA, it is important to keep in mind two specific characteristics of Nicaragua's financial sector[9].

First, between mid-2008 and mid-2010, Nicaragua's microfinance sector suffered from a severe crisis. In mid-2008 a protest movement for non-payment of loans began in Nicaragua, called "Movimiento No Pago" or *No Pago.* The members of this movement were mostly farmers in Northern Nicaragua with ties to the left-wing ruling party. This group organized protests (some of which were violent) and forced some microfinance institution branches to close. In addition, members refused to pay back their debts to microfinance institutions. Coupled with the 2008 global financial crisis, the *No Pago* movement took a toll on Nicaraguan MFIs and left them both illiquid and unpopular. As a result, MFIs' total portfolio in Nicaragua dropped from USD 420 million in 2008 to USD 170 million in 2011. This protest movement makes quantification and attribution of some of the evaluation results to MASSIF and Locfund's interventions more difficult.

The second important characteristic of Nicaragua's financial market is that its Central Bank runs a crawling peg regime. Nicaragua has had this regime since 1998. Specifically, in order to promote exchange-rate stability and facilitate exports, Nicaragua pegged the value of its domestic currency, the Cordoba, to the U.S. dollar. However, because of a general tendency of the Cordoba to depreciate against the dollar, the Central Bank allows for a small, controlled depreciation which amounts to ~5% annually. Because the Central Bank announces what the expected exchange rate to the dollar will be at any point in time, and because the depreciation has been controlled and constant throughout time at 5%, this has enabled financial institutions and (M)SMEs to safely manage currency exchange risk. Because of this exchange rate regime, loans have been usually granted in Nicaragua using two currencies:

- The USD
- The Cordoba "*con mantenimiento de valor,"* which means the local currency, but with an indexation to the USD in order to reflect the announced depreciation.

Because the Cordoba loan "*con mantenimiento de valor"* loans reflect the Dollar's appreciation, we will consider both of these types of loans as non-local currency (non-LCY) loans.

[9] A country context has been included for the FAMA analysis because of Nicaragua's specificities. The country contexts for the other countries in-scope are included in the appendix.

2.2. Overall Summary for FAMA

In 2007, FAMA received from MASSIF a USD 4M senior secured loan in local currency with a duration of 5 years. MASSIF's intervention was the only local currency loan in FAMA's funding structure in 2007 and therefore represented 100% of FAMA's LCY liabilities.

The ex-ante assessment of the intervention has been assessed as satisfactory. The intervention was aimed at enabling FAMA to be the first institution in Nicaragua to offer local currency financing to micro enterprises. At the time of the loan, there was low access to LCY funding for financial institutions and LCY financing to (M)SMEs did not exist in Nicaragua. However, our assessment is not very good given that MASSIF did not conduct a detailed assessment of (M)SMEs' potential demand for LCY products in preparation of the intervention.

The effectiveness in strengthening financial institutions has been assessed as very good. MASSIF helped reduce FAMA's risk profile by improving its capital adequacy ratio, improving its currency assets-liabilities matching, and decreasing the portfolio at risk. Additionally, MASSIF's senior loan's conditions were in line with FAMA's needs. However, we cannot clearly attributed the financial benefits to MASSIF's intervention given that the microfinance crisis started soon after MASSIF's loan was disbursed.

The effectiveness in increasing and improving the financing to (M)SMEs has also been assessed as satisfactory. Specifically, FAMA introduced its first LCY product which contributed to an increase of the overall portfolio. However, our assessment is not very good because the new LCY product was not targeted at a specific type of client or to new clients. Moreover, following the first year FAMA's LCY portfolio decreased very quickly.

The impact on (M)SMEs has been assessed as satisfactory. While the No Pago microfinance crisis in Nicaragua did lead to a drop in FAMA's clients' performance ratios, the drop was less severe than the market's average drop. According to FAMA's CFO, one of the potential reasons which contributed to the lower increase in the NPL ratio is the fact that FAMA was providing a local currency loan to part of its client base, mainly in the commercial sector.

The additionality in strengthening the financial institutions has been assessed as satisfactory. First, there were no other players in the domestic or international market which could have also provided appropriate financing with similar tenor on workable terms. MASSIF's loan was the first loan in Cordobas to FAMA and in Nicaragua generally. Second, when compared to the other loans on FAMA's balance sheet, MASSIF's transaction had a longer tenor than the average. Third, MASSIF's loan helped improve FAMA's risk profile. However, our assessment is not very good because the extent to which MASSIF's loan helped mobilize and/or catalyze additional funds was limited.

Finally, the intervention enabled FAMA to introduce the first LCY loan product in Nicaragua which, in the following years, also played a part in encouraging another microfinance institution to introduce a LCY loan. However, FAMA did not use MASSIF's financing to reach new sectors or target groups or to reach the (M)SMEs most in need of LCY. It is important to note, however, that providing additional financial products was not within MASSIF's interventions stated goals.

2.3. Ex-ante assessment

To what extent were anticipated effects of the MASSIF LCY financing in line with MASSIF's objectives and aimed at resolving local constraints for access to financial services?

The extent to which MASSIF's LCY financing was in line with MASSIF's objectives and aimed at resolving local constraints for access to financial services is assessed as satisfactory because (i) MASSIF's intervention was in line with its mandate, (ii) at the time of the loan, there was low access

to LCY funding for financial institutions in Nicaragua, and (iii) LCY financing to (M)SMEs did not exist in Nicaragua. However, our assessment is not very good given that MASSIF did not conduct a detailed assessment of (M)SMEs' potential demand for LCY products in preparation of the intervention.

The type of financial institution targeted by the intervention and the type of instrument used were in line with MASSIF's objectives. Specifically, MASSIF's mandate is to contribute to the improvement of the financial infrastructure in developing countries focused on serving entrepreneurs and consumers at the bottom of the financial market. FAMA was an institution serving entrepreneurs at the bottom of the market: 67% of its clients were (M)SMEs and its average loan was USD 600. FAMA was one the five largest microfinance institutions in Nicaragua. The instrument's anticipated effects were geared towards implementing Nicaragua's financial infrastructure and specifically (i) strengthen FAMA's local currency funding base, and (ii) provide long term LCY capital to (M)SMEs.

MASSIF's intervention was aimed at addressing local constraints as, at the time of the loan, FAMA did not have long-term local currency financing. In 2007, long-term local currency financing was only offered in Nicaragua by international private institutions such as Triple Jump and Blue Orchard. However, the tenor was short – approximately 24-36 months – and the price was high given that these institutions had to hedge their local currency exposures. As a result, neither FAMA nor other financial institutions offered local currency loans.

In addition, MASSIF's intervention was aimed at addressing local constraints because as of 2007 there was no LCY financing available to (M)SMEs. As of 2007, no financial institution in Nicaragua offered loans in Cordobas not indexed to the USD. MASSIF's intervention was specifically geared towards closing this market gap.

However, we have not attributed a very good assessment as MASSIF did not conduct a detailed analysis of (M)SMEs' potential demand for LCY products in preparation for the intervention or throughout the time of the intervention. While MASSIF's objective for the intervention was to address local constraints, it did not conduct any detailed studies of whether this would have been possible. As we will discuss in the following questions, initially the demand for LCY loans from (M)SMEs was limited as the product was not really understood by the end borrowers. This potential obstacle to achieving MASSIF's objectives was not identified early on and actions to address it were not put in place.

How relevant were MASSIF's inputs to the intermediary?

The extent to which MASSIF's inputs were relevant to the intermediary is assessed as very good. The first reason is that the intervention was unique. MASSIF's intervention was the only local currency loan in FAMA's funding structure in 2007 and therefore represented 100% of FAMA's LCY liabilities.

In addition, MASSIF's intervention also represented a large part of the institution's overall liabilities, and particularly long term liabilities. The USD 4M Senior Loan represented 14% of FAMA's total liabilities and equity (USD 29.3M + USD 4M). Moreover, MASSIF's intervention represented 38% of FAMA's liabilities with tenor >1 year (USD 6.5M + USD 4M).

2.4. Effectiveness at the FI level

Does the LCY product bring (financial) benefits for the MASSIF client (the intermediary) which recover the charge for the LCY feature? Does LCY help to reduce risks at FI level and how?

The extent to which MASSIF's loan in Cordobas brought financial benefits to FAMA is assessed as very good. According to FAMA's senior management, it helped to reduce its risk profile by (i) improving its capital adequacy ratio (CAR), (ii) improving its currency assets-liabilities matching (ALM), and (iii) decreasing the portfolio at risk. However, it is very important to note that most of these

benefits are more difficult to quantify clearly from the data given that the microfinance *No Pago* crisis started soon after MASSIF's loan was disbursed.

MASSIF's intervention helped FAMA to reduce its risk profile by improving its CAR. In Nicaragua the regulator's formula to calculate the CAR prescribes to use risk-weighted assets and the currency risk contributes to increasing the risk-weighting of the assets. As a result, thanks to the local currency loan, FAMA's CAR improved from 17.6% in 2007 to 19.5% in 2008. According to mix market, MFIs' weighted average CAR in Nicaragua was 19.27% in 2007 and 17.00% in 2008. As the majority of MASSIF's loan was disbursed at the beginning of 2008 and considering the CAR's declining market trend, it is likely that the intervention played an important role in the improvement.

MASSIF's intervention also reduced FAMA's risk profile by improving its currency ALM. In Nicaragua the regulator's formula to calculate the currency ALM prescribes to also calculate as "local currency," loans which are in Cordoba and indexed to the USD. Before MASSIF's intervention, most of FAMA's assets (79%) were in Cordoba indexed to the USD, while only a smaller portion of its liabilities (43%) were. This meant FAMA had a 2.4 currency ALM ratio. Following MASSIF's intervention, FAMA's assets/liabilities currency mismatch decreased to 2.1 in 2008, improving the institution's risk profile. The ALM ratio worsened again in 2009 due to the fall in capital which resulted from the *No Pago* crisis.

Figure 12: Capital Adequacy Ratio

Fama, 2007-2009

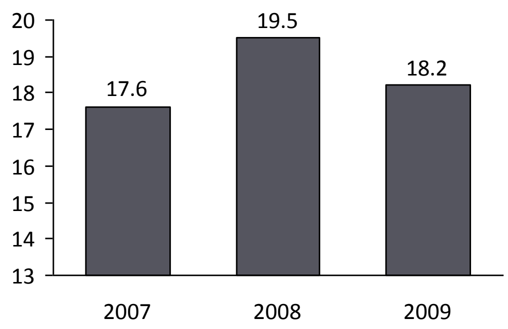
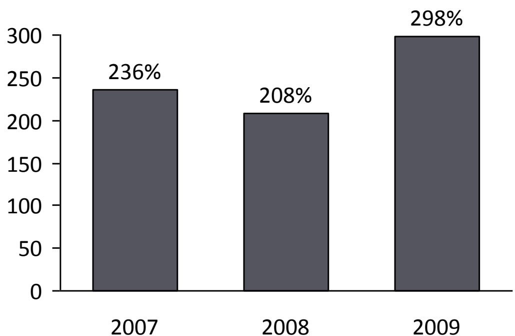
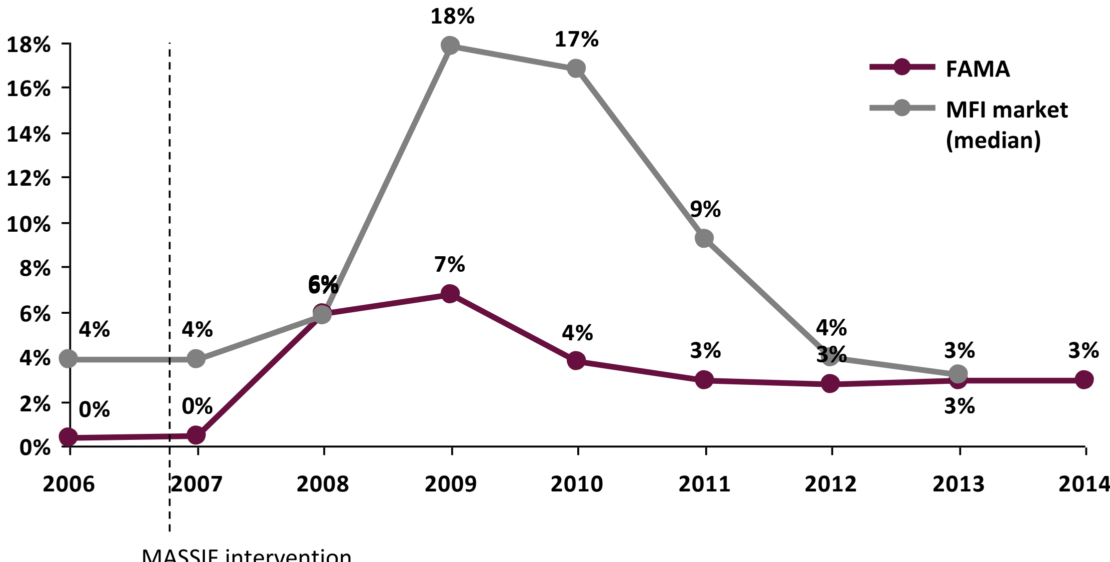


Figure 13: Absolute difference between assets and liabilities in foreign currency / capital ratio
FAMA, 2007-2009



In addition, FAMA's risk profile also improved thanks to the effect of the LCY product on non-performing loans (NPLs). Although FAMA's non-performing loan (NPL) ratio increased following the *No Pago* movement in 2008 and 2009, importantly it did so to a lesser extent than the overall market. According to FAMA's senior management, one of the reasons which contributed to the lower increase in the NPL ratio is the fact that FAMA was providing a local currency loan with a lower price to part of its client base. According to MASSIF's management, this lower price was intended to attract clients to the LCY product and to reward existing clients. This facilitated clients' repayments and therefore lowered FAMA's credit risk. An interesting additional analysis would have been to compare the NPL ratios for the local currency portfolio with the NPL ratio of the hard currency portfolio. FAMA's senior management expects the risk profile of the LCY portfolio to be lower. However, this has not been possible due to the lack of data.

Figure 14: Total portfolio at risk (Non-Performing Loans at 30 days)
Nicaragua, 2006-2014



Are MASSIF's LCY products well-structured, or could they be improved in certain ways to further benefit the client?

The extent to which MASSIF's loan was well-structured is assessed as satisfactory. Given that there were no other local currency loans on the market at the time, the loan's conditions cannot be compared to the market. However, according to FAMA's CFO, MASSIF's senior loan's tenor was aligned with the institution's needs. MASSIF's loan had a longer tenor (5 years) than FAMA's existing funding, which had a weighted average duration of 2.3 years.

However, the intervention was not assessed as very good for two reasons. First, the loan was not accompanied by technical assistance. The local institution did not have experience in the benefits and impact of local currency, and senior executives at FAMA stated that capacity building would have been desirable to assist the institution in both developing the Cordoba-denominated loans and marketing and distributing the new product to new and existing clients. Second, FAMA's senior management suggested that the amount granted by MASSIF was less than what the microfinance institution was hoping for and had demanded.

2.5. Effectiveness at the (M)SME financing level

How has provision of financial services to (M)SMEs improved as a result of MASSIF's LCY financing? Did any side effects occur?

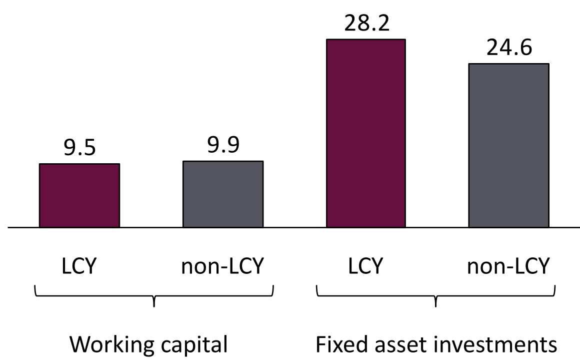
The extent to which the provision of financial services to (M)SMEs improved as a result of MASSIF's financing is assessed as satisfactory. MASSIF's intervention improved the provision of financial services to (M)SMEs because (i) FAMA introduced its first LCY product, (ii) the conditions of this product were similar to the conditions for the non-LCY product, and (iii) the introduction of the new product contributed to an increase of the overall portfolio. However, our assessment is not very good because (i) the LCY product disbursement slowed down quickly after the first year, and (ii) the new LCY product was not targeted at a specific type of client or to new clients.

The provision of financial services to (M)SMEs improved as a result of MASSIF's LCY financing because thanks to this intervention FAMA started offering LCY products to its clients. Before

MASSIF's loan, FAMA did not offer local currency products to its clients. It only offered financing in dollars and in Cordobas indexed to the dollar (con *mantenimiento de valor*). Thanks to MASSIF's loan, FAMA introduced a new product to its clients: a loan in Cordobas, NOT indexed to the dollar (sin *mantenimiento de valor*).

The LCY denominated loan conditions were similar than the conditions of non-LCY loans. For both types of loans, FAMA offered the same tenor: (i) working capital with a tenor up to 12 months, and (ii) fixed asset investments with a tenor of 18-24 months. As can be seen in the following graph, the average duration of the two types of loans was also very similar. According to FAMA's management, the collateral requirements were also identical.

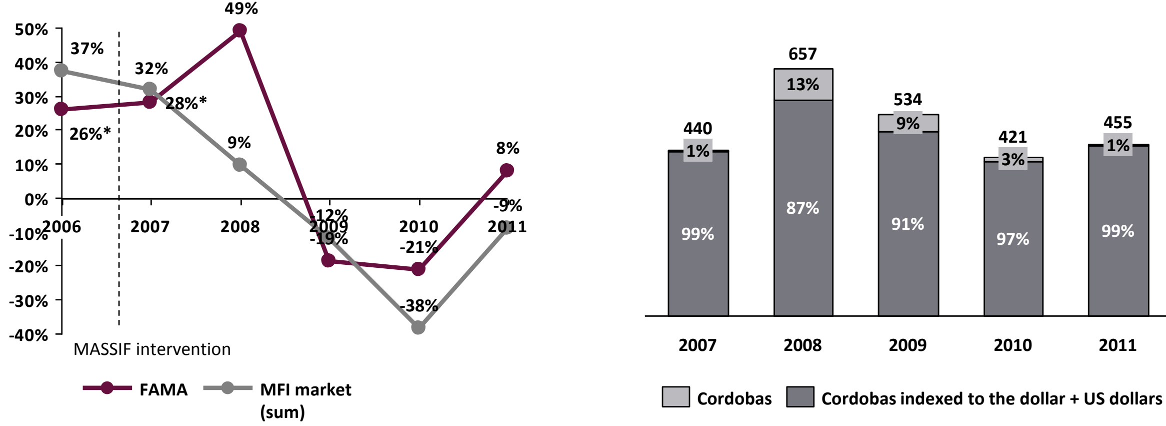
Figure 15: Average loan duration (in months)
FAMA, 2009



MASSIF's intervention led to an improvement in the provision of financial services to (M)SMEs also thanks to a temporary increase in FAMA's portfolio. Specifically, between 2007 and 2008 (i.e., following MASSIF's intervention), FAMA's portfolio grew by 49%. FAMA's main competitors were Procredit and Findesa, but FAMA could attract more funding, thus growing its portfolio. FAMA's growth rate was faster than the market (9%) and also faster than FAMA's growth in the previous year (28%). Specifically, over one third of this portfolio growth (36%) can be attributed to the introduction and placement of the new LCY product.

Figure 16: (M)SME portfolio growth
Nicaragua, 2006-2011

Figure 17: (M)SME financing volume, Cordoba M
FAMA, 2007-2011

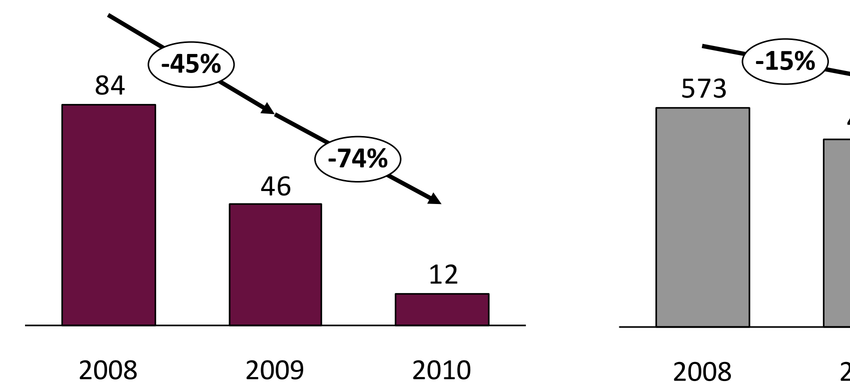


However, as can be seen in the graphs below, the improvement in the provision of financial services to (M)SMEs did not sustain itself. Both FAMA's LCY and non-LCY loan portfolios decreased after 2008. In part this was due to the *No Pago* microfinance crisis which hit Nicaragua in 2009. However, the LCY

portfolio fell at a higher rate than the non-LCY portfolio. According to FAMA's senior management this had two reasons. First, because clients did not fully understand the benefits of borrowing in Cordoba and, especially during a financial crisis, they were reticent to adopt a product which they did not know. This is probably because, as recognized by the management team, FAMA itself may not have understood the advantages, and it did not conduct enough marketing and client-education activities in order to provide information regarding the LCY product. Second, because MASSIF's loan was amortizing and had to be paid back. As a result, the amount of financing in LCY available to FAMA for disbursement was decreasing.

Figure 18: (M)SME LCY portfolio, Cordoba M FAMA, 2008-2010

Figure 19: (M)SME non-LCY portfolio, Cordoba M FAMA, 2008-2010

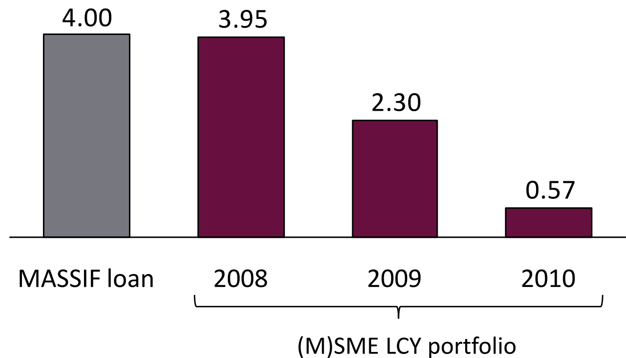


A second reason for which MASSIF's intervention was not as effective in improving the provision of financial services to (M)SMEs is that the new product was not targeted at a specific type of client or to new clients. Unfortunately, lack of data does not enable us to calculate what share of the LCY financing went to new clients and whether it was directed at specific (M)SMEs segments, or those that particularly needed LCY. However, interviews with FAMA's management indicated that the LCY product was offered on a first come-first serve basis mostly to existing clients. New criteria or processes were not defined in order to target the clients which would have most benefited from the LCY product.

Are the loan benefits for the MASSIF client passed over to their clients?

The extent to which the loans' benefits for FAMA are passed over to its clients is assessed as satisfactory. **The first reason is that FAMA lent to its clients during 2008 the same amount it had received from MASSIF, but the amount dropped during the following years**. As indicated in the following graph, FAMA received a USD 4 million loan from MASSIF in LCY at the end of 2007. At the end of 2008, FAMA's LCY loan portfolio was equivalent to USD 3.95 million, almost the same as the MASSIF loan. However, our assessment is not very good because the LCY portfolio decreased in the following years (for the reasons described previously).

Figure 20: MASSIF's loan to FAMA in 2007 and FAMA's (M)SME LCY portfolio (USD M)
FAMA, 2007-2010



Second, FAMA did not pass the loan tenor on to their clients. FAMA's average loan tenor was 11 months for its LCY product, while MASSIF's financing had a duration of 5 years. Again, this was done in order to keep the loan tenors in line with market practice, since tee were mainly working capital loans .

2.6. Impact on (M)SMEs

Have (M)SME client performance ratios improved? Or have their ratings changed?

The extent to which (M)SME client performance has improved is assessed as satisfactory. This is because, as already described, while the *No Pago* microfinance crisis in Nicaragua did lead to a drop in FAMA's clients' performance ratios, the drop was less severe than the market's average drop. According to FAMA's senior management, one of the reasons which contributed to the lower increase in the NPL ratio is the fact that FAMA was providing a local currency loan with a lower price to part of its client base. This facilitated clients' repayments therefore lowering FAMA's credit risk. An interesting additional analysis would have been to compare the NPL ratios for the local currency portfolio with the NPL ratio of the hard currency portfolio. FAMA's senior management expected the risk profile of the LCY portfolio to be lower. However, as previously indicated, this has not been possible due to the lack of data.

2.7. Additionality at the FI level

To what extent has the MASSIF LCY financing been financially additional? Were there commercial players in the domestic or international market which could have also provided appropriate financing on workable terms?

The extent to which the MASSIF financing has been financially additional for FAMA is assessed as very good for two reasons. The first reason is that there were no other commercial players in the domestic or international market which could have also provided appropriate financing on workable terms. According to Nicaragua's Bank Regulator (Superintendencia) and FAMA executives, MASSIF's loan was the first loan in Cordobas to FAMA and in Nicaragua generally. There were other international institutions, such as Triple Jump and Blue Orchard, offering local currency financing but MFIs in Nicaragua did not buy their products given the short tenor and high price. Second, when compared to the other loans on FAMA's balance sheet, MASSIF's transaction had a longer tenor (5 years) than the average (2.3 years).

Was the financing additional in terms of risk taking (e.g., providing equity or subordinated debt financing due to which capital ratios became healthy and due to which more debt could be attracted for expansion)? To what extent has MASSIF's LCY financing helped intermediaries to (simultaneously or subsequently) raise additional funds and/or strengthen the internal organization?

The extent to which the financing was additional in terms of risk taking and helped FAMA raise additional funds and/or strengthen the internal organization is assessed as satisfactory. MASSIF's loan helped improve FAMA's risk profile, but the extent to which it helped mobilize and/or catalyze additional funds was limited.

MASSIF's transaction helped improve FAMA's risk profile. Specifically, as described in question 2.1, according to FAMA's senior management, the transaction helped (i) improve its capital adequacy ratio (CAR), (ii) improve its currency assets-liabilities matching (ALM), and (iii) decrease the portfolio at risk.

MASSIF's loan also had a minor mobilizing effect. Specifically, FAMA's CFO mentioned that the transaction helped improve FAMA's perception among development financial institutions and attract some additional funding. In 2012 FAMA received a LCY financing from Locfund and it also received additional loans from MASSIF in 2011 and 2014. Our assessment is not very good because the transaction did not help mobilize additional funding from institutions not affiliated to FMO or from commercial lenders.

Finally, MASSIF's loan also contributed to a minor catalyzing of LCY funding in Nicaragua. Specifically, according to representatives of Nicaragua's regulatory agency (Superintendencia) "MASSIF's transaction showed that LCY financing in Nicaragua was a possibility" and played a role in encouraging a local commercial bank, PRODEL, to start offering (semi) LCY financing to its MFI clients.

2.8. Additionality at the (M)SME financing level

Did MASSIF's LCY financing lead to providing additional financial products reaching additional sectors and/or target groups in the local market?

It is important to note that while the evaluation team has provided comments on this question, we did not conduct a formal assessment given that providing additional financial products was not within MASSIF's interventions stated goals.

The transaction enabled FAMA to introduce the first LCY loan product in Nicaragua which, in the following years, also played a part in encouraging another microfinance institution to introduce a LCY loan. However, FAMA did not use MASSIF's financing to reach new sectors or target groups.

MASSIF's financing enabled the introduction of a new LCY product. Before MASSIF's intervention, no financial institution in Nicaragua, including FAMA, offered LCY products to its clients. Following the intervention, FAMA introduced a LCY loan. In addition, as stated by Nicaragua's Bank Regulator (Superintendencia), "FAMA's LCY loans was an interesting experiment and in some ways contributed to FINCA [another microfinance institution in Nicaragua] starting to offer its own LCY loans."

However, FAMA's new LCY product was not targeted at a specific type of client or to new clients. Unfortunately, lack of data does not enable us to calculate what share of the LCY financing went to new clients and whether the LCY financing was directed at specific (M)SMEs segments. However, interviews with FAMA's management indicated that the LCY product was offered on a first come-first serve basis. New criteria or processes were not defined in order to target the clients which would have most benefited from the LCY product. Most benefited have been FAMA's micro-urban clients on a first come-first serve basis. As a result, it is unlikely that the LCY financing reached additional sectors or target groups.

3. Lafise's Results

3.1. Context

In 2008, the Honduran financial sector consisted of 18 banks, with total assets of USD 10.4 billion. The financial sector was one of the most dynamic sectors in Honduras. However, the spread between lending and deposit rate remained relatively wide, thus limiting access to credit for SMEs.

In 2009, the second-tier state lending bank, Banco para la Produccion y Vivienda (BANHPROVI) started offering relatively cheap credit lines for FIs to promote (M)SME financing. BANHPROVI provided financing to FIs at an interest rate of ~7% to enable these FIs to offer financing to (M)SME at a low interest rate (~10%). This interest rate was lower than that of the commercial banks at the time.

3.2. Overall Summary for Lafise

In 2008, Lafise received from MASSIF a USD 7M senior loan and a USD 5M subordinated loan in local currency with a duration of 7 and 10 years, respectively. These represented 6% of Lafise's total liabilities and equity and 16% of Lafise's long term liabilities and equity. At the time of MASSIF's intervention, ~71% of Lafise's liabilities were in Lempiras. MASSIF's intervention increased the share to 73%.

The ex-ante assessment of the intervention has been assessed as overall sufficient. While MASSIF's intervention was aimed at strengthening the country's financial infrastructure, it was not well set up to target (M)SMEs. On the other hand, while Lafise had access to LCY financing already, its funding sources were mostly public deposits and national state-owned banks. MASSIF's loans helped Lafise diversify its funding sources.

The effectiveness in strengthening financial institutions has been assessed as satisfactory. The subordinated loan helped improve Lafise's Capital Adequacy Ratio, which in turn, improved its risk profile. However, the benefits of MASSIF's intervention in terms of currency asset liability management, credit risk, and earnings were very limited. On the other hand, both loans' conditions were originally aligned with Lafise's needs, but the prices were significantly higher than what Lafise expected and no technical assistance was provided.

The effectiveness in increasing and improving the financing to (M)SMEs has been assessed as overall slightly insufficient. The intervention was not sufficient because Lafise had not and did not target (M)SMEs in a systematic fashion, no new product or product with different characteristics was introduced, and no new clients or new client segments were targeted. It is important to highlight, however, that increasing the provision of (M)SME financing was not part of MASSIF's intervention's original goals. In addition, Lafise was unable to disburse the senior loan in its entirety. On the positive side, it can be argued that MASSIF's intervention helped increase Lafise's perception of (M)SMEs as an attractive segment.

The impact on (M)SMEs cannot be fully assessed given the lack of data.

The additionality in strengthening the financial institutions has been assessed as satisfactory. MASSIF's subordinated loan helped in strengthening the institution's CAR ratio, and at the time of MASSIF's intervention, Lafise did not have any other subordinated loan on its balance sheet given that these are scarce resources. In addition, MASSIF's loans helped Lafise diversify its funding sources. Nonetheless, our assessment is not very good because a market for LCY financing, although mainly dominated by state-owned banks, existed in Honduras and the intervention did not significantly help Lafise raise additional LCY funds

Finally, in terms of additionality in increasing and improving the financing to (M)SMEs, LCY financing was already widely available to (M)SMEs that had access to finance in Honduras. Additionally, Lafise did not introduce a new product and did not target new clients or client segments, and the pricing of Lafise's LCY loans was much higher than the market price. It is important to note, however, that providing additional financial products was not within MASSIF's interventions stated goals.

3.3. Ex-ante assessment

To what extent were anticipated effects of the MASSIF LCY financing in line with MASSIF's objectives and aimed at resolving local constraints for access to financial services?

The extent to which MASSIF's LCY financing was in line with MASSIF's objectives and aimed at resolving local constraints for access to financial services is assessed as overall sufficient. First, MASSIF's intervention was only partly in line with its mandate. While it was aimed at strengthening the country's financial infrastructure, it was not well set up to target (M)SMEs. Second, MASSIF's loans helped Lafise diversify its funding sources. While Lafise had access to LCY financing already, this financing came mostly from public deposits and national state-owned banks.

MASSIF's intervention was only partly in line with its own mandate. MASSIF's mandate is to contribute to the improvement of the financial infrastructure in developing countries focused on serving entrepreneurs and consumers at the bottom of the financial market. The LCY loan to Lafise helped improve the financial infrastructure as it included a subordinated loan, for which, according to Lafise's management, there was limited supply and which helped strengthen the institution's balance sheet.

However, MASSIF's intervention was not well set up to focus on entrepreneurs and consumers at the bottom of the financial market. At the time Lafise had a very small portfolio of (M)SMEs clients. Lafise's portfolio only had ~10 (M)SME borrowers between 2006 and 2008. Its portfolio mainly focused on mortgages, commercial finance and consumer loans. More importantly, while Lafise's strategy was to grow its corporate portfolio, there was no specific mention of (M)SMEs.

While Lafise had access to LCY financing already, its funding sources were mostly public deposits and national state-owned banks. Over 70% of its liabilities in 2007 were in lempira and therefore LCY financing was not a constraint; however, public banks' funding represented ~54% of Lafise's liabilities. Therefore, MASSIF's loans helped Lafise diversify its funding sources.

How relevant were MASSIF's inputs to the intermediary?

The extent to which MASSIF's inputs were relevant to Lafise is assessed overall sufficient because while the intervention was useful to strengthen its balance sheet and increase its LCY financing, MASSIF's loans were relatively small in comparison to the financial institution's total liabilities. MASSIF's intervention increased Lafise's LCY funding by providing a USD 7 million senior loan and a USD 5 million subordinated loan. This represented 6% of Lafise's total liabilities and equity (USD 190.3M + USD 7M + USD 5M) and 16% of Lafise's long term liabilities and equity (Total Liabilities & Equity minus Deposits & Short Term Funding). Therefore, while MASSIF's contribution was surely positive, it was relatively small.

The same can be said when analyzing Lafise's local currency financing. At the time of MASSIF's intervention, ~71% of Lafise's liabilities were in Lempiras. MASSIF's intervention, while important, only increased the share to 73%.

3.4. Effectiveness at the FI level

Does the LCY product bring (financial) benefits for the MASSIF client (the intermediary) which recover the charge for the LCY feature? Does LCY help to reduce risks at FI level and how?

The extent to which MASSIF's loan in lempiras brought financial benefits to Lafise is assessed as satisfactory. This is because the subordinated loan helped improve Lafise's Capital Adequacy Ratio (CAR), which in turn, improved its risk profile. The assessment is not very good because in terms of currency asset liability management (ALM), credit risk and earnings, the benefits of MASSIF's intervention were very limited[10].

MASSIF's subordinated loan contributed to the improvement of Lafise's CAR ratio. Specifically, as can be seen in the following graph, Lafise's CAR increased from 11.6% in 2007 (before MASSIF's intervention) to 15.3% in 2009 (after MASSIF's intervention). This increase is partly due to the USD 5 million subordinated loan received by MASSIF given that, by being subordinated, it is counted as Tier II capital.

However, MASSIF's loan did not improve Lafise's ALM and/or credit risk. As mentioned, ~ 71% of Lafise's liabilities at the time of the intervention were in local currency. Given that the proportion of assets in local currency was similar (72%), Lafise did not have a currency mismatch to be corrected. As a result of MASSIF's loan the currency ALM ratio did not change. Although the data was not available to conduct the NPL analysis, the Lafise portfolio composition suggests that MASSIF's intervention also had a very limited impact on Lafise's Non Performing Loans ratio. If the intervention had helped in significantly expanding the LCY financing to Lafise's clients, then a reduction in the client's currency risk could have been expected which would have translated into a reduction in Lafise's credit risk. However, Lafise already had a substantial LCY portfolio before MASSIF's intervention (representing almost 100% of its total portfolio), meaning that MASSIF did not help in improving its credit risk.

Figure 21: CAR
Lafise, 2007-2009

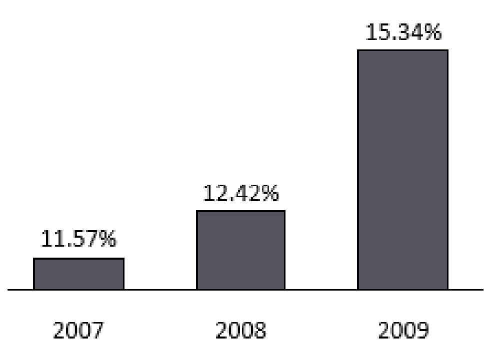
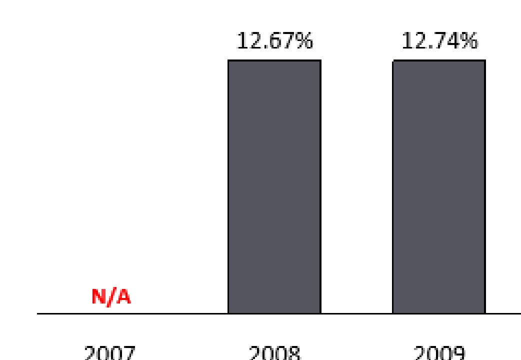


Figure 22: ALM
Lafise, 2007-2009

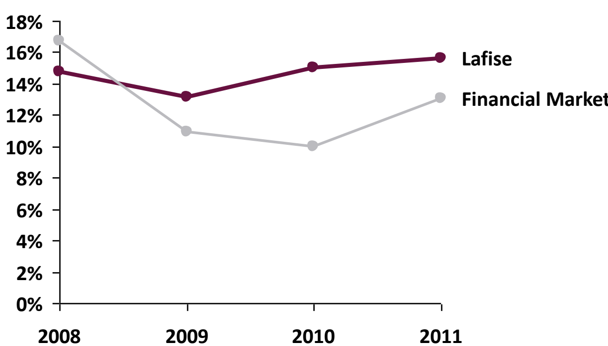


Finally, MASSIF's intervention did not help Lafise in improving its return on equity (RoE). Specifically, there was not an increase in revenue[11] that could be attributed to MASSIF's intervention since no new products or client segments were introduced. On the other hand, Lafise's interest margin worsened marginally, as MASSIF's loans had the highest prices among Lafise's financing. Specifically, MASSIF's financing was priced at 11.8% (the senior loan) and 13.7% (the subordinated loan), while the average

[10] At the time of writing the report we had not received the evolution of Lafise's rating over the period of the intervention. However, according to Lafise's management, MASSIF's intervention had a very minor impact on the rating.
[11] There was an increase in revenues due to other reasons that the evaluation team did not explore

rate for the other loans was 7.8%. As shown in Figure 23, Lafise's RoE remained relatively stable following MASSIF's intervention and above the market.

Figure 23: Return on Equity (ROE)
Honduras, 2008-2014



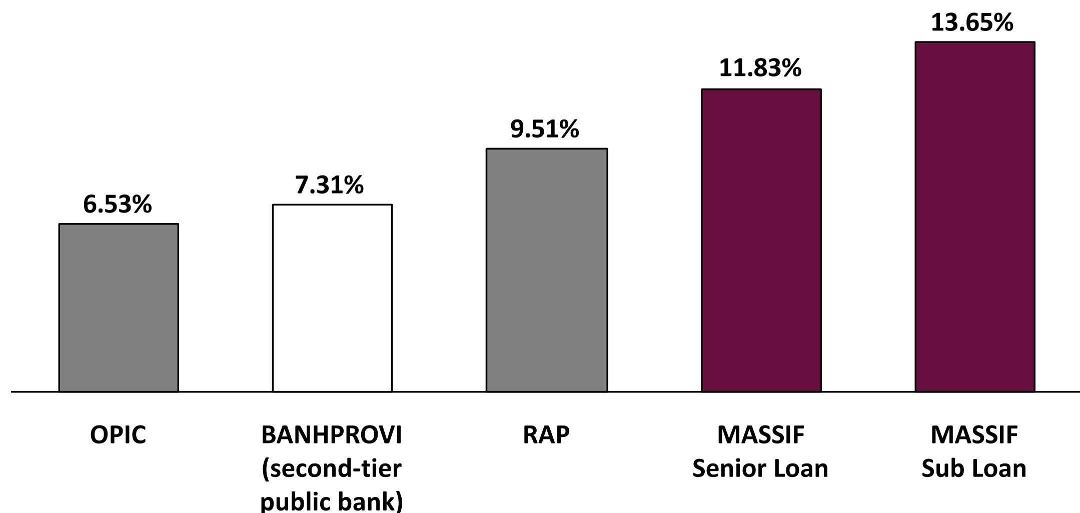
Are MASSIF's LCY products well-structured, or could they be improved in certain ways to further benefit the client?

The extent to which MASSIF's loans were well-structured is assessed as satisfactory. The main reasons are that (i) Lafise received a substantial subordinated loan, and (ii) the amount, security and tenor of both loans were in line with Lafise's expectations. However, the assessment is not very good because (i) both loans' prices were significantly higher than what Lafise expected and (ii) no technical assistance was provided.

Lafise was particularly satisfied by the subordinated portion of the intervention and by both loans' amount, security and tenor. As stated by Lafise's CFO, the subordinated loan helped strengthen the financial institution's balance sheet and was not otherwise readily available on the market. In addition, when Lafise was unable to disburse the senior loan in its entirety, it asked MASSIF, and MASSIF agreed, to turn part of the senior loan into subordinated debt. In addition, Lafise's CFO mentioned that the institution was satisfied with the amount, security and tenor of both loans provided by MASSIF as they were in line with the market average.

However, Lafise was not satisfied with the pricing of MASSIF's loans. As can be seen in the following graph, MASSIF's financings were the most expensive on Lafise's balance sheet. This is partly due to the specificities of MASSIF's loans (e.g., the subordinated part, the long duration). However, Lafise believed the product to be very expensive compared to the market. It is important to highlight that at the time of the funding, the loan' price was slightly better than what was available in the local market; however, a few months after, BANHPROVI, a second-tier state-owned bank, introduced a credit line for FIs to finance (M)SME at a much cheaper rate (10% to MSME). This resulted in MASSIF's price not being competitive. The CFO mentioned that "we tried to negotiate a price reduction with MASSIF, but MASSIF was unable to meet our request for understandable reasons."

Figure 24: Price of different LCY loans on Lafise's balance sheet (non-comprehensive list)
Lafise, 2008



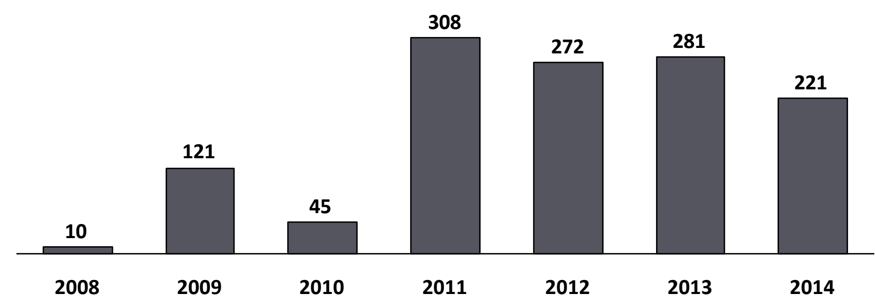
3.5. Effectiveness at the (M)SME financing level

How has provision of financial services to (M)SMEs improved as a result of MASSIF's LCY financing? Did any side effects occur?

The extent to which the provision of financial services to (M)SMSEs improved as a result of MASSIF's LCY financing is assessed as overall slightly insufficient. The intervention was not sufficient because (i) Lafise had not and did not target (M)SMEs in a systematic fashion, (ii) no new product or product with different characteristics was introduced, and (iii) no new clients or new client segments were targeted. It is important to highlight, however, that increasing the provision of (M)SME financing was not part of MASSIF's intervention's original goals. On the positive side, it can be argued that MASSIF's intervention helped increase Lafise's perception of (M)SMEs as an attractive segment.

First, following MASSIF's intervention Lafise did not start offering financial services to (M)SMEs in a systematic fashion. As previously mentioned, Lafise concentrated mainly on mortgages, consumer finance and commercial loans. Both before and after MASSIF's intervention, Lafise did not have a dedicated (M)SME financing unit, but instead served this client segment either from the consumer or the corporate units. This is reflected in the graph below - Lafise has been serving a limited number of (M)SMEs on an ad-hoc basis. While the number of (M)SMEs did increase following MASSIF's intervention, it never grew much over 300 from the initial baseline of 10. This number is very small compared to both Lafise's overall portfolio and other banks' SME portfolio. The evaluation team did not compare Lafise's growth against the market growth (which was 12%, 4%, 3%, 9%, 13% and 6% in 2008, 2009, 2010, 2011, 2012 and 2013, respectively, according to the World Bank) since Lafise's baseline is too low.

Figure 25: (M)SME portfolio growth (number of (M)SME borrowers)
Lafise, 2008-2014



Second, no new products or products with different characteristics were introduced as a result of MASSIF's financing. Lafise already offered LCY financing to its clients before 2008, and according to its CFO "did not make any product modification as a result of MASSIF's intervention."

Third, no new clients or new client segments were reached as a result of MASSIF's intervention. Unfortunately, data is not available to check what proportion of Lafise's (M)SME clients were new following MASSIF's intervention and Lafise's (M)SME clients were too few anyway, making the segmentation irrelevant. Additionally, Lafise's management team confirmed that no changes in terms of process or structure were introduced for disbursing (M)SME loans in 2008. As a result, it can be concluded that MASSIF's intervention most likely did not help in reaching new clients or new client segments.

However, it is important to note that MASSIF's intervention helped increase Lafise's awareness of the potential of targeting in a more focused fashion the (M)SME segment. Lafise's management is currently setting up a dedicated (M)SME financing unit and MASSIF's financing played a role in this development. Specifically, the new director of the soon-to-be-launched (M)SME unit expressed that "the learning from the MASSIF experience were important in launching our new unit."

Are the loan benefits for the MASSIF client passed over to their clients?

The extent to which the loan benefits for Lafise passed over to its clients is assessed as overall sufficient. This is because Lafise was unable to disburse the senior loan in its entirety, as explained earlier (only ~ USD 2.93M out of USD 7M). However, the assessment is not unsatisfactory because a substantial portion of MASSIF's loan tenor was passed on to Lafise's clients. Specifically, following 2008, Lafise's LCY (M)SME loans had an average tenor of 4.3 years.

3.6. Impact on (M)SMEs

Have (M)SME client performance ratios improved? Or have their ratings changed?

Unfortunately given the lack of data it has not been possible to fully assess this question. Because Lafise did not clearly recognize which loans were extended to (M)SMEs it is not possible to track whether (M)SMEs performance ratios improved. However, an initial hypothesis can be that MASSIF's financing did not help in improving clients' performance ratios. Lafise already had a substantial LCY portfolio before MASSIF's intervention (representing ~71% of its total liabilities), meaning that it is unlikely that clients' exposure to currency risk decreased because of the intervention.

3.7. Additionality at the FI level

To what extent has the MASSIF LCY financing been financially additional? Were there commercial players in the domestic or international market which could have also provided appropriate financing on workable terms?

The extent to which MASSIF's financing has been financially additional is assessed as satisfactory because MASSIF's subordinated loan was additional and MASSIF's loans helped Lafise diversify its funding sources. At the time of MASSIF's intervention, Lafise did not have any other subordinated loan on its balance sheet given that these are scarce resources. Usually international development financial institutions (DFIs) are the only institutions that may (rarely) offer subordinated loans, and when they do, they are usually in hard currency. In addition, MASSIF's loans contributed to diversify the types of Lafise's funding sources, which were dominated by deposits and national banks at that moment.

However, the assessment is not very good because a relatively mature market for LCY financing existed in Honduras. The IMF representative for Honduras stated that "Lempira financing for financial institutions in Honduras has been easily and widely available for a long time." Similarly, Lafise's CFO stated that "obtaining local currency financing has never been an issue for us." This is reflected in Lafise's balance sheet, where ~ 71% of its liabilities at the time of MASSIF's intervention were in local currency.

Was the financing additional in terms of risk taking (e.g., providing equity or subordinated debt financing due to which capital ratios became healthy and due to which more debt could be attracted for expansion)? To what extent has MASSIF LCY financing helped intermediaries to (simultaneously or subsequently) raise additional funds and/or strengthen the internal organization?

The extent to which the financing was additional in terms of risk taking and helped Lafise raise additional funds and/or strengthen the internal organization is assessed as satisfactory. MASSIF's intervention helped in strengthening the institution's CAR ratio and partly contributed to attracting new funding. However, the assessment is not very good because the intervention did not significantly help Lafise raise additional LCY funds.

MASSIF's financing was additional in terms of risk taking because a USD 5 million subordinated debt was given. As tier II capital, the subordinated instrument helped strengthen Lafise's balance sheet and risk profile by increasing the CAR ratio.

However, the intervention did not significantly help in raising additional LCY funds. As already mentioned, Lafise's level of LCY financing was already relatively high at the time of the intervention and the proportion of its LCY financing did not increase significantly in the years following MASSIF's intervention.

3.8. Additionality at the (M)SME financing level

Did MASSIF's LCY financing lead to providing additional financial products reaching additional sectors and/or target groups in the local market?

It is important to note that while the evaluation team has provided comments on this question, we did not conduct a formal assessment given that providing additional financial products was not within MASSIF's interventions stated goals.

MASSIF's LCY financing did not lead to providing additional financial products reaching additional sectors/target groups. First, LCY financing was already widely available to (M)SMEs that had access to

finance in Honduras. Second, Lafise did not introduce a new product and did not target new clients or client segments. Third, the pricing of Lafise's LCY loans was much higher than the market price.

As mentioned previously, LCY financing was already widely available to (M)SME that had access to finance in Honduras (even though non-LCY specific overall financing to (M)SME was limited). The IMF representative for Honduras stated that "local currency loans are pretty standard for (M)SMEs in the country. This is what they need and they get it easily." Similarly, also Lafise's CFO recognized that LCY financing was already widely available to this client segment in Honduras. In addition, MASSIF's USD 7 million senior loan was devoted to on-lending to (M)SMEs, but only ~ USD 2.93M of the loan was disbursed. No considerable additional LCY financing was granted to (M)SMEs and no other financial institutions started offering an LCY product as a result of MASSIF's intervention.

Lafise did not introduce new products and did not target new clients or new client sectors as a result of MASSIF's intervention. Lafise already offered LCY financing to its clients before 2008, and according to its CFO "did not make any product modification as a result of MASSIF's intervention." With respect to the client characteristics, unfortunately, the lack of data does not allow us to check what proportion of (M)SMEs clients were new following MASSIF's intervention and does not allow us to analyze changes in the client segmentation. However, Lafise's management team confirmed that no changes in terms of process or structure were introduced for disbursing (M)SME loans in 2008.

Finally, Lafise's pricing for its LCY loans was relatively higher than the price offered by the national banks, meaning that MASSIF's intervention did not contribute to improving loan conditions. Before obtaining the loan from MASSIF, the interest rate for LCY financing to (M)SMEs in Honduras was in the 18-25% range. Lafise planned on lowering the price of its product thanks to MASSIF's financing to ~15-17% and therefore being competitive. However, in 2008 BANHPROVI, a second-tier state-owned bank, started offering local currency financing to (M)SMEs at ~10% via FIs. As a result, as mentioned by Lafise's CFO, "BANHPROVI's product flooded the market" and Lafise's product became uncompetitive.

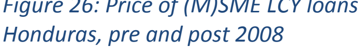
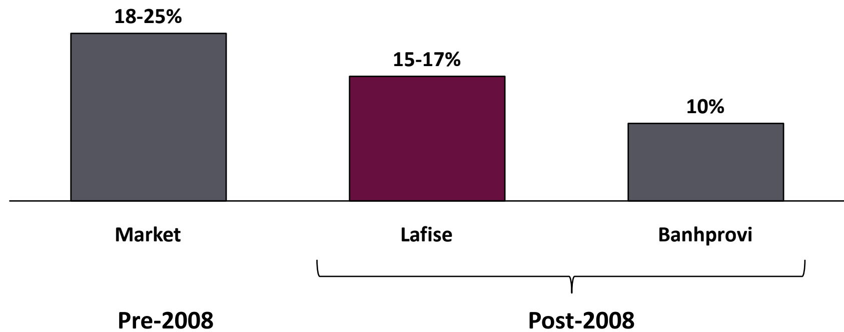


Figure 26: Price of (M)SME LCY loans
Honduras, pre and post 2008



4. Locfund's Results

4.1. Overall Summary for Locfund

MASSIF invested USD 5M into Locfund - USD 2.5 equity and USD 2.5 subordinated loan with a duration of 7 years. Locfund had a total initial investment of USD 21 M. The other initial investors were the MIF, Norfund, and Gray Ghost.

The ex-ante assessment of the intervention has been assessed as satisfactory. First, MASSIF's intervention was in line with its mandate of improving the financial infrastructure in developing countries. Second, the intervention was aimed at addressing local constraints in local currency financing availability for Tier II/III microfinance institutions. Third, the combination of equity and subordinated debt was optimal to achieve the stated objectives. Fourth, MASSIF's role was crucial in terms of involvement in the creation of the fund and in the transfer of local currency experience. However, the assessment is not very good because Locfund's mandate did not specifically include improving financing to (M)SMEs (i.e., better products, different segments/sectors, etc.) as an objective.

The additionality in strengthening financial institutions has also been assessed as very good. MASSIF's real value-add was in proposing the idea of creating Locfund and in tapping into its network in order to bring those other investors to the table. Therefore, MASSIF's intervention helped raise additional funds for Locfund. However, the creation of Locfund did not spark the creation of other similar local currency funds as it had originally been hoped.

4.2. Ex-ante assessment

To what extent were anticipated effects of MASSIF's LCY financing in line with MASSIF objectives and aimed at resolving local constraints for access to financial services?

The extent to which MASSIF's investment into Locfund was in line with MASSIF's objectives and aimed at resolving local constraints for access to financial services is assessed as satisfactory. First, MASSIF's intervention was in line with its mandate of improving the financial infrastructure in developing countries. Second, the intervention was aimed at addressing local constraints, in local currency financing availability for second-tier microfinance institutions. Third, the combination of equity and subordinated debt was optimal to achieve the stated objectives. However, the assessment is not very good because Locfund's mandate did not specifically include improving financing to (M)SMEs (e.g., better products, different segments/sectors), or targeting those with local currency need, as an objective.

MASSIF's intervention in Locfund was in line with its mandate of improving the financial infrastructure in developing countries. Specifically, Locfund articulated its main role as providing financing to institutions that "are growing and would like to transform at a certain stage into a regulated institution."[12]

However, MASSIF's intervention into Locfund was not perfectly aligned with MASSIF's second part of the mandate, which is "serving entrepreneurs and consumers at the bottom of the financial market." This is because Locfund's objectives focused on providing funding to MFIs, but did not explicitly mention improving access to finance (e.g., better products, different segments/sectors) for (M)SMEs. Even though funding MFIs does directly increase access to finance for (M)SMEs and indirectly lead to improving access to financing for (M)SMEs, this was not a specific goal of Locfund and its transactions were not structured in order to maximize this.

[12] MASSIF's Financial Proposal for investment in Locfund.

MASSIF's intervention was aimed at addressing a major local constraint: the provision of local currency financing to smaller microfinance institutions. Locfund's objective is to provide financing "to second tier microfinance institutions (MFIs) that in general have limited or no capability to attract local funding."[13] Development financial institutions usually focus on tier 1 MFIs, therefore Locfund was designed to address the financing constraint face by smaller institutions. In addition, it is important to recognize that MASSIF conducted an exhaustive assessment of the potential demand for LCY financing prior to approval and identified a pipeline of 44 institutions which could have demanded local currency financing from Locfund.

The combination of equity and subordinated debt, together with the technical assistance, was an optimal instrument to achieve the stated objectives. Specifically, as reported by Locfund's management, by financing with equity and subordinated debt, MASSIF clearly indicated that it had "skin in the game" and was willing to take on a part of the initiative's risks. Having equity also enabled MASSIF to have a seat on the Board, which was important in order to transfer its local currency financing experience to Locfund. Finally, the technical assistance was crucial in ensuring that Locfund could start its operations by having a clear understanding of what had already worked and not worked in local currency financing for MASSIF.

How relevant were MASSIF's inputs to the intermediary?

The extent to which MASSIF's inputs were relevant to Locfund is assessed as very good. In monetary terms, the inputs were relevant but not extremely high. However, both in terms of involvement in the creation of the fund and in the transfer of local currency experience, MASSIF's role has been crucial.

MASSIF's financial inputs into Locfund have been material and relevant. Specifically, MASSIF provided USD 2.5 million in subordinated debt and USD 2.5 million in equity. This is equivalent to 16.7% of Locfund's total financing.

MASSIF's non-financial contribution to Locfund has been even more relevant. Specifically, Locfund's management team has recognized that "FMO and the IDB were the ones that had the idea of creating Locfund." FMO was the institution with the most local currency expertise and was responsible for catalyzing the investment of other development financial institutions. FMO reached out to its network during the fundraising stage in order to "provide introductions and positive references to other potential investors."[14] Following FMO's and the IDB's lead, other investors such as Norfund decided to contribute to the initial capital. For these reasons, Locfund's current Director stated that without FMO "it would be difficult to imagine the existence of Locfund."

MASSIF has also been very relevant because of its role in transferring local currency financing expertise. This was particularly important because at the time BIM (Locfund's fund manager) had experience in equity investment but not credit investment. MASSIF helped Locfund's management in navigating LCY financing through three mechanisms. First, by having a seat on the Board, it helped guide the institution as it set up its policies and went through important decisions. Second, during the first year, MASSIF seconded one of its local currency experts to Locfund in order to facilitate the knowledge-transfer. Third, MASSIF also prepared a very clear "local currency financing guide" which explained to Locfund's management the most important lessons learned on this topic.

[13] MASSIF's Financial Proposal for investment in Locfund.
[14] MASSIF's Financial Proposal for investment in Locfund.

4.3. Additionality at the FI level

To what extent has the MASSIF's financing been financially additional? Were there commercial players in the domestic or international market which could have also provided appropriate financing on workable terms?

The extent to which MASSIF's financing has been financially additional is assessed as very good. As stated in the previous question, other development financial institutions (e.g., IDB, CAF, Norfund) and also some private players (Gray Ghost, ResponsAbility) participated in the financing of Locfund. This indicates that other players existed in the market that could have provided appropriate financing on workable terms. However, MASSIF's real value-add was in proposing the idea of creating Locfund and in tapping into its network in order to bring those other investors to the table.

Was the financing additional in terms of risk taking (e.g., providing equity or subordinated debt financing due to which capital ratios became healthy and due to which more debt could be attracted for expansion)? To what extent has MASSIF's financing helped intermediaries to (simultaneously or subsequently) raise additional funds and/or strengthen the internal organization?

The extent to which the financing was additional in terms of risk taking and helped Locfund raise additional funds and/or strengthen the internal organization is assessed as satisfactory. On the one hand, MASSIF's intervention helped raise additional funds for Locfund. However, on the other hand, the creation of Locfund did not spark the creation of other similar local currency funds as it had originally been hoped.

MASSIF's intervention helped raise additional funds for Locfund. At the time of MASSIF's financing proposal only 3 other institutions had committed to investing in Locfund, for a total of USD 21 million. Also thanks to MASSIF's efforts and networking, other investors decided to join bringing the total number to 8 and the fund's capital to USD 30 million. In addition, this intervention helped catalyze new investments into Locfund II. The Locfund II fund has recently been launched, with a similar mandate as Locfund's but a capital which has doubled to USD 60 million.

However, our assessment was not very good because the investment in Locfund did not lead to the creation of other similar local currency investment funds. To our knowledge, no similar major vehicles have been set up in other geographies. During our interviews, Locfund's Director also mentioned that he was disappointed by the lack of a demonstration effect and that the hoped for massification of local currency financing offerings had not materialized.

5. Locfund Investees' Results

5.1. Overall Summary for Locfund's Investees

The type of financial institutions targeted by Locfund's interventions and the type of instruments used is indicated in the table below.

Name	Description	Country	Instrument provided	Year
FDL	Regulated MFI with total assets of USD ~67M	Nicaragua	USD 1.2M Senior loan with 3-year tenor + Technical Assistance	2011
Pro Mujer	Unregulated MFI with total assets of USD ~22M	Nicaragua	USD 0.7M Senior loan with 4-year tenor	2012
ODEF	Regulated MFI with total assets of USD ~6M	Honduras	USD 1.5M Senior loan with 30-month tenor + Technical Assistance	2007
Ademi	Regulated MFI with total assets of USD ~162M	Dominican Republic	USD 1.5M Senior loan with 4-year tenor + Technical Assistance	2008
ADOPEM	Regulated MFI with total assets of USD ~56M	Dominican Republic	USD 1.5M Senior loan with 4-year tenor + Technical Assistance	2009
Acorde	Unregulated MFI with total assets of USD ~35M	Costa Rica	USD 1.5M Senior loan with 4-year tenor + Technical Assistance	2009

The ex-ante assessment has been assessed as satisfactory. This is because (i) 5 out of 6 Locfund interventions were in line with its mandate, (ii) 3 out of 6 MFIs met the size criteria for Tier 2 and Tier 3 required by Locfund's mandate, and (iii) at the time of the loans, access to LCY funding for financial institutions in their respective markets was relatively limited for 3 out of 6 MFIs.

The effectiveness in strengthening financial institutions has also been assessed as satisfactory. First, increasing the LCY liabilities of Pro Mujer, FDL, Ademi, and Acorde had a positive effect in the ALM ratio because their portfolios were mostly in local currency. Second, Locfund's loans helped reduce all six investees' risk profile by decreasing their funding source concentration. Third, senior management noted the positive impact of the technical assistance provided on strengthening the internal organization. On the other hand, none of the MFIs had any change in the NPL ratios that can be attributed to Locfund's loans.

The effectiveness in increasing and improving the financing to (M)SMEs has been assessed as overall sufficient. First, although Locfund's financing did support the MFIs' expansion of their portfolio, there was not an acceleration in the MFIs' portfolios' growth rates. Second, none of the investees introduced any new products or client segments as a result of Locfund's LCY funding. Third, two out of the six MFIs passed all of the loan benefits over to their clients. Of the four that did not pass both, two did not pass the currency risk safeguard, and four did not pass the tenor.

The impact on (M)SMEs cannot be fully assessed given the lack of data.

The additionality in strengthening the financial institutions has been assessed as satisfactory. One out of the six MFIs rated the financial additionality in terms of access to LCY funding with similar conditions than those of Locfund as very good, three out of the six MFIs rated the financial additionality as satisfactory, and two out of the six MFIs rated the financial additionality as overall sufficient. Additionally, Locfund's loans contributed to a limited improvement in the MFIs' risk profile and they helped mobilize and/or catalyze additional funds.

Finally, none of the MFIs introduced a new product and did not target new clients or client segments as a result of Locfund's intervention. It is important to note, however, that providing additional financial products was not within Locfund's interventions stated goals.

5.2. Ex-ante assessment

To what extent were anticipated effects of Locfund's LCY financing in line with Locfund's objectives and aimed at resolving local constraints for access to financial services?

The extent to which Locfund's LCY financing was in line with Locfund's objectives and aimed at resolving local constraints for access to financial services is assessed as satisfactory. This is because (i) 5 out of 6 Locfund interventions were in line with its mandate, (ii) 3 out of 6 MFIs met the size criteria for Tier 2 and Tier 3 required by Locfund's mandate, and (iii) at the time of the loans, access to LCY funding for financial institutions in their respective markets was relatively limited for 3 out of 6 MFIs.

The type of financial institutions targeted by Locfund's interventions and the type of instruments used were in line with Locfund's objectives for the most part. Specifically, the objectives of Locfund's interventions were (i) to increase and diversify Tier 2 and Tier 3 MFI funding and (ii) to support Tier 2 and Tier 3 MFIs' institutional strengthening, particularly their financial asset-liability management and global risk administration, by offering a technical assistance (TA) component. While 5 out of 6 Locfund interventions were in line with Locfund mandate, Locfund's loan to Pro Mujer was not in line because it did not provide a TA component aimed at strengthening the MFI.

Only half of Locfund's investees met the fund's size criteria. The fund's mandate is to provide financing to Tier 2 and Tier 3 MFIs which, usually, are considered MFIs with assets lower than USD 50 million. However, only three of the MFIs included in the scope complied with this criteria: Pro Mujer, ODEF and Acorde. The other 3 MFIs all had total assets higher than USD 50 million, with Ademi being particularly large (over USD 160 million in assets).

Prior to Locfund's loans, there was relatively limited access to LCY funding for 3 of the 6 MFIs receiving Locfund's interventions. In Nicaragua (where Pro Mujer and FDL are based), as previously explained, LCY financing was not available at workable terms. In 2009 in Costa Rica (where Acorde is based), only local banks offered LCY funding but with short tenors. However, in Honduras LCY funding was available locally during the time of Locfund's intervention. In the Dominican Republic LCY financing was available even though at the time of Locfund's interventions a financial crisis was restricting its availability somewhat.

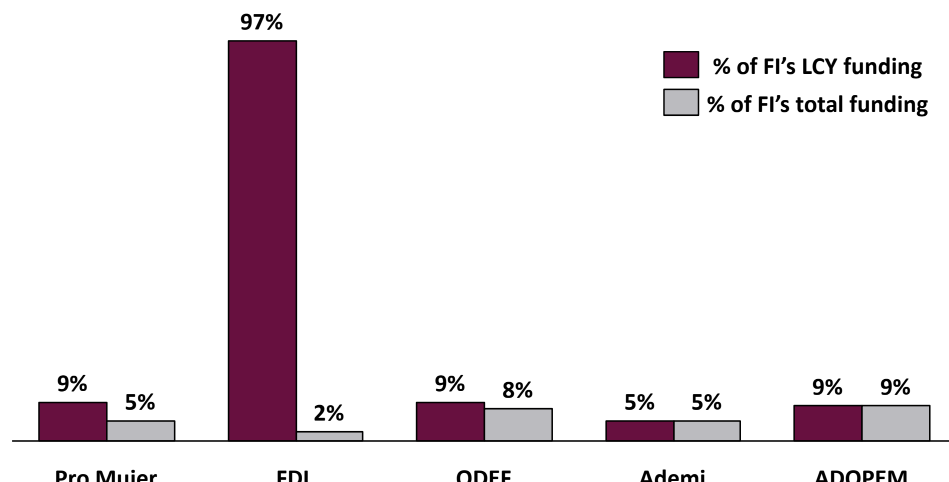
How relevant were Locfund's inputs to the intermediary?

The extent to which Locfund's inputs were relevant to the intermediary is assessed as satisfactory. For one investee – FDL –, the Locfund loan was significant (>50%) relative to its existing LCY funding, as shown in Figure 27. Specifically, the Locfund loan was the only local currency loan in its funding structure in 2011.

However, the assessment is not very good, because for four investees – Pro Mujer, ODEF, Ademi and ADOPEM – neither the percentage of Locfund's intervention out of their existing LCY funding nor the

percentage of Locfund's intervention out of their total funding was significant. It can therefore be concluded that Locfund's intervention was relevant only in the case that the investee had limited LCY financing to start with. Unfortunately the data for Acorde was not available.

Figure 27: Locfund's loan as a % of LCY funding and total funding
At the time of Locfund's intervention



5.3. Effectiveness at the FI level

Does the LCY product bring (financial) benefits for the Locfund client (the intermediary) which recover the charge for the LCY feature? Does LCY help to reduce risks at FI level and how?

The extent to which Locfund's loans in local currency brought financial benefits to its investees is assessed as satisfactory.[15][16] According to our conversations with the investees' senior management, Locfund's loans did strengthen their respective balance sheets. First, Pro Mujer, FDL, Ademi, and Acorde experienced improvement in their currency ALM ratios as a result of LCY funding. Second, Locfund's loans helped reduce all six investees' risk profile by decreasing their funding source concentration. Third, senior management noted the positive impact of the technical assistance provided on strengthening the internal organization. On the other hand, none of the MFIs had any change in the NPL ratios that can be attributed to Locfund's loans.

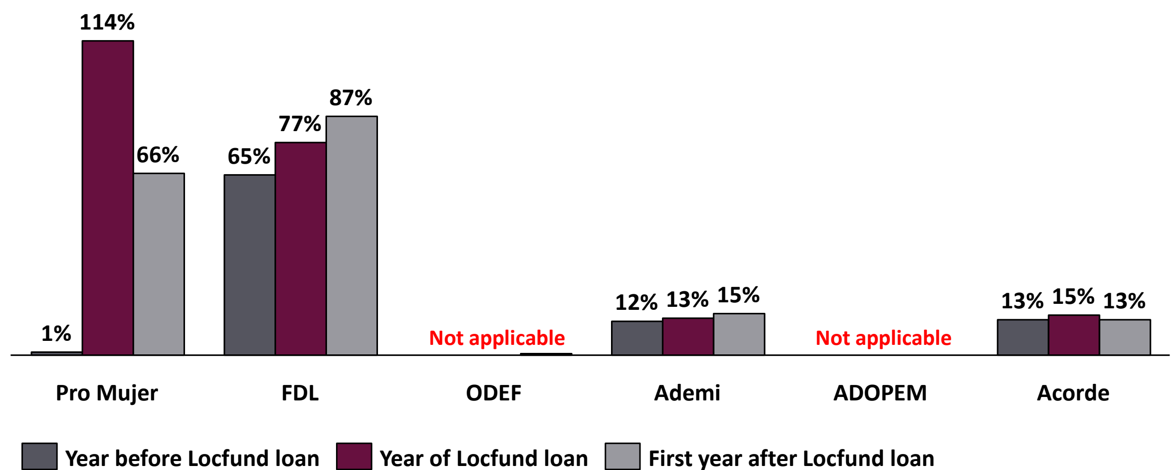
Locfund's loans brought specific benefits in the currency assets-liabilities matching (ALM) ratios to 4 out of 6 MFIs. Pro Mujer, FDL, Ademi, and Acorde's senior management stated that increasing their LCY liabilities had a positive effect in the ALM ratio because their portfolios were mostly in local currency. On the other hand, ODEF and ADOPEM had an internal strategy to only raise funding in local currency, so they did not have to manage their ALM currency ratios.

However, unfortunately, as shown in the following graph, we cannot isolate the positive effect of the Locfund loan on the currency ALM ratio. All MFIs went through internal changes and/or changes to the market conditions that had a major impact on the institutions' balance sheets. For instance, Pro Mujer separated from its NGO arm in 2012 and therefore reduced its own capital. Similarly, FDL's CFO commented on the constraints in raising local currency funding in 2011 due to the global financial crisis. As a result, the institution's currency ALM ratio shows a worsening instead of an improvement.

[15] The evaluation team did not include the CAR since it is calculated differently in each country and the data was difficult to obtain

[16] None of the investees affirmed that the Locfund intervention had an impact on their earnings; therefore, we have not included the analysis

Figure 28: Absolute difference between assets and liabilities in foreign currency / capital ratio
Locfund investees, before and after Locfund loan



Second, Locfund's loans helped reduce the MFIs' risk by diversifying the funding sources for all investees, especially for Ademi and ADOPEM. This is indeed one of the main objectives of Locfund's loans. While Pro Mujer, ODEF and FDL, to some extent, were well diversified, Ademi and ADOPEM had a high concentration of funding sources, with less than 50% of their funders contributing over 90% of total funding. Thanks to Locfund's loans this diversification was increased and, as suggested by the MFIs' management teams, this also helped improve their credit ratings.

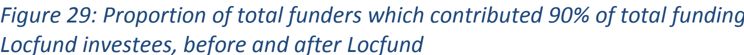
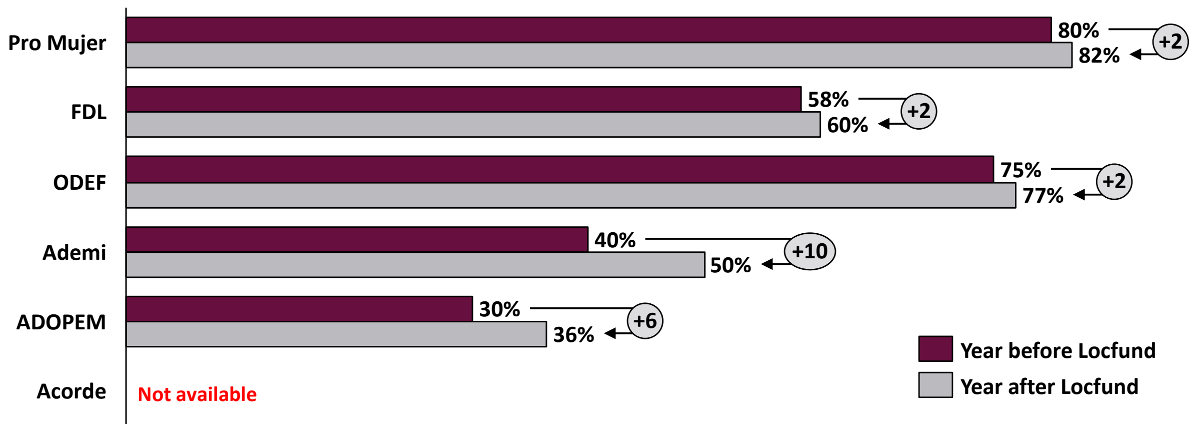


Figure 29: Proportion of total funders which contributed 90% of total funding
Locfund investees, before and after Locfund



Additionally, 5 out of 6 MFIs received technical assistance and, as a result, improved their financial risk management processes. As a case in point, Ademi's CFO commented that they "chose to copay the technical assistance that was offered with the second Locfund loan because [they] really understood the benefits." Similarly, ADOPEM's CFO mentioned that technical assistance "was very useful. Locfund is expensive but it can be worth it."

However, Locfund's intervention did not have an impact on non-performing loans (NPL). If the intervention had helped in significantly expanding the LCY financing to the investees' clients, then a reduction in the client's currency risk could have been expected which would have translated into a reduction in the investees' credit risk. However, of the six investees four already had a substantial LCY portfolio before Locfund's intervention. The remaining two, Pro Mujer and FDL, did not introduce a LCY product following Locfund's intervention. As a result, Locfund did not contribute in reducing the

MFI's credit risk. As can be seen in the following graph, MFIs' NPL ration did change, but the management teams of all MFIs agreed that these changes were not due to Locfund's interventions.

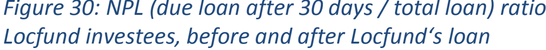
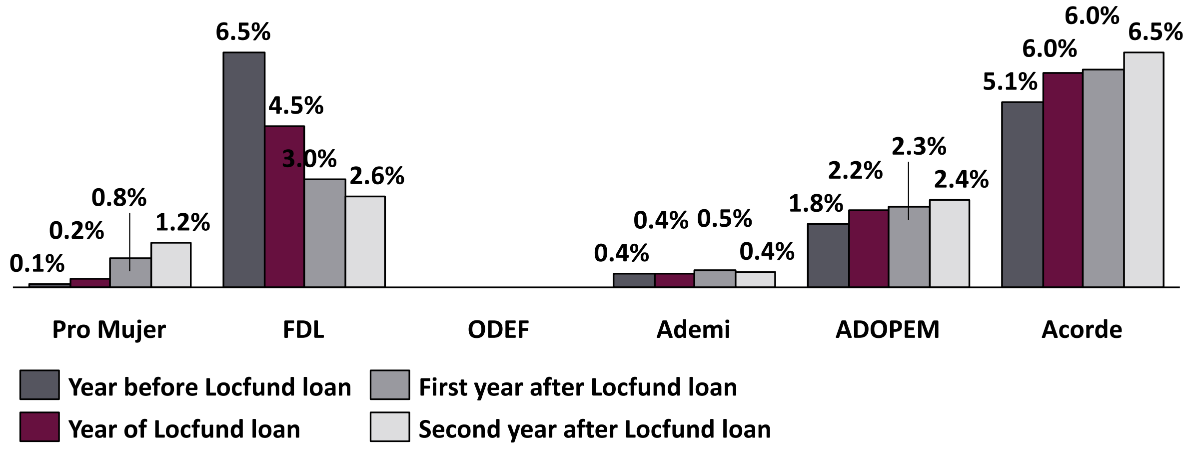


Figure 30: NPL (due loan after 30 days / total loan) ratio
Locfund investees, before and after Locfund's loan



Are Locfund's LCY products well-structured, or could they be improved in certain ways to further benefit the client?

The extent to which Locfund's interventions were well-structured is assessed as satisfactory. The table below shows the perception of senior management on the alignment of Locfund's loan features with the institutions' needs and the overall market. While most of Locfund's investees expressed their general satisfaction with the loan features, there were a few exceptions:

- Pro Mujer mentioned that the price was slightly higher than the market and that they did not receive technical assistance. The unregulated status of Pro Mujer and the fact that it was receiving LCY for the first time, suggest that it could have benefited from receiving some form of capacity building.
- ODEF mentioned that Locfund's short grace period did not align with its agricultural portfolio's needs. Additionally, ODEF expressed its interest in cancelling the loan in advance due to slow disbursement during the financial crisis. This was not possible because Locfund requested a high cancellation fee.
- Ademi and ADOPEM assessed the amount as lower than what they needed and below their funding amount average. The price was also considered slightly higher than the market.
- Acorde mentioned that the price was slightly higher than the market and that they would have preferred more flexibility in the repayment methods.

Figure 31: Senior management response to questions measuring satisfaction with the Locfund intervention features (check = satisfied; x = unsatisfied)

Institution	Amount	Tenor	Grace period	Flexibility	Price	TA
FDL	✓	✓	✓	✓	✓	✓
Pro Mujer	✓	✓	✓	✓	✓	×
ODEF	✓	✓	×	×	✓	✓
Ademi	×	✓	✓	✓	×	✓
ADOPEM	×	✓	✓	✓	×	✓
Acorde	✓	✓	✓	×	×	✓

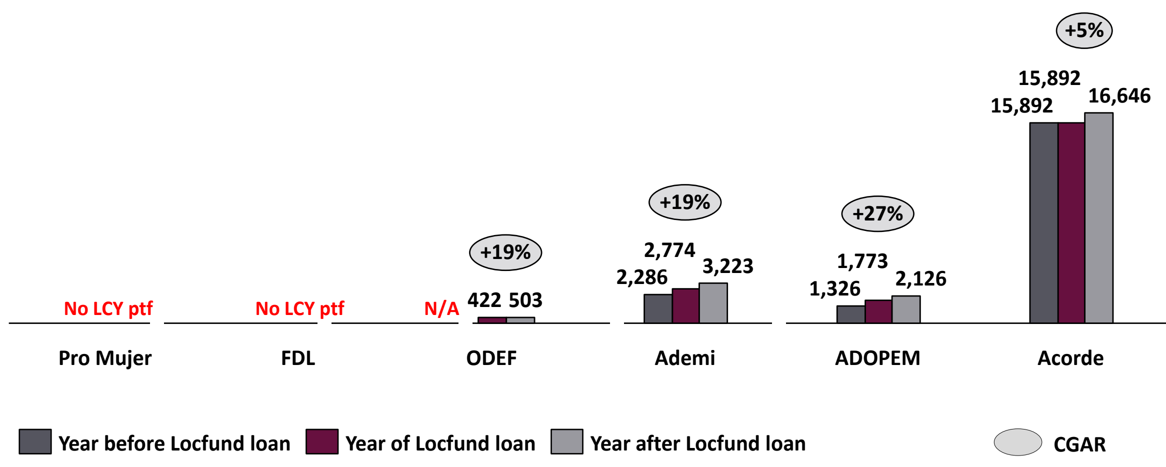
5.4. Effectiveness at the (M)SME financing level

How has provision of financial services to (M)SMEs improved as a result of Locfund's LCY financing? Did any side effects occur?

The extent to which the provision of financial services to (M)SMEs improved as a result of MASSIF's financing is assessed as overall sufficient. First, although Locfund's financing did support the MFIs' expansion of their portfolio, we have not observed an acceleration in the MFIs' portfolios' growth rates. Second, none of the investees introduced any new products or client segments as a result of Locfund's LCY funding. 4 out of the 6 MFIs exclusively already offered LCY loans to their clients before Locfund's intervention. The remaining two, FDL and Pro Mujer, did not start offering LCY loans following the intervention.

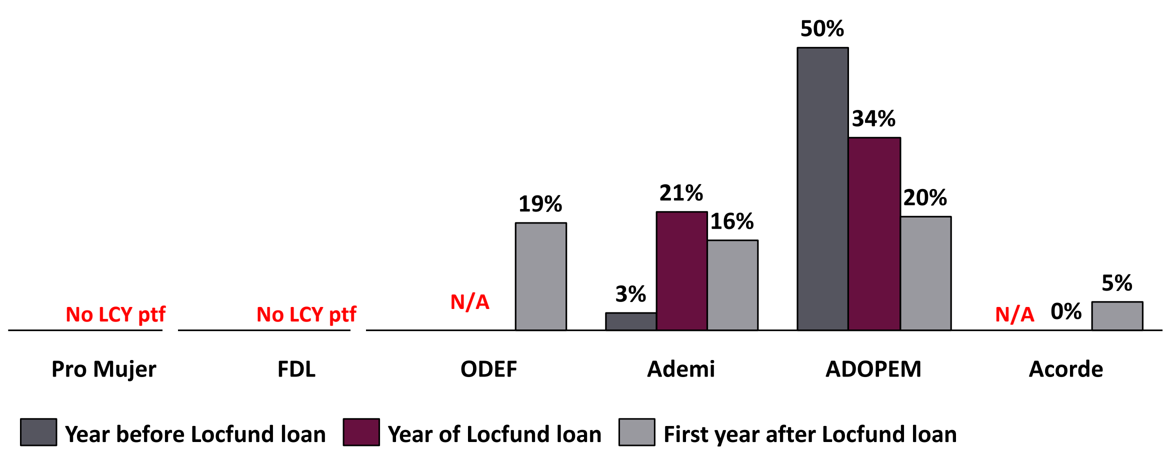
Locfund's interventions supported its investees in increasing their (M)SME portfolios. As shown in the graph below, the additional funding coming from Locfund helped the MFIs continue growing their portfolios. According to senior management, the Locfund loans were important enablers for growth at a time when their funding diversification was limited.

Figure 32: (M)SME portfolio in LCY (million) and growth
Locfund investees, before and after Locfund loan



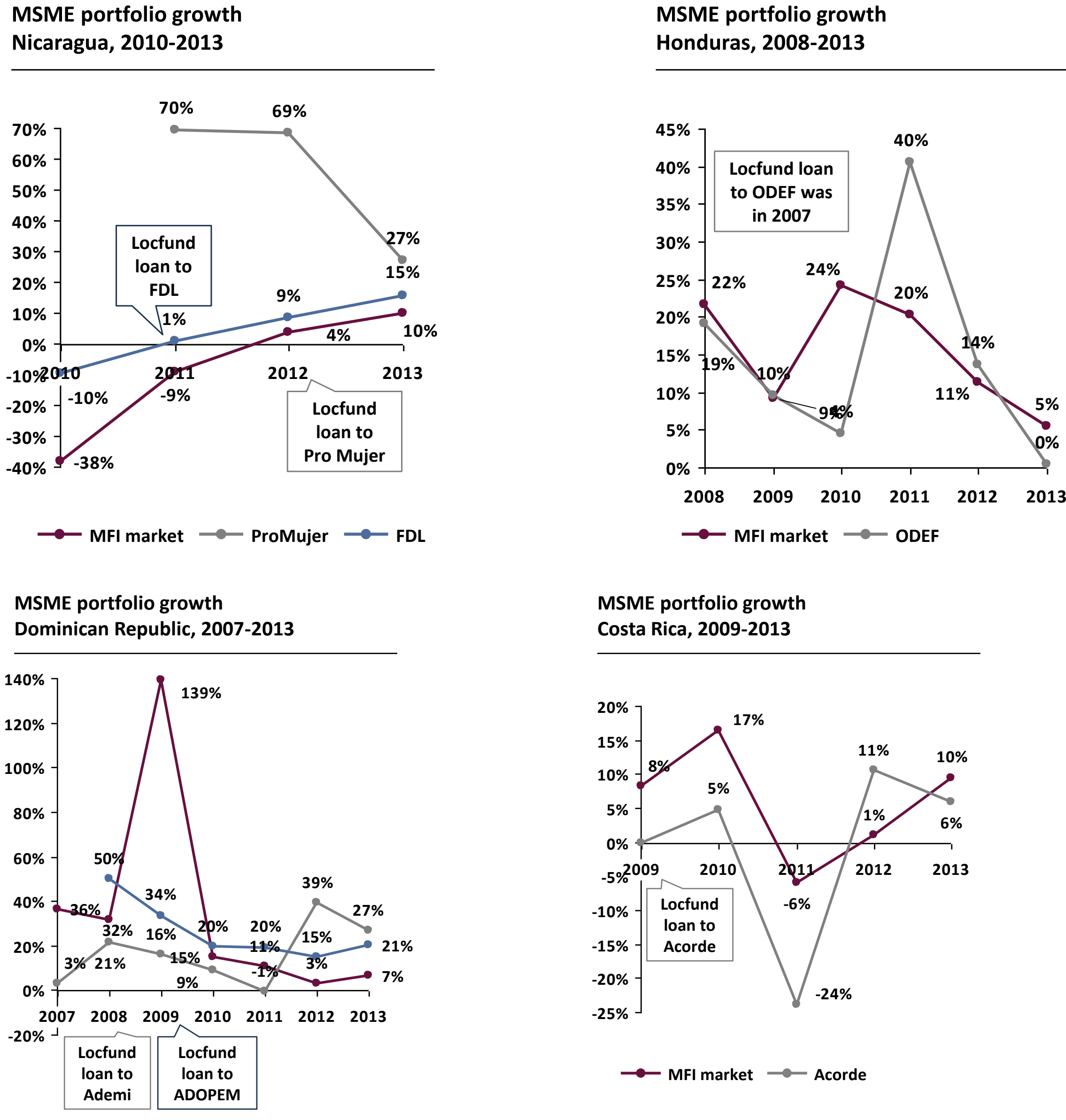
However, this additional funding did not translate into an accelerated growth in the LCY (M)SME portfolio. With the exception of Acorde, the MFIs either maintained or slowed down their growth rates. The reasons behind these growth trends are diverse, but they are mostly related to market conditions, as well as the MFIs' internal strategies and the changes in their business model. According to the MFIs' management they are not related to Locfund's loans.

Figure 33: (M)SME LCY portfolio annual growth rate
Locfund investees, before and after Locfund loan



There is not a consistent trend in the comparison of Locfund's investees' portfolio growth with the MFI market growth in the corresponding countries. ProMujer, FDL and ADOPEM consistently outperformed the market, while ODEF, Ademi and Acorde had a variable performance relative to the market.

Figure 34: MSME portfolio annual growth rate Locfund investees

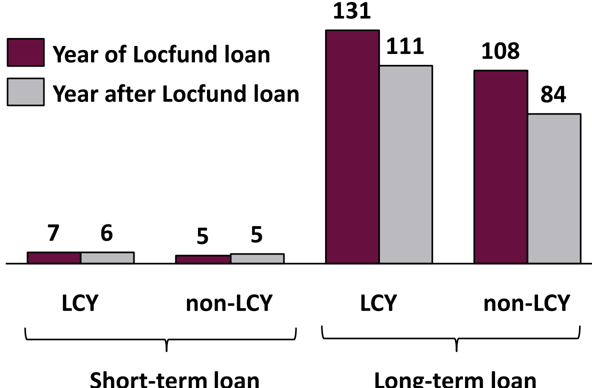


Following Locfund's intervention, none of the MFIs improved their provision of financial services by introducing new products. It is important to note, however, that providing additional financial products was not within Locfund's interventions stated goals. Four of the six MFIs (all but Pro Mujer and FDL) already had a range of LCY products, mainly working capital, catered to (M)SMEs. During the interviews, senior management noted that any changes in products' characteristics during the life of the Locfund loans were the result of strategic choices, rather than Locfund's intervention. For instance, ODEF introduced a credit product to better serve farmers in new rural areas to consolidate ODEF's positioning in new geographies. In addition, the 2 MFIs that did not offer LCY loans (Pro Mujer and FDL) did not start offering them following Locfund's intervention. The two MFIs only offered Cordoba loans indexed to the USD which cannot be considered as LCY as they maintain the foreign exchange risk.

Finally, it is difficult to assess whether there were differences between HCY and LCY loan conditions because only 1 out of the 6 MFIs (Acorde) offered both types of loans. The data below suggests that

the tenor slightly decreased following Locfund's intervention. However, management mentioned this change was not caused by Locfund's financing.

Figure 35: Average loan duration in months
Acorde, before and after Locfund loan



Are the loan benefits for Locfund's clients passed over to their clients?

The extent to which the loans' benefits for the MFIS are passed over to their clients is assessed as overall sufficient. 2 out of the 6 MFIs (ODEF and Ademi) passed all of the loan benefits over to their clients. Of the 4 that did not pass both, 2 did not pass the currency risk safeguard, and 4 did not pass the tenor.

Pro Mujer and FDL did not pass on the safeguard against the currency risk they obtained from Locfund to their clients. While the Locfund loans were in Cordobas without the indexation to the US dollar (sin *mantenimiento de valor),* Pro Mujer and FDL's loans to (M)SMEs are in Cordobas indexed to the US dollar (*con mantenimiento de valor).* As a result, the currency risk remains with the (M)SMEs even through the MFIs have been safeguarded against it. Pro Mujer and FDL's CFOs argued that the demand for loans without the indexation would have been very low because (M)SMEs are used to the indexed loans.

Pro Mujer, FDL, ADOPEM, and Acorde did not pass Locfund's interventions' tenors on to their clients. This can be clearly seen in the following graph. The tenor, however, seems to be more related to the type of MFI rather than due to Locfund's intervention. MFIs that serve the upper end of (M)SMEs, such as Ademi, and MFIs that have agricultural portfolios, such as ODEF, are more likely to offer longer tenors aligned with their clients' needs than MFIs that are mainly focused on micro entrepreneurs, such as Pro Mujer, FDL, ADOPEM, and Acorde.

Figure 36: Tenor of Locfund's loan vs. tenor of the Locfund investees' average long term LCY loans to (M)SME (months) Locfund investees, before and after Locfund loan

Pro Mujer: 48, N/A
FDL: 36, 22, 23
ODEF: 30, 29, 28
Ademi: 48, 58, 60
ADOPEM: 48, N/A
Acorde: 48, 21, 21

Locfund's loan to the FI
FI's loans to (M)SMEs the year of Locfund's loan
FI's loans to (M)SMEs the year after Locfund's loan

5.5. Impact on (M)SMEs

Have (M)SME client performance ratios improved? Or have their ratings changed?

Unfortunately given the lack of data it has not been possible to fully assess this question.

5.6. Additionality at the FI level

To what extent has the Locfund LCY financing been financially additional? Were there commercial players in the domestic or international market which could have also provided appropriate financing on workable terms?

The extent to which the Locfund financing has been financially additional is assessed as satisfactory because for 1 out of the 6 MFIs it was very good, for 3 out of the 6 MFIs it was satisfactory and for 2 out of the 6 MFIs it was overall sufficient. More details can be found in the table below. Specifically, the table includes a rating of the additionality provided by the MFIs' senior management, together with the evaluation team's assessment.

Figure 37: Additionality assessment by MFI senior management using 1-5 scale, 1 being the lowest and 5 the highest

Name	MFI management rating	Access to LCY funding	Access to similar conditions for LCY funding
FDL	**5**	In 2011, there were limited LCY funding options in Nicaragua and the Locfund loan was the first LCY loan for FDL	Locfund loan had a longer tenor than FDL's average (3 years versus 12-18 months)
Pro Mujer	**3**	In 2012, there were limited LCY funding options in Nicaragua and the Locfund loan was the first LCY loan for Pro Mujer. However, Pro Mujer was able to obtain other 6 non-LCY loans during 2012	Locfund loan had a slightly better price and similar tenor than comparable loans in Pro Mujer's balance sheet

Ademi	**3**	In 2008, international LCY funding was restricted in DR, only a few organizations, such as EIB and Oikocredit, were offering long-term LCY funding. Local banks also offered LCY funding but with short tenors	Locfund loan had a higher price and lower tenor (4 years versus 7 years) than comparable loans (e.g., BEI loan)
Acorde	**3**	In 2009, LCY funding was only available from state-owned banks; however, FIs mostly demanded USD funding at that time	Locfund loan had a slightly higher price, but better tenor than funding locally available
ODEF	**2**	In 2007, LCY funding was widely available in Honduras, mainly from CABEI, BANHPROVI, and local banks. However, CABEI had limits to the loan amount, BANHPROVI's timeline for disbursements was not always reliable, and local banks required collateral	Locfund loan had a slightly higher price and lower tenor (4 years versus 7 years) than comparable loans
ADOPEM	**2**	In 2009, international LCY funding availability was increasing in the Dominican Republic. Local banks also offered LCY funding but with short tenors	Locfund loan had a higher price (~3 percentage points higher) and lower tenor (4 years versus 7 years) than comparable loans (e.g., BEI loan)

Was the financing additional in terms of risk taking (e.g., providing equity or subordinated debt financing due to which capital ratios became healthy and due to which more debt could be attracted for expansion)? To what extent has Locfund's LCY financing helped intermediaries to (simultaneously or subsequently) raise additional funds and/or strengthen the internal organization?

The extent to which the financing was additional in terms of risk taking and helped Locfund's investees raise additional funds and/or strengthen the internal organization is assessed as satisfactory. Locfund's loans contributed to a limited improvement in the MFIs' risk profile and they helped mobilize and/or catalyze additional funds.

Locfund's interventions had some influence on the MFIs' risk profile. Specifically, as described in question 2.1, the investees' senior management mentioned that Locfund's loans did strengthen their respective balance sheets. First, Pro Mujer, FDL, Ademi, and Acorde experienced improvement in their currency ALM ratios as a result of LCY funding. Second, Locfund's loans helped reduce all six investees' risk profile by decreasing their funding source concentration. Third, senior management noted the positive impact of the technical assistance provided on strengthening the internal organization. On the other hand, none of the MFIs had any change in the NPL ratios that can be attributed to Locfund's loans.

Locfund's loans had a mobilizing effect and, to a lesser extent, a catalyzing effect. According to MFIs' senior management, the Locfund loan served as a "stamp of approval" which had a significant impact in attracting other international funders. Locfund's catalyzing effect, however, is more difficult to isolate from the market conditions. More details can be found in the table below.

Figure 38: Mobilizing/catalyzing effect assessment by senior management using 1-5 scale, 1 being the lowest and 5 the highest

Name	Rating	Mobilizing / Catalyzing effect
FDL	**4**	The Locfund loan was a very important signal to the market, since in 2011 there was a financial crisis resulting in a lack of confidence in the entire MFI sector
Pro Mujer	**3**	Following Locfund's intervention, Pro Mujer was able to significantly increase its number of funders. However, Pro Mujer's management mentioned that Locfund's intervention did not play a major role in this.
ODEF	**3**	The Locfund loan required a thorough due diligence that helped improve ODEF's reputation on the market. Locfund's intervention also contributed to the expansion of LCY funding in the country, as following this intervention organizations such as Blue Orchard and Symbiotics started offering LCY funding
Ademi	**3**	The Locfund loan required a thorough due diligence that helped increase funders' trust in Ademi. In addition, Locfund facilitated introductions to other funders in Foromic, an annual MFI convention in LAC Following Locfund's intervention other DFIs came to the market offering better LCY financing conditions, e.g., AFD, Proparco, FMO. However, it is difficult to separate Locfund loan's catalyzing effect from the overall improvement in the Dominican Republic's economy
ADOPEM	**2**	Locfund's loan did, to a small degree, contribute to improving ADOPEM's creditbility. Following Locfund's intervention other DFIs came to the market offering better LCY financing conditions, e.g., AFD, Proparco, FMO. However, it is difficult to separate Locfund loan's catalyzing effect from the overall improvement in the Dominican Republic's economy
Acorde	**2**	The Locfund loan did not help attract additional funding; however, it served during the negotiations with other DFIs to request local currency funding instead of hard currency funding

5.7. Additionality at the (M)SME financing level

Did Locfund's LCY financing lead to providing additional financial products reaching additional sectors and/or target groups in the local market?

It is important to note that while the evaluation team has provided comments on this question, we did not conduct a formal assessment given that providing additional financial products was not within Locfund's interventions stated goals.

None of the MFIs introduced a new product and did not target new clients or client segments as a result of Locfund's intervention. Of the six MFIs, four (all but Pro Mujer and FDL) already had a range

of LCY products, mainly working capital, catered to (M)SMEs. During the interviews, senior management noted that any changes in products during the life of the Locfund loans were the result of strategic choices, rather than the LCY funding itself. FDL and Pro Mujer, as already stated, did not introduce LCY products following Locfund's intervention.

Similarly, the six MFIs did not start serving new client segments or change their outreach and marketing processes as a result of the Locfund interventions. Unfortunately, the lack of data does not allow us to check what proportion of the (M)SME clients started following Locfund's interventions after their introduction or to analyze changes in client segmentation. That being said, senior management specified that no changes to their client segmentation resulted from Locfund's interventions because Locfund's financing was not geared towards reaching a particular client group.

6. Assessment of the effects of different LCY instruments and different conditions on intermediaries' incentives and performance with regard to improving access to finance for (M)SMEs

The LCY subordinated loan given to Lafise contributed more significantly to institutional strengthening than the LCY senior loans. Lafise's subordinated loan entered in its balance sheet as Tier II capital, which significantly improved Lafise's Capital Assets Ratio (CAR). Additionally, because the subordinated loan was in local currency, it also helped Lafise's currency risk. On the other hand, LCY senior loans only strengthened FAMA and the Locfund investees' balance sheets by reducing the potential currency mismatch that, in turn, helped improve the CAR.

However, different LCY instruments had limited impact on improving access to finance for (M)SMEs. As the results in the earlier sections have shown, LCY loans (both subordinated and senior loans) did not automatically improve access to finance. In most cases, they only supported the FIs in expanding their portfolio. Our conversations with senior management indicated that receiving financing rarely influences the business, unless they have specific targets such as specific products or clients. Their treasury teams try to obtain the best financing possible, while, separately, the business teams decide the business strategy.

Last but not least, when the loan was accompanied by a technical assistance component, it was more likely to maximize its potential in strengthening the institution and/or improving (M)SME financing. In the case of Locfund's investees, for instance, five out of six received TAs to improve their LCY financial risk management. Senior management in all of those FIs agreed that TAs had a positive impact on strengthening the institution as a whole, which arguably could have led to better (M)SME services in the longer run.

7. Assessment of the effects of different LCY instruments and different conditions on intermediaries' incentives and performance with regard to improving access to finance for (M)SMEs

The LCY subordinated loan given to Lafise contributed more significantly to institutional strengthening than the LCY senior loans. Lafise's subordinated loan entered in its balance sheet as Tier II capital, which significantly improved Lafise's Capital Assets Ratio (CAR). Additionally, because the subordinated loan was in local currency, it also helped Lafise's currency risk. On the other hand, LCY senior loans only strengthened FAMA and the Locfund investees' balance sheets by reducing the potential currency mismatch that, in turn, helped improve the CAR.

However, different LCY instruments had limited impact on improving access to finance for (M)SMEs. As the results in the earlier sections have shown, LCY loans (both subordinated and senior loans) did not automatically improve access to finance. In most cases, they only supported the FIs in expanding their portfolio. Our conversations with senior management indicated that receiving financing rarely influences the business, unless they have specific targets such as specific products or clients. Their treasury teams try to obtain the best financing possible, while, separately, the business teams decide the business strategy.

Last but not least, when the loan was accompanied by a technical assistance component, it was more likely to maximize its potential in strengthening the institution and/or improving (M)SME financing. In the case of Locfund's investees, for instance, five out of six received TAs to improve their LCY financial risk management. Senior management in all of those FIs agreed that TAs had a positive impact on strengthening the institution as a whole, which arguably could have led to better (M)SME services in the longer run.

VIII. MAIN ASSIGNMENT: RECOMMENDATIONS

Overall, we have identified seven key lessons, subject to the caveats indicated in the introduction, each with its corresponding recommendations. These seven recommendations should not be read individually, but should instead be approached holistically.

Strategic recommendations - at the country and FI level:

1. **Financial institutions are strengthened and their risk profile is improved through local currency financing interventions when they are based in a country with limited access to LCY financing and high currency risk and have a low level of LCY financing on their balance sheet**. FAMA, Pro Mujer and FDL are based in Nicaragua, where local currency financing was not available. They strengthened their risk profile through improved currency ALM ratios because they had a low level of LCY financing to start with. On the other hand, the other institutions were based in countries (Honduras, Dominican Republic, Costa Rica) where LCY financing was already widely available. They did not significantly improve their risk profile because they already had sufficient LCY financing.
2. **The intervention is more effective at improving the provision of LCY financing to (M)SMEs when there is limited LCY (M)SME financing in the market and the local currency risk is high, when the institution provides limited LCY financing to (M)SMEs and (M)SME clients have indicated an interest in receiving LCY financing.** For example, neither FAMA nor other institutions in Nicaragua offered LCY financing before MASSIF's intervention. As a result, MASSIF's intervention was able to significantly improve the provision of LCY financing to (M)SMEs. On the other hand, in Honduras, the Dominican Republic and Costa Rica, and for the financial institutions in those countries (i.e., Lafise, Ademi, ADOPEM, Acorde) LCY financing was already very common, and therefore MASSIF's intervention did not lead to a significant improvement. Finally, it is important to add that the improvement in LCY financing due to MASSIF's intervention in FAMA was not as significant as it could have been, because (M)SMEs' demand for the product was not as high as anticipated. This indicates that estimating demand in a new LCY financing market is also important.
   - **Recommendation A:** Take a holistic portfolio approach to interventions and concentrate MASSIF's management and team efforts on:
     - Financial institutions based in countries where the currency risk is high and local currency financing at workable terms is relatively scarce. This assessment can be easily conducted through interviews with experts (e.g., IMF country representatives) and/or by analyzing the proportion of LCY financing in the financial system, and/or
     - Financial institutions which have a lower level of LCY financing to start with on their balance sheet. This can easily be done by analyzing the institution's balance sheet during the due diligence for the loan, and/or
     - Financial institutions in countries where LCY financing for (M)SMEs at workable terms is relatively scarce and the local currency risk is high. This assessment can be easily conducted through a couple of interviews with experts (e.g., IMF country representatives) and/or by analyzing the proportion of LCY financing to (M)SMEs, and/or
     - Financial institutions which have a limited offering of LCY products to (M)SMEs.
   - **Recommendation B:** Continue offering LCY financing to institutions that need it but do not meet these criteria, but dedicate a lower level of MASSIF's management and team efforts to them.

3. **The provision of LCY financing to (M)SMEs increases when the financial institutions receiving MASSIF's loans already have a strategy with a significant (M)SME client base, or have a clear plan for building one, and/or have a clear mandate of supporting (M)SMEs.** The loan to FAMA was the most effective in improving (M)SME financing also because this was the only institution

receiving MASSIF funds which had a clear mandate of supporting (M)SME financing and had a substantial (M)SME client base. Instead, Lafise had a very small (M)SME client base and did not have a clear plan for building one. As a result, MASSIF's financing struggled to reach (M)SMEs. Locfund's mandate, instead, was to strengthen Tier 2 and Tier 3 MFIs and did not mention improving funding to (M)SMEs. As a result, Locfund's financing focused more on strengthening MFIs by diversifying their funding sources, rather than helping in improving financing for (M)SMEs.

- **Recommendation A:** to be more effective at increasing financing for (M)SMEs, MASSIF should focus on financial institutions that have a clear mandate/objective of targeting (M)SMEs and that either already have a significant (M)SME client base, or a robust plan for building one. Otherwise, MASSIF should offer technical assistant to help the FI develop a (M)SME financing plan.

Strategic recommendations - at the financial and non-financial instrument level:

4. **The most appropriate product for strengthening financial institutions' risk profile depends on the specific characteristic of the financial institution.** In the case of FAMA, FDL and Pro Mujer, which did not have local currency financing within their liabilities, their risk profile was strengthened through a "standard" senior loan. For Lafise, which already had ample access to LCY financing, the risk profile was strengthened through the subordinated loan, which was relatively uncommon in the market. For most of Locfund's clients, which were smaller Tier 2 or 3 microfinance institutions with a limited number of funding sources, risk was reduced thanks to relatively small senior loans as these helped diversifying funding sources.
   - **Recommendation A:** in case the financial institution is relatively large (e.g., tier 1 MFI) and does not have access to LCY financing at workable terms, offer a substantial senior LCY loan.
   - **Recommendation B:** in case the financial institution is relatively small (e.g., tier 2 or 3) and has a limited number of funding sources, expand its funding diversity by offering a LCY financing (of any size).
   - **Recommendation C:** in case the financial institution already has access to LCY financing at workable terms, evaluate the possibility of offering a subordinated loan or other loans which are not easily available on the market.

5. **Financial institutions value technical assistance (TA) focused on understanding customers' LCY needs. Such support would make the expansion of LCY financing to (M)SMEs more effective and help FIs target the (M)SMEs that would most benefit from the LCY financing.** MASSIF does not offer LCY-related technical assistance to its borrowers and our analysis indicates this would have been welcome. Specifically, FAMA's management team mentioned that receiving TA from MASSIF would have been highly beneficial as they received their first LCY financing and they started offering their first LCY product on the market. On the other hand, MASSIF did provide substantial technical assistance to Locfund during its first year of operation and Locfund's management team recognized it as "crucial." With respect to Locfund, all of its investees but one mentioned that they were comfortable with paying a slightly higher price for Locfund's financing in order to get access to the technical assistance. In addition, it is important to mention that offering TA might have helped expanding LCY financing to (M)SMEs. For example, FAMA mentioned that if they had a better methodology and process for marketing their new LCY product and explaining its benefits to its clients, more (M)SMEs could have been reached.
   - **Recommendation A:** Locfund should continue offering technical assistance to its clients and increase further its focus on local currency technical assistance.
   - **Recommendation B:** MASSIF should seek means to start offering technical assistance (i) focused on local currency to borrowers, and (ii) that follows a customer-centric approach to understand customer needs. For instance, help FIs that borrow in local currency to include new processes and mechanisms in order to target with LCY financing the (M)SMEs that would

most benefit from it. Or assist FIs in developing LCY products using a human-centered design approach. This will be seen as an important value-add in the market and will also help the financial institutions be more effective at managing and disbursing their LCY financing to (M)SMEs.

Strategic recommendations - Operational

6. **LCY financing is not always on-lent to (M)SMES and the financing's benefits are not fully extended to (M)SME clients when there are no contractual or operational mechanisms included in the financing agreement that incentivize the financial institutions to do so.** Specifically, MASSIF did not include mentions in its loan agreements that the funds lent to financial institutions had to be used to provide LCY financing to (M)SME clients. As a result, Lafise was able not to use the loan it received for onlending to (M)SMEs. Similarly, Locfund did not include in its loan agreements, any clause requiring the local currency benefits to be passed-on to (M)SMEs. As a result, even if Locfund absorbed the currency risk in its loans to FDL and Pro Mujer, these two institutions did not absorb their clients' currency risks.
   - **Recommendation A:** include clauses or mechanisms within the loan agreements that ensure that the financing is on-lent to (M)SMEs and the benefits are extended to the (M)SME clients. Even though money is fungible and difficult to track, including these provisions will introduce an additional safeguard for (M)SMEs.

ANNEX A: LITERATURE REVIEW

1. MAIN ASSIGNMENT: (M)SME SECTOR DEVELOPMENT VIA SUPPLY-SIDE APPROACHES

How do we define (M)SMEs?

Several theoretical and operational definitions for (M)SMEs exist. In Central America, (M)SMEs are generally defined by the number of employees, annual sales, and value of assets. Each country has determined different parameters to identify (M)SMEs, thus making it difficult to establish a regional definition (see the figure below).[17] **This study will adopt the World Bank's (M)SME definition. The SME Department of the World Bank works with the following: microenterprise - up to 10 employees, total assets of up to $10,000 and total annual sales of up to $100,000; small enterprise - up to 50 employees, total assets and total sales of up to $3 million; medium enterprise - up to 300 employees, total assets and total sales of up to $15 million.**

Figure 1: Definition of (M)SMEs in Central America

QUANTITATIVE ASPECTS	GUA	ES	HON	NIC	CR
Medium Enterprise					
Employees	50 - 199	50 - 99	26 - 100	31 - 100	31 - 100
Annual Sales (US $)	375,000	NA	1,848,000	NA	1,000,000
Value of Assets (US $)	250,000	NA	200,000	NA	500,000
Small Enterprise					
Employees	5 - 49	10 - 50	6 - 25	6 - 30	6 - 30
Annual Sales (US $)	37,500	666,680	112,500	NA	500,000
Value of Assets (US $)	62,500	50,000	25,000	NA	250,000
Microenterprise					
Employees	1 - 4	1 - 9	1 - 5	1 - 5	1 - 5
Annual Sales (US $)	7,500	66,680	37,500	NA	150,000
Value of Assets (US $)	6,250	10,000	2,400	NA	10,000

Why are (M)SMEs important?

(M)SMEs make important contributions to the economies of Central America. (M)SMEs account for more than 97% of all firms and employ almost half (44.5%) of the economically active population in the region, although most employment is represented by informal labor. However, the vast majority of (M)SMEs in Central America have low levels of productivity and internationalization, and accordingly only contribute to 33% of GDP.[18]

The specific economic contribution depends on the type of (M)SME. The figure below indicates the type of economic impact that different (M)SMEs can have.

---

[17] Alaniz, Jorge Godoy. "Presentation for the 2012 Workshop on Micro and Small – Sized Enterprise Development (ICDF)." Central American Bank for Economic Integration. Web. 5 Mar. 2015.
[18] Ibid.

Figure 2. Economic Impact of (M)SMEs[19]

Type of SME	Economic Impact
• High-growth firms • Innovative firms • Young firms	Create jobs & grow GDP (via productivity)
• Small firms	Create & maintain jobs
• Service sector firms • Manufacturing firms	Maintain jobs (i.e., employment share)
• Agriculture firms	Maintain jobs & reduce poverty
• Women-led firms	Reduce poverty & reduce the gender gap

High-growth, young, and innovative firms are more likely to show high rates of both job creation and productivity improvement given their higher likelihood to innovate and invest in R&D activities.[20] While young firms are the fastest ones growing and are responsible for significant job creation, they account for a relatively low proportion of total employment. Five years after the founding of new companies, many of them have failed and nearly half of the jobs they created have been eliminated. However, the surviving firms continue to grow faster than more mature companies, and create a disproportionate share of jobs relative to their size.[21]

Other types of (M)SMEs make specific contributions to creating and maintaining jobs, and supporting poverty reduction. In developing countries, small firms—particularly those with fewer than 100 employees—create jobs at the highest rate and represent the largest share of total employment; however, their productivity rates are lower than those of large and young firms.[22] (M)SMEs in the services sector lead in terms of employment share, followed by manufacturing.[23] Agricultural (M)SMEs have a lower impact in terms of employment creation but contribute to poverty reduction by providing food supplies to reduce hunger, and maintaining employment.[24] Finally, women-led (M)SMEs contribute to reducing the gender gap, and improving outcomes for families and communities by increasing a woman's bargaining power within her household, which tends to lead to greater investments in health and education of children and help reduce poverty.[25]

---

[19] "Assessing Private Sector Contributions to Job Creation and Poverty Reduction." International Finance Corporation. 2013. Web. 5 Mar. 2015.; Ayyagari, Meghana, Asli Demirgüç-Kunt, and Vojislav Maksimovic. "Small vs. Young Firms across the World Contribution to Employment, Job Creation, and Growth." *Policy Research Working Paper Series 5631* (2011). World Bank. Web. 5 Mar. 2015.; Haltiwanger, John, et al. "Who Creates Jobs? Small vs. Large vs. Young." *NBER Working Paper No. 16300* (2010). Web. 5 Mar. 2015.; Lawson, Sandra. "Women Hold Up Half the Sky." *Global Economics Paper No: 164* (2008). Goldman Sachs. Web. 5 Mar. 2015.; Stein Peer, Christopher Grewe, et al. "Strengthening Access to Finance for Women-Owned SMEs in Developing Countries." International Finance Corporation. 2011. Web. 5 Mar. 2015.; "World Development Report 2012." World Bank. 2012. Web. 5 Mar. 2015.

[20] "High-Growth SMEs and Employment." *Study* (2002). Organisation for Economic Co-Operation and Development. Web. 5 Mar. 2015.

[21] Haltiwanger, John, et al.

[22] Demirgüc-Kunt, Asli. "Generating Jobs in Developing Countries: A Big Role for Small Firms." *The World Bank Blog* (2011). The World Bank. Web, 5 Mar. 2015.

[23] "Assessing Private Sector Contributions to Job Creation and Poverty Reduction."

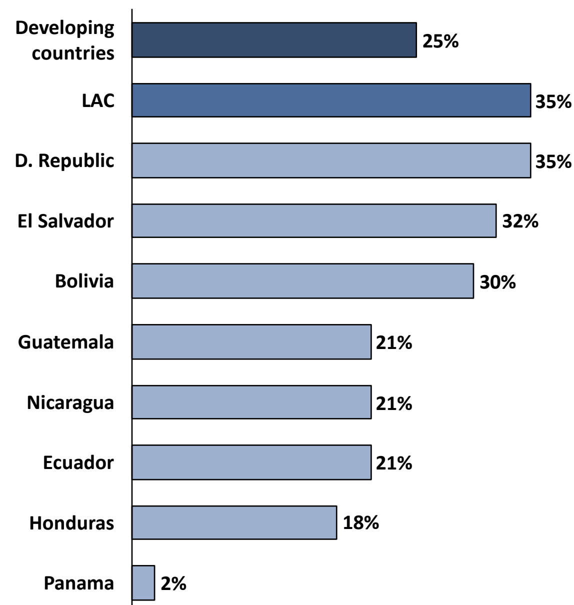
[24] Ibid.

[25] Lawson, Sandra; "Strengthening Access to Finance..."; "World Development Report 2012".

What is the level of access to finance for (M)SMEs in LAC?

A large financing gap still exists for (M)SMEs in LAC. The credit gap for formal SMEs has been estimated at USD 235 billion in this region during the 2003-2010 period, with an even larger gap when informal (M)SMEs are taken into account.[26] The financing gap includes both unserved (M)SMEs and underserved (M)SMEs[27] in terms of access to loans with fair borrowing conditions (e.g., reasonable interest rates and collateral requirements) and long-term growth capital in the form of both equity and debt. (M)SMEs consistently report higher interest rates and collateral requirements than large enterprises.[28] These gaps in financing are exacerbated for some types of (M)SMEs, especially agricultural (M)SMEs and women-led (M)SMEs. As a result, efforts to improve financing for (M)SMEs in Latin America and the Caribbean focus on trying to close these specific gaps.

*Figure 3. Access to finance as major/severe barrier, survey among (M)SMEs, 2011*29



Gaps in both short- and long-term financing affect (M)SMEs' sustainability and growth. Short-term loans (e.g., working capital, trade credit, or factoring) help (M)SMEs manage their cash flow, sustain their operations, and grow incrementally. Factoring is especially valuable because it allows (M)SMEs to obtain working capital without the high collateral requirement. Short-term loans are relatively more available than longer-term loans today; among short-term loans, working capital and trade credit are relatively more available than factoring. However, many (M)SMEs have difficulties even in accessing short-term loans. Longer-term capital (e.g., long-term debt, leasing, or equity) helps (M)SMEs expand their businesses either independently, in the case of debt, or by sharing some ownership in their business, in the case of equity.[30] In addition, equity provided by venture capital funds has the potential to contribute to the growth of innovative and start-up (M)SMEs by helping them access networks,

[26] Dassanou, Marieme Esther, et al. "Women-Owned SMEs: A Business Opportunity for financial Institutions." International Finance Corporation. 2014. Web. Mar 15. 2015.

[27] Un-served SMEs are SMES that do not have access to formal sources of finance and underserved SMEs are SMEs that have financing from formal sources but the volume is limited or the terms and conditions are not appropriate

[28] Ibid

[29] "IFC Enterprise Finance Gap Database." International Finance Corporation. Web. 15 Mar. 2015.

[30] Brennen, Timothy, et al. "Scaling-Up SME Access to Financial Services in the Developing World." International Finance Corporation. 2010. Web. 5 Mar. 2015.

providing management support, and sharing best practices.[31] Longer-term capital, both debt and equity, is relatively unavailable to (M)SMEs today.

What are the supply-side barriers to improving access to finance for (M)SMEs in LAC, and what are the different interventions to address these barriers?

The reasons for limited credit supply for (M)SMEs in Latin America and the Caribbean include:

- The growth of larger banks in Central America led to a shift from a relationship business model, typical of small banks, to a multi-service business model. The latter model is less prompt to lend to (M)SMEs due to potential information asymmetries, high fixed costs for relatively small transactions, and the lack of economies of scale that exist when lending to large firms.
- Net interest margins in several Latin American countries rank among the highest in the world. Because of higher cost of capital, (M)SMEs' ability to access credit is severely curtailed. From the (M)SME perspective, although dollarization represents a borrowing option for some firms, the lack of financial infrastructure for hedging has resulted in a higher currency risk. Dollarization increased in Latin America in the 1990s due to high inflation and large interest rate differentials[32]. For instance, in Peru and Bolivia, the dollarization of loans for small businesses reached almost 30% and 50% respectively during the last decade[33]. Additionally, financial intermediaries in ineffective financial markets who need to finance their long-term local currency assets are often faced with two suboptimal and risky alternatives. The borrower can fund its long-term assets (i) in domestic markets, where it can borrow in local currency but generally only short-term or (ii) in international markets where it can borrow long-term, but only in hard currency. The first alternative creates a maturity mismatch, the second a currency mismatch.
- Similarly, a currency mismatch also exists between savings and borrowing. Individuals in LAC prefer to save in hard currency (e.g., the US dollar), meaning that a large part of banks' deposits are in hard currency. However, (M)SME often prefer to borrow in local currency. This mismatch between the currency of individual savings and (M)SMEs borrowing preferences can contribute to limiting the credit supply.
- International financial regulation requiring larger reserves may have resulted in a decline of the capital available for borrowing in some segments of commercial banking. The international experience shows that recent reforms in financial regulation embedded in the implementation of Basel II and Basel III have had some negative effects on access to finance for (M)SMEs, as they increase capital and liquidity requirement for lending.[34]

Nonetheless, large banks in the LAC region have shown a growing interest in providing services to (M)SMEs in recent years.[35] As margins in other banking markets (such as the retail sector) narrow, financial institutions are increasingly recognizing that the (M)SME sector can be an attractive segment to serve. At the same time, new transaction technologies (e.g., credit scoring) and special products (e.g., standard leasing products) are increasingly available for (M)SME lending, therefore reducing

[31] "Survey of the Economic and Social Impact of Venture Capital in Europe." *Research Paper* (2002). The European Private Equity and Venture Capital Association. Web. 5 Mar. 2015.

[32] "Latin American Economic Outlook 2013: SME Policies for Structural Change." Organisation for Economic Co-Operation and Development and the Economic Commission for Latin America and the Caribbean. 2012. Web. 5 Mar. 2015.

[33] García-Escribano, Mercedes, and Sebastián Sosa. "What is Driving Financial De-dollarization in Latin America?" IMF Working Paper 11/10 (2011). International Monetary Fund. Web. 15 Mar. 2015.

[34] Latin American Economic Outlook 2013: SME Policies for Structural Change."

[35] De La Torre, Augusto, María Soledad Martínez Pería, and Sergio L. Schmukler. "Bank Involvement With SMEs: Beyond Relationship Lending." *Policy Research Working Paper Series 4649* (2008): 2280-293. World Bank. Web. 5 Mar. 2015.

information asymmetries. As a result, FIs are introducing changes to their business models to profitably increase their lending to (M)SMEs.[36]

A variety of interventions suggest the ability to catalyze financing for (M)SMEs via financial intermediaries by addressing market failures or institutional barriers. These include the following:

- *Interventions focused on the enabling environment (e.g., policies) for banks, microfinance institutions, and leasing companies.* These interventions focus on promoting competition, encouraging (M)SME-friendly products, and strengthening the financial information and hedging infrastructure (e.g., Mexico's Nacional Financiera (NAFIN) platform for factoring and value chain finance).
- *Interventions focused on helping FIs overcome barriers to providing debt to (M)SMEs.* These interventions include (i) employing risk sharing mechanisms to address what FIs perceive to be the high risk of targeting the (M)SME sector and to allow FIs to improve credit allocation (e.g., fondo de garantía para pequeños empresarios (FOGAPE), a partial credit guarantee scheme in Chile); (ii) providing funds for strengthening the balance sheet and/or on-lending, which has been achieved best through second-tier funding facilities (e.g., European Investment Bank SME APEX Facility); (iii) building the capacity and skills of FIs to better serve (M)SMEs (e.g., psychometric credit scoring tools).
- *Interventions focused on creating and enabling the environment for funds:* These interventions often (i) strengthen the equity ecosystem via network building opportunities and credit facilities (e.g., the Inovar program in Brazil to create a technology-focused VC market); (ii) create (M)SME-specific capital markets such as stock exchanges; and (iii) reform the investment climate to increase market attractiveness, particularly to foreign investors.
- *Interventions focused on helping funds overcome barriers to providing equity to (M)SMEs:* These interventions focus on (i) providing non-traditional equity financing—such as regional funds or structured finance—to minimize high investment costs and increase net returns in order to attract investors (e.g., SEAF structured finance funds) and (ii) developing alternative exit opportunities for investors such as royalties or permanent capital vehicles.

In particular, how does providing local currency financing (LCY) to financial intermediaries help both FIs and (M)SMEs?

Long-term finance in developing countries is usually denominated in US Dollars and predominantly provided by development financial institutions (DFIs). This is mainly due to the high level and volatility of interest rates in local currency in developing countries. International investors usually do not assume this local currency risk on their balance sheet and transfer it to local borrowers, who have often been willing to assume this risk based on the nominally lower interest rates.

The literature suggests that the provision of long-term local currency financing to local financial institutions can have the effect of strengthening their balance sheets by reducing their currency mismatch of assets and liabilities. This, in turn, reduces the vulnerability of financial systems to external shocks. As a case in point, during the 1997 Asian financial crisis, currency mismatches between foreign currency assets and liabilities in bank balance sheets were at the top of the list of Asian banks' financial vulnerabilities.

[36] De La Torre, Augusto, María Soledad Martínez Pería, and Sergio L. Schmukler. "Bank Involvement With SMEs: Beyond Relationship Lending." *Policy Research Working Paper Series 4649* (2008): 2280-293. World Bank. Web. 5 Mar. 2015.

Additionally, the literature suggests that financial institutions that have long-term local currency loans in their funding structure, can be better able to offer longer term local currency financing to their (M)SME clients. Local currency lending helps (M)SMEs that have their revenues in local currency by reducing their exposure to currency exchange fluctuations that can lead to increasing the company's liabilities. This, in turn, benefits FIs by helping reduce their (M)SME portfolio credit risk.

However, the literature also notes several risks inherent to local currency financing:

- When DFIs provide longer-term (over 1 year maturity period) LCY to financial intermediaries, they may distort local markets by providing the funds at a lower price than what the inherent risk would warrant and what other indigenous intermediaries would provide
- When financial intermediaries offer LCY products to (M)SMEs clients, the challenge exists that these clients might not be interested in the products given the higher nominal cost/price in comparison to hard currency loan. This difficulty can be stronger in the case of clients that have not been educated regarding the advantages of LCY financing
- The risk also exists that financial intermediaries only offer DFI-facilitated LCY products to their best clients as a means of rewarding them, and not to those that most require it. The result is that the original LCY financing to the intermediary does not have the effect of reaching new clients, which might be in the most need for LCY financing

Similarly, the risk exists that intermediaries do not have adequate processes in place in order to select the borrowers with the higher proportion of local currency in their cash-flows (i.e., the clients most in need of LCY products).

2. Sub-assignment: Pricing and Diversification Strategy for LCY Risks

This section of the literature review focuses on the mitigation strategies for local currency risks and the pricing methodologies of local currency loans. As explained in the previous section, according to the literature, providing local currency financing to (M)SMEs is important because it reduces the (M)SMEs' exposure to currency risks. However, the currency risk does not disappear – it is transferred to the investment funds that disbursed the local currency financing while having their own funding in hard currency (e.g., Euros or US Dollars). Because of this mismatch in the currency of assets and liabilities, the investment funds are vulnerable to exchange rate fluctuations. As a result, it is important to investigate what strategies exist for mitigating this local currency risk. **According to the literature, two main mitigation strategies exist for funds' local currency risks**.

The first is diversification, where the fund maintains the local currency mismatch on its books, but diversifies its currency risk through exposure to multiple currencies. The rationale for diversification is that different currency pairs move in different directions and, therefore, over time the movements of currency pairs can reduce currency risk. Specifically, modern portfolio theory[37] states that a portfolio of different securities or currencies, for which the returns are weakly or negatively correlated, can lead to an overall superior return than the individual securities, when adjusted for risk. "The volatility of the whole is less than the sum of its parts."[38]

[37] Modern portfolio theory (MPT) is a theory of finance that attempts to maximize portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return, by carefully choosing the proportions of various assets

[38] Dodd, Randall, and Shari Spiegel. "Up from Sin: a Portfolio Approach to Financial Salvation." *G-24 Discussion Paper Series No. 34* (2005). United Nations. Web. 10 Apr. 2015.

According to a literature review, 20-40 currencies are necessary in order to truly diversify a portfolio. CGAP states that "for funds that do not actively manage their currency positions for profit, 20–30 currencies may be needed." [39] Joost Zuidberg of TCX agrees that on the basis of an econometric model 20–30 currencies are necessary for diversification. Twenty currencies may be enough for portfolios with good regional diversification, while 30 are probably necessary for those with regional concentrations. Instead, a model by Cygma (a currency fund) built on the basis of over 10 years of data, suggests that 30–40 currencies may be necessary.[40]

The second option for mitigating local currency risks is hedging through the use of derivatives. Derivatives are contracts that derive their value from the performance of an underlying asset (in this case a currency). Specifically, two different types of derivatives are more commonly used for hedging local currency risks:

- **Currency forwards:** agreements to exchange a future payment in one currency for an equal payment in another. The exchange rate of a forward contract differs from the spot market exchange rate by an amount reflecting the expected movement of the currencies, determined by differences in relevant benchmark interest rates.
- **Currency swaps:** agreements to exchange loans of equal value in two currencies. These consist of (i) an initial exchange of equal amounts of principal at market exchange rates; (ii) exchange of interest rate payments on the loan; and (iii) exchange of repayments of the principal at a future date. The interest rates differ to reflect expected currency movements, the fixed or floating rates on the two loans, and the credit quality of the parties in the swap.

When comparing the advantages and disadvantages of diversification and hedging strategies, it appears that the main disadvantage of diversification strategies it that they cannot eliminate the entire local currency risk. This is because emerging markets currencies are not perfectly uncorrelated. Especially in the short-term, some level of correlation among them remains. Research by Diamantini[41] shows that currencies that moved in opposite directions with respect to the USD during the period of October 2007 until October 2008, all depreciated against the USD during the credit crunch of November 2008. These currencies all showed a high degree of correlation during the crisis at the end of 2008.

Hedging strategies, instead, have three disadvantages in comparison to diversification strategies. First, hedges are not available in the market for all emerging market currencies, especially longer-term hedges. This is because in many markets there is not a reliable benchmark rate calculated periodically which can be used for pricing derivatives. In addition, some emerging economies do not allow the trading of currency derivatives on their exchanges.[42] Second, even when they are available, derivative instruments have an additional cost which diversification does not have. Given that emerging markets are relatively illiquid and currency volatilities are high, the price of hedges is usually higher than in developed markets, increasing the cost of this strategy. Third, using hedges often requires the fund to pledge collateral to the financial institution selling the hedge, given that the seller is taking on credit risk.

---

[39] Apgar, David, and Xavier Reille. "Microfinance Foreign Exchange Facilities: Performance and Prospects." *Occasional Paper No.17* (2010). CGAP. Web. 5 Mar. 2015.
[40] Ibid.
[41] Diamantini, Stefano. "A Primer on Currency Risk Management for Microfinance Institutions." *JP Morgan Chase & Co.* (2010). Web. 10 Apr. 2015.

[42] Cleveland, Tom. "Emerging Markets Seem Attractive, but Forex Risks Abound. *Business Insider* (2011). Web. 10 Apr. 2015.

As a result of this analysis of advantages and disadvantages, the literature draws the following conclusions regarding the choice of strategy for mitigating local currency risk.

- A diversification strategy works best when the fund has a longer timeframe and therefore losses in one year can be offset against gains in the following years. In addition, a diversification strategy is more appropriate in countries where a market for derivatives does not exist or where the derivatives' pricing is excessive
- A hedging strategy works best when the timeframe is shorter and the fund cannot afford to have periods with losses. In addition, hedges are more advisable when a relatively liquid market exists and therefore their price is lower.

It is therefore apparent that different strategies work best in different situations. This is reflected by the fact that different funds choose different strategies. Specifically, the following table represents the local currency risk mitigation strategies that different funds have adopted.

Figure 4: local currency risk mitigating strategies for a selection of funds

	Institution	Diversification	Hedging	Mix of diversification and hedging
Public sector	EBRD			
	IADB			
	MASSIF			
Private sector / NGO	Cordaid			
	Locfund			Hedging if exposure to one currency is more than 10% of total portfolio
	TCX			
	Triodos			Open position can be held if hedge is too expensive
	Triple Jump			Hedge only when it is affordable

Finally, the literature review indicates that the pricing of local currency loans is usually based on a variable short-term local benchmark. Local benchmarks can include, for example, interbank deposit rates, treasury bills and interbank lending rates. The rationale for using this pricing strategy is that the benchmark is expected to reflect exchange rate fluctuations. The benchmark interest rate increases when the local currency depreciates, and decreases when the local currency appreciates.

The literature review also recognizes several disadvantages of using a benchmark as the basis of the pricing strategy. First, the benchmarks are not always reliable in emerging markets. For example, the measurement and publication of a specific rate might be discontinued or the methodology for calculating it could change. Second, the relation explained above between the benchmark and the currency exchange rate, does not always exist. Some local benchmarks are relatively responsive, whereas others, usually in less liquid and less mature markets, remain relatively stable regardless of spot changes. Third, even in more liquid and mature markets, this relation between the benchmark and the currency exchange is not immediate. For example, there usually is a lag between the depreciation and the increase in the benchmark rate. **Despite these disadvantages, pricing on the basis of a local benchmark still remains the most widely used methodology in the market.**

ANNEX B: BIBLIOGRAPHY

Alaniz, Jorge Godoy. “Presentation for the 2012 Workshop on Micro and Small – Sized Enterprise Development (ICDF).” Central American Bank for Economic Integration. Web. 5 Mar. 2015.

Apgar, David, and Xavier Reille. “Microfinance Foreign Exchange Facilities: Performance and Prospects.” *Occasional Paper No.17* (2010). CGAP. Web. 5 Mar. 2015.

“Assessing Private Sector Contributions to Job Creation and Poverty Reduction.” International Finance Corporation. 2013. Web. 5 Mar. 2015.

Auguin, Anne-Cécile. "Jordan: JEDCO, EIB and Abraaj Capital Launch Jordan Growth Capital Fund." *European Investment Bank* (2011). Web. 5 Mar. 2015.

Ayyagari, Meghana, Asli Demirgüç-Kunt, and Vojislav Maksimovic. "Small vs. Young Firms across the World Contribution to Employment, Job Creation, and Growth." *Policy Research Working Paper Series* 5631 (2011). World Bank. Web. 5 Mar. 2015.

Beck, Thorsten, Asli Demirgüç-Kunt, and Vojislav Maksimovic. “Financial and Legal Institutions and Firm Size.” *Policy Research Working Paper Series 2997* (2003). World Bank. Web. 5 Mar. 2015.

Brennen, Timothy, et al. “Scaling-Up SME Access to Financial Services in the Developing World.” International Finance Corporation. 2010. Web. 5 Mar. 2015.

Cleveland, Tom. “Emerging Markets Seem Attractive, but Forex Risks Abound.” *Business Insider* (2011). Web. 10 Apr. 2015.

Dassanou, Marieme Esther, et al. “Women-Owned SMEs: A Business Opportunity for financial Institutions.” International Finance Corporation. 2014. Web. Mar 15. 2015.

De La Torre, Augusto, María Soledad Martínez Pería, and Sergio L. Schmukler. "Bank Involvement With SMEs: Beyond Relationship Lending." *Policy Research Working Paper Series* 4649 (2008): 2280-293. World Bank. Web. 5 Mar. 2015.

Demirgüc-Kunt, Asli. “Generating Jobs in Developing Countries: A Big Role for Small Firms.” *The World Bank Blog (2011)*. World Bank. Web, 5 Mar. 2015.

Diamantini, Stefano. “A Primer on Currency Risk Management for Microfinance Institutions.” *JP Morgan Chase & Co.* (2010). Web. 10 Apr. 2015.

Dodd, Randall, and Shari Spiegel. “Up from Sin: a Portfolio Approach to Financial Salvation.” *G-24 Discussion Paper Series No. 34* (2005). United Nations. Web. 10 Apr. 2015.

Ferraro, Carlos, Evelin Goldstain, Luis Alberto Zuleta, and Celso Garrido. “El Financiamiento a las PYMEs en America Latina.” *Naciones Unidas* (2011). Cepal. Web. 5 Mar. 2015.

Gamser, Matthew. “Small and Medium Enterprise Finance: New Findings, Trends and G-20/Global Partnership for Financial Inclusion Progress.” International Finance Corporation. 2013. Web. 5 Mar. 2015.

García-Escribano, Mercedes, and Sebastián Sosa. "What is Driving Financial De-dollarization in Latin America?" *IMF Working Paper 11/10* (2011). International Monetary Fund. Web. 15 Mar. 2015.

Haltiwanger, John, et al. "Who Creates Jobs? Small vs. Large vs. Young." *NBER Working Paper No. 16300* (2010). Web. 5 Mar. 2015.

"High-Growth SMEs and Employment." *Study* (2002). Organisation for Economic Co-Operation and Development. Web. 5 Mar. 2015.

"IFC and Local Currency Financing." International Finance Corporation. Web. 5 Mar. 2015.

"IFC Enterprise Finance Gap Database." International Finance Corporation. Web. 15 Mar. 2015.

"International Finance Institutions and Development through the Private Sector: A Joint Report of 31 Multilateral and Bilateral Development Finance Institutions." International Finance Corporation. 2011. Web. 5 Mar. 2015.

"Latin American Economic Outlook 2013: SME Policies for Structural Change." Organisation for Economic Co-Operation and Development and the Economic Commission for Latin America and the Caribbean. 2012. Web. 5 Mar. 2015.

Lawson, Sandra. "Women Hold Up Half the Sky." *Global Economics Paper No: 164* (2008). Goldman Sachs. Web. 5 Mar. 2015.

Llisterri, Juan, and Jaime Garcia-Alba. "HGSMEs in Latin American Emerging Economies." *Inter-American Development* Bank (2008). Web. 5 Mar. 2015.

"Local Currency Financing: Managing Your Currency Risk." FMO. 2012. Web. 5 Mar. 2015.

"Local Currency Matters." TXC. 2013. Web. 5 Mar. 2015.

Pearce, Douglas, et al. "SME Finance Policy Guide." International Finance Corporation. 2011. Web. 5 Mar. 2015.

"Report on Support to SME in Developing Countries through Financial Intermediaries." *Dalberg Report* (2011). Dalberg. Text.

Rhett, Morris. "2011 High-Impact Entrepreneurship Global Report." Center for High-Impact Entrepreneurship at Endeavor. 2011. Web. 5 Mar. 2015.

Stein Peer, Christopher Grewe, et al. "Strengthening Access to Finance for Women-Owned SMEs in Developing Countries." International Finance Corporation. 2011. Web. 5 Mar. 2015.

Stein, Peer, Oya Pinar Ardic, and Martin Hommes. "Closing the Credit Gap for Formal and Informal Micro, Small, and Medium Enterprises." International Finance Corporation. 2013. Web. 5 Mar. 2015.

"Stimulating Investment in Emerging-Market SMEs." *Financial Innovations Lab Report Volume 8* (2009). Milken Institute. Web. 5 Mar. 2015.

"Survey of the Economic and Social Impact of Venture Capital in Europe." *Research Paper* (2002). The European Private Equity and Venture Capital Association. Web. 5 Mar. 2015.

Tricarico, Antonio. "EIB Lending through Financial Intermediaries in Africa: A Call for Action." *International Center for Trade and Sustainable Development*, 14 June 2011. Web. 5 Mar. 2015.

"World Development Report 2012." World Bank. 2012. Web. 5 Mar. 2015.

ANNEX C: METHODOLOGY QUESTIONS

Questions	Analysis for FAMA and Lafise	Analysis for Locfund's MFI clients	Analysis for Locfund
Ex-ante assessment			
To what extent were anticipated effects of the MASSIF LCY financing in line with MASSIF/Locfund objectives and aimed at resolving local constraints for access to financial services?	• Alignment of MASSIF interventions' objectives with MASSIF mandate • Relevance of type of FI and MASSIF instrument to MASSIF mandate • Existence, appropriateness, and implementation of MASSIF processes and criteria to identify the need and demand for LCY • Qualitative assessment of level of FIs' LCY financing need and demand at the time of MASSIF intervention • Level of FIs' access to LCY long-term funding at the time of MASSIF intervention • Qualitative assessment of level of (M)SME access to LCY financial services	• Alignment of Locfund interventions' objectives with Locfund mandate • Relevance of type of FI and Locfund instrument to Locfund mandate • Existence, appropriateness, and implementation of Locfund's processes and criteria to identify the need and demand for LCY • Level of MFIs' access to LCY long-term funding • Qualitative assessment of level of (M)SME access to LCY financial services	• Alignment of MASSIF intervention's objectives with MASSIF mandate • Relevance of type of FI and MASSIF instrument to MASSIF mandate • Existence, appropriateness, and implementation of MASSIF's processes and criteria to identify the need and demand for LCY
How relevant were MASSIF inputs to the intermediary?	• % of LCY financing in the FI funding structure at the time of MASSIF intervention • MASSIF intervention as % of total FI liabilities	• Not relevant (not direct intervention from MASSIF)	• Qualitative assessment of relative importance of MASSIF in the creation of Locfund • MASSIF intervention as % of total Locfund funding
Effectiveness at the FI level			
Does the LCY product bring (financial) benefits for the MASSIF client (the	• Net average earnings from LCY products; i.e., difference between	• Net average earnings from LCY products; ie, difference between the	• Not relevant (MASSIF financing was in USD)

intermediary) which recover the charge for the LCY feature? Does LCY help to reduce risks at FI level and how?	the price of MASSIF loan and the average price of (M)SME subloans • Change in non-performing loans level before and after the intervention • Change in ALM3 foreign currency risk & ALM4 liquidity risk levels before and after the intervention • Change in the CAR (total capital/total assets, total liabilities/equity) before and after the intervention • Change in asset quality (past due + restructured/total portfolio) before and after the intervention • Change in earning performance (RoE, net interest margin) before and after the intervention • *Change in FI rating before and after the intervention* • Qualitative assessment by FIs' senior management of the contribution of LCY instruments to all these changes	price of Locfund loan and the average price of (M)SME subloans • Change in non-performing loans level before and after the intervention • Change in ALM3 foreign currency risk & ALM4 liquidity risk levels before and after the intervention • Change in the CAR (total capital/total assets, total liabilities/equity) before and after the intervention • Change in asset quality (past due + restructured/total portfolio) before and after the intervention • Change in earning performance (RoE, net interest margin) before and after the intervention • *Change* in FI rating before and after the intervention • Qualitative assessment by FIs' senior management of the contribution of LCY instruments to all these changes	
Did the risk profile of the FI fall as they were provided with LCY?	• *See previous question*	• *See previous question*	• *See previous question*
Are MASSIF/Locfund's LCY products well-structured, or could they be improved in certain ways to further benefit the client?	• Qualitative assessment by evaluation team and FIs' senior management of alignment of senior loan features –amount, tenor, security, price – with FIs needs • Qualitative assessment by evaluation team and FIs' senior	• Qualitative assessment by evaluation team and FIs' senior management of alignment of sub loan features – amount, tenor, collateral, price – with MFIs needs • Assessment on whether TA addressed the limited MFIs' experience in	• Assessment on whether TA addressed the lack of experience in managing a local currency fund as well as local currency financing models

	management of alignment of subordinated loan features with FIs needs • Existence and relevance of TA specific to LCY financing	developing LCY processes and products as well as techniques for asset and liability management	
Effectiveness at the (M)SME financing level			
How has provision of financial services to (M)SMEs improved as a result of MASSIF's/Locfund's LCY financing? Did any side effects occur?	• Change in (M)SME portfolio size and growth rate in USD & LCY before and after the intervention • *Change in number of (M)SME borrowers before and after the intervention* • *Change in (M)SME portfolio composition (e.g., by industry) in USD & LCY before and after the intervention* • *Percentage of clients who receive LCY financing following the intervention who are new clients versus existing* • *Change in (M)SME loan conditions (i.e., tenor, price, collateral) in LCY before and after the intervention* • *Change in (M)SME loan conditions (i.e., tenor, price, collateral) in USD versus LCY before and after the intervention* • Introduction of new LCY financing products for (M)SME following the intervention • Change/modification in policy/processes for selection & approval of clients for LCY and for	• Change in (M)SME portfolio size and growth rate in USD & LCY before and after the intervention • *Change in number of (M)SME borrowers before and after the intervention* • *Change in (M)SME portfolio composition (e.g., by industry) in USD & LCY before and after the intervention* • *Percentage of clients who receive LCY financing following the intervention who are new clients versus existing* • *Change in (M)SME loan conditions (i.e., tenor, price, collateral) in LCY before and after the intervention* • *Change in (M)SME loan conditions (i.e., tenor, price, collateral) in USD versus LCY before and after the intervention* • Introduction of LCY financing products for (M)SME following the intervention • Change/modification in policy/processes for selection & approval of clients for LCY and for managing LCY risk following the intervention • Qualitative assessment of changes in (M)SME investment climate	• Not relevant

	managing LCY risk following the intervention • Qualitative assessment of changes in (M)SME investment climate • Qualitative assessment of demonstration effect	• Qualitative assessment of demonstration effect	
What are the effects of different LCY instruments and different conditions on intermediaries' incentives and performance with regard to improving access to finance for (M)SMEs?	• *Difference in results for indicators listed above depending on the type of MASSIF instrument* • *Qualitative assessment by FIs' senior management of the difference in contribution of LCY instruments to all these changes*	• *Difference in results for indicators listed above depending on the type of Locfund instrument* • *Qualitative assessment by FIs' senior management of the difference in contribution of LCY instruments to all these changes*	• Not relevant
Are the loan benefits for the MASSIF client passed over to their clients?	• *Difference between size of MASSIF intervention and increase in FI's (M)SME LCY financing portfolio following the intervention* • Difference between MASSIF loan features (tenor, price, collateral) and average LCY (M)SME sub-loan features (tenor, price, collateral)	• *Difference between size of Locfund intervention and increase in FI's (M)SME LCY financing portfolio following the intervention* • Difference between Locfund loan features (tenor, price, collateral) and average LCY (M)SME sub-loan features (tenor, price, collateral)	• Not relevant
Impact on (M)SME			
Have (M)SME client performance ratios improved? Or have their ratings changed?	• Change in FI PAR30 ratio before and after the intervention • Change in non-performing loans levels before and after the intervention	• Change in FI PAR30 ratio before and after the intervention • Change in non-performing loans levels before and after the intervention	• Not relevant
Additionality at FI level			
To what extent has the MASSIF/Locfund LCY financing been financially additional? Were there commercial players in the	• Qualitative assessment by FIs' senior management of existence and level of maturity of LCY financing in the market at the time of MASSIF intervention	• Qualitative assessment by FIs' senior management of existence and level of maturity of LCY financing in the market at the time of Locfund intervention	• Qualitative assessment by Locfund senior management of existence of equity and subordinated debt in the market at the time of MASSIF intervention

domestic or international market which could have also provided appropriate financing on workable terms?	• Qualitative assessment by industry experts of existence and level of maturity of LCY financing in the market at the time of MASSIF intervention • Existence of other LCY loans in FI's balance sheet at the time of MASSIF intervention • Difference in conditions between MASSIF loan and other LCY loans that FI had on its balance sheet at the time of MASSIF intervention	• Qualitative assessment by industry experts of existence and level of maturity of LCY financing in the market at the time of Locfund intervention • Existence of other LCY loans in FI's balance sheet at the time of Locfund intervention • Difference in conditions between Locfund loan and other LCY loans that FI had on its balance sheet at the time of Locfund intervention	
Was the financing additional in terms of risk taking (e.g., providing equity or subordinated debt financing due to which capital ratios became healthy and due to which more debt could be attracted for expansion)? *To what extent has the MASSIF/Locfund LCY financing helped intermediaries to (simultaneously or subsequently) raise additional funds and/or strengthen the internal organization?*	• Qualitative assessment by FIs' senior management of whether the level of risk taken contributed to attracting additional debt • Qualitative assessment by FIs' senior management of whether MASSIF's participation positively influenced the perception of the market • Qualitative assessment by FIs' senior management of whether MASSIF helped introduce the client to commercial banks, institutional investors, and DFIs • *Change in level and conditions in LCY financing from DFIs and other sources following MASSIF intervention* • *Change in level and conditions in LCY financing from commercial players following MASSIF intervention*	• Qualitative assessment by FIs' senior management of whether the level of risk taken contributed to attracting additional debt • Qualitative assessment by FIs' senior management of whether Locfund's participation positively influenced the perception of the market • Qualitative assessment by FIs' senior management of whether Locfund helped introduce the client to commercial banks, institutional investors, and DFIs • *Change in level and conditions in LCY financing from DFIs and other sources following Locfund intervention* • *Change in level and conditions in LCY financing from commercial players following Locfund intervention* • Qualitative assessment by FIs' senior management of the contribution of TA	• Qualitative assessment by Locfund senior management of whether MASSIF intervention contributed to raising a second fund • Qualitative assessment by Locfund senior management of whether MASSIF's participation positively influenced the perception of the market • Qualitative assessment by Locfund senior management of whether MASSIF helped introduce the client to commercial banks, institutional investors, and DFIs • Qualitative assessment by Locfund senior management of the contribution of TA to proper implementation of local currency framework and methodology at the fund level

		to strengthening the MFIs in areas like ALM, risk management, as well as environmental and social issues	
Additionality at the (M)SME financing level			
Did the MASSIF/Locfund LCY financing lead to providing additional financial products reaching additional sectors and/or target groups in the local market?	• *Level of availability and conditions (tenor, price, collateral) of LCY financing for (M)SMEs across the market at the time of MASSIF intervention* • *Level of availability and conditions (tenor, price, collateral) of LCY financing for (M)SMEs across the market following MASSIF intervention* • *Qualitative assessment of level of demand/resistance of LCY financing from (M)SMEs across the market at the time of MASSIF intervention* • *Qualitative assessment of level of demand/resistance of LCY financing from (M)SMEs across the market following MASSIF intervention (and if possible, changes in attitude to LC vs. FX over the period with devaluations/revaluations)* • Qualitative assessment by FIs' senior management of whether MASSIF intervention positively influenced other banks to introduce (M)SME LCY products • Qualitative assessment by industry experts of whether MASSIF intervention positively influenced	• *Level of availability and conditions (tenor, price, collateral) of LCY financing for (M)SMEs across the market at the time of Locfund intervention* • *Level of availability and conditions (tenor, price, collateral) of LCY financing for (M)SMEs across the market following MASSIF intervention* • *Qualitative assessment of level of demand/resistance of LCY financing from (M)SMEs across the market at the time of Locfund intervention* • *Qualitative assessment of level of demand/resistance of LCY financing from (M)SMEs across the market following Locfund intervention (and if possible, changes in attitude to LC vs. FX over the period with devaluations/revaluations)* • Qualitative assessment by FIs' senior management of whether Locfund intervention positively influenced other banks to introduce (M)SME LCY products • Qualitative assessment by industry experts of whether Locfund intervention positively influenced	• Not relevant

	other banks to introduce (M)SME LCY products • Change in (M)SME portfolio size and growth rate in USD & LCY before and after the intervention • *Percentage of clients who receive LCY financing following the intervention who are new clients versus existing* • *Qualitative assessment by FIs' senior management of the contribution of LCY instruments to the two changes above (i.e., LCY finance allowed FIs to provide loans to borrowers that would not have provided otherwise)*	other banks to introduce (M)SME LCY products • Change in (M)SME portfolio size and growth rate in USD & LCY before and after the intervention • *Percentage of clients who receive LCY financing following the intervention who are new clients versus existing* • *Qualitative assessment by FIs' senior management of the contribution of LCY instruments to the two changes above (i.e., LCY finance allowed MFIs to provide loans to borrowers that would not have provided otherwise)* • Qualitative assessment by FIs' senior management of the contribution of TA to enable them to analyze and select borrowers that would have been less eligible/credit worthy otherwise	

Annex D: Interview Tracker

The table below lists the people we have interviewed during the evaluation process, both over the phone and in-person (during field visits). We have spoken to over 30 stakeholders in five different countries.

No.	Name	Position	Organization	Country
1	Cesar Castillo Zambrana	Director of Latin America	Locfund	Bolivia
2	Carlo Peysack	Investment Manager for Central America, Mexico & the Caribbean	Locfund	Bolivia
3	Bruno Ayllon	Financial Analyst	Locfund	Bolivia
4	Veronica Cespedes	Microfinance Analyst	Locfund	Bolivia
5	Ajack Delgadillo Guevara	Manager of Finance & Administration	Acorde	Costa Rica
6	Mauricio Urena Garbanzo	Treasurer	Acorde	Costa Rica
7	Nurkis Lara	Vice President of Finance	Ademi	Dom. Rep.
8	Francisco De La Rosa Ventura	Vice President of Business	Ademi	Dom. Rep.
9	Yrene Mena	Director of Treasury & Finance	Ademi	Dom. Rep.
10	Daniel Ramirez	Product Development Manager	Ademi	Dom. Rep.
11	Mercedes Canalda de Beras-Goico	Executive President	ADOPEM	Dom. Rep.
12	Sonia Reyes Frias	Vice President of Finance & Accounting	ADOPEM	Dom. Rep.
13	Eva Carvajal	Vice President of Business	ADOPEM	Dom. Rep.
14	Elbin F Cuevas	Supervision Director	Monetary & Financial Adminsitraton	Dom. Rep.
15	Ivan Zuniga Orban	Chief Financial Officer	Lafise	Honduras
16	Jose Jorge Mondagron	Vice Manager of Retail Banking	Lafise	Honduras
17	Juan Euceda	Manager of Finance & Operations	ODEF	Honduras
18	Doris Mazariego	Manager of Operations, Finance & Administration	ODEF	Honduras
19	Maria Lydia Solando	Executive Director	Honduran Banking Association (AHIBA)	Honduras

20	Liana Fortin	Project Director	Honduran Banking Association (AHIBA)	Honduras
21	Violeta Zuniga de Godoy	Head of Studies	National Banking & Insurance Commission	Honduras
22	Miguel A. Escobar Castillo	Head of Studies & Financial Analysis	National Banking & Insurance Commission	Honduras
23	Mario Dehesa	Resident Representative in Honduras	IMF	Honduras
24	Alvaro Rocha Cerna	Chief Financial Officer	FAMA	Nicaragua
25	Julio Flores	General Manager	FDL	Nicaragua
26	Elizabeth Campos	Manager of Finance & Administration	FDL	Nicaragua
27	Claudia Patricia Ortiz Olivas	Fund Manager	Pro Mujer	Nicaragua
28	Tyrone Ahmed Largaespada Salgado	Head of Treasury	Pro Mujer	Nicaragua
29	Sonia Meza Allen	Director of Microfinance	Superintendence of Banks and Other FIs	Nicaragua
30	Juan Fernando Zalduendo	Resident Representative in Nicaragua	IMF	Nicaragua

ANNEX E: CLIENT MAPPING

MASSIF's Clients

LAFISE – Honduras (2008)
• In 2007, Honduras had a stable macroeconomic outlook with a growing financial sector, but access to international capital was scarce. • Competition from international banks increased, but LAFISE Honduras (Lafise) remained a small player focused on mortgages, credit cards and the corporate sector. • MASSIF's lending to Lafise (USD 7M Senior Loan and USD 5M Subordinated Loan) aimed to finance LCY (M)SME loans and strengthen Lafise's capital base.

FAMA – Nicaragua (2007)
• Nicaragua's financial sector was nationalized for years (since 1979), but got fully privatized by 2007. • FAMA's profitability and capitalization were healthy compared to its peer group and FAMA was growing at a rapid pace. • MASSIF's long term LCY funding (USD 4M Senior Loan) was aimed at enabling FAMA to be the first institution in Nicaragua to offer local currency financing to micro enterprises.

Locfund I – Bolivia (2006)
• In 2006, the capital market in LAC was weak with a relatively underdeveloped PE/VC market • Locfund I was a newly established fund with 4 key initial investors that aimed to provide local currency financing to tier 2 and tier 3 microfinance institutions across Latin America • Through MASSIF's lending (USD 2.5M Equity, USD 2.5 Subordinated Loan and USD 0.25M TA) and that of other investors, Locfund I was expected to have a positive impact on the economic development of the LAC region

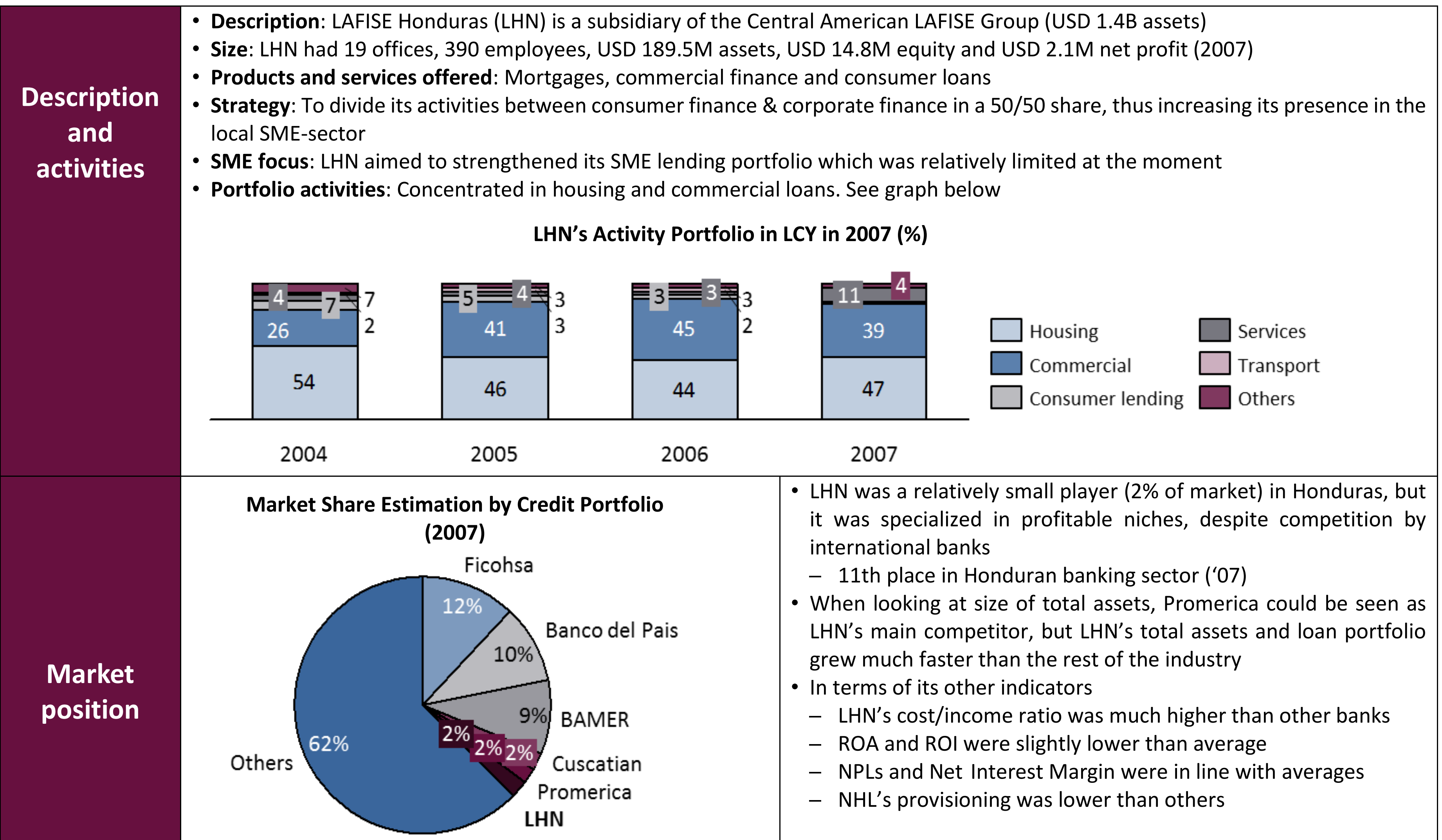
Locfund's Clients:

MFI/NGO	Country	Instrument	Year
ODEF	Honduras	USD 1.5M Senior Loan	2007
ADEMI	Dominican Republic	USD 1.5M Senior Loan	2008
ADOPEM	Dominican Republic	USD 1.5M Senior Loan	2009
Acorde	Costa Rica	USD 1.5M Senior Loan	2009
FDL	Nicaragua	USD 1.2M Senior Loan	2011
Pro Mujer	Nicaragua	USD 0.8M Senior Loan	2012

Client Mapping: LAFISE – Honduras (I/III)

Local Context (2008)	Financial Sector (2008)
Macroeconomic outlook • Rising interest rates and decreasing GDP growth between 2006 & 2007 meant the macro-economic environment was not benign – Consumer price inflation reached 8.9% in 2007 (outside of the Central Bank's 5-6% target) so the short-term policy interest rate was raised to 7.5% to face credit expansion – Diminishing exports to the US slowed down GDP growth in 2008 • The combination of high inflation with an appreciation of the currency challenged the competitiveness of Honduras – The Central Bank mitigated this risk by operating a crawling-peg rate (L18.90:USD1) **Regulation** • Honduras had one of the most conservative regulations in the LAC region, but recent consolidation induced harmonization – A larger risk-asset weight was assigned to dollar loans to discourage banks from extending foreign currency loans – The rate of increase in foreign currency lending slowed down since 2004, reflecting increasing currency stability and growing confidence in the Central Bank's monetary and exchange rate policies	**Financial sector outlook** • In 2007, the financial sector was one of the most dynamic sectors in Honduras – 18 banks (10 of which were owned by foreign banks) – USD 10.4B total assets and USD 153M total net profit – The aggregated credit portfolio grew by 34% (to USD 5.9B) from Dec 2006 to Dec 2007 – The average quality of the loan portfolio kept improving – the ratio of non-performing loans to total loans was 1.8% in 2007 • Currency risk management at many Honduran FIs was still perceived to be in an early stage – Low diversification, immature internal org. & business practices, vulnerability to external shocks – However, internationalization and consolidation were expected to improve practices and technologies, and increase competition and presence throughout the region **Level of SME access to appropriate financial services** • The spread between lending and deposit rate remained wide, limiting access to credit for SMEs • However, more banks were slowly starting to engage SMEs • Honduras had many MSMEs with high unmet demand – In 2004, Honduras had a over 0.5M MSMEs, representing 90% of total enterprises, 25% of GDP, 75% of poor population and 75% were located in urban areas – A study showed that Honduras could have 1M MSMEs in 2007 & 17-25% would have unsatisfied demand for credit

Client Mapping: LAFISE – Honduras (II/III)



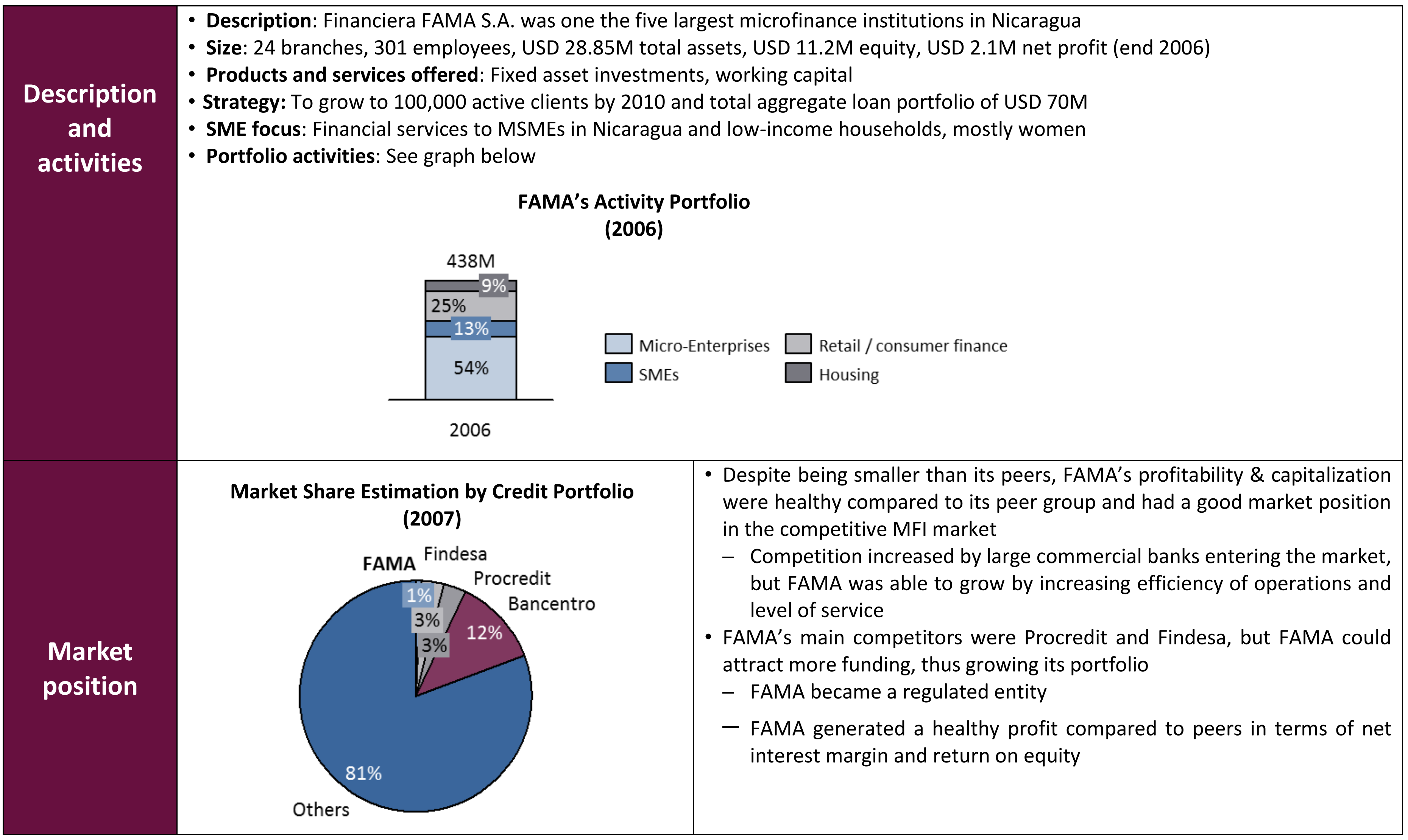
Client Mapping: LAFISE – Honduras (III/III)

MASSIF's objective	MASSIF's financing
• To provide LHN with stable long-term currency financing to (i) increase LCY financing to SMEs, and (ii) strengthen the capital adequacy by increasing the Tier II capital • In addition, MASSIF supported LAFISE Group Holding (LGH) and wanted to enter the country-based entities	**Instrument 1: USD 7M Senior Secured Loan** • **Currency**: Lempira • **Tenor**: 7 years • **Grace period**: 1.5 years • **Security**: First ranking pledge over the eligible sub-borrowers in the SME sector in the amount of 125% of the total loan principal (USD 7M) • **Price of the instrument**: Local base rate + 0.50% (~LIBOR + 2.25%) • **Hedge of the instrument**: Natural hedging (diversified across countries/currencies) **Instrument 2: USD 5M Subordinated Loan** • **Currency**: Lempira • **Tenor**: 10 years • **Grace period**: 7 years • **Security**: None • **Price of the instrument**: Local base rate + 2.50% (~LIBOR + 4.25%). Non-linear pricing grid in case of a change in country rating • **Hedge of the instrument**: Natural hedging (diversified across countries/currencies)

Client Mapping: FAMA – Nicaragua (I/III)

Local Context (2007)	Financial Sector (2007)
Political situation • In 2006, Daniel Ortega (Sandinista party) was elected President with 38% of the votes, and was expected to have a moderate socialist style of governing • By 2007, Ortega did not declare any measures that would adversely impact the entrepreneurial community so economic concerns were toned down **Macroeconomic outlook** • Total GDP growth was foreseen to be lower in 2007 (partially due to the uncertainty about Ortega's government), but spending levels were expected to remain stable – Uncertainty about Ortega's regime was expected to decrease GDP growth, but Ortega continuously sought to restore people's confidence in the economy and their spending – Steady rise in remittances and increased credit card spending were expected to contribute to sustainable spending levels – Inflation was expected to decrease gradually **Regulation** • Nicaragua's regulations were in line with the region, but they had sharpened on a number of points by 2007 – Capital adequacy ratio was increased from 8% in 1996 to 10% in 2007 – Minimum cash reserve was set at 16.25% – 15% of each year's net profit was added to legal reserve	**Financial sector outlook** • By 2007, Nicaragua's financial sector became fully privatized after being nationalized by the Sandinista government in 1979 – The sector consisted of the Central Bank, a second tier bank (FNI), 6 private banks, 1 finance company and 3 regulated micro-finance institutions (including FAMA) – The sector had USD 2.8 billion in total assets (end 2005) – The top 3 banks controlled 72% of the assets • The credit portfolio started to grow significantly – Total deposits were USD 2.17 billion or around 86% of total banking liabilities and grew with some USD 500M in 2005 – Despite the crisis period bankruptcies, no huge deposit outflow took place because guarantees were in place **FIs' access to appropriate funding for SME financing** • Long term LCY funding was not available to MSMEs in Nicaragua • In 2002, a microfinance law was approved, featuring ceiling on interest rates established monthly (~25% annually), but MFIs circumvented this law & increased fee rate above ceiling rate • Micro-finance was provided by both regulated institutions such as FAMA and by unregulated, supervised institutions

Client Mapping: FAMA – Nicaragua (II/III)



Description and activities

- **Description**: Financiera FAMA S.A. was one the five largest microfinance institutions in Nicaragua
- **Size**: 24 branches, 301 employees, USD 28.85M total assets, USD 11.2M equity, USD 2.1M net profit (end 2006)
- **Products and services offered**: Fixed asset investments, working capital
- **Strategy:** To grow to 100,000 active clients by 2010 and total aggregate loan portfolio of USD 70M
- **SME focus**: Financial services to MSMEs in Nicaragua and low-income households, mostly women
- **Portfolio activities**: See graph below

Market position

- Despite being smaller than its peers, FAMA's profitability & capitalization were healthy compared to its peer group and had a good market position in the competitive MFI market
  - Competition increased by large commercial banks entering the market, but FAMA was able to grow by increasing efficiency of operations and level of service
- FAMA's main competitors were Procredit and Findesa, but FAMA could attract more funding, thus growing its portfolio
  - FAMA became a regulated entity
  - FAMA generated a healthy profit compared to peers in terms of net interest margin and return on equity

Client Mapping: FAMA – Nicaragua (III/III)

<table>
<tr><th>MASSIF's objective</th><th>MASSIF's financing</th></tr>
<tr><td>

- MASSIF's credit was aimed to strengthen FAMA's LCY funding base and provide long term LCY capital in Nicaragua, especially within the lower end of the country's entrepreneurial community
  - MASSIF already provided capital to Nicaragua's largest MFI (Findesa) in 2005
  - MASSIF's strategy was to support the development of 2-3 strong MFIs in each one of its focus countries

</td><td rowspan="3">

Instrument: USD 4M Senior Secured Loan

- **Currency**: Cordoba
- **Tenor**: 5 years
- **Grace period**: 1 year
- **Security**: Pledge over part of FAMA's receivables – collateral pledge on borrowers sub loans in an amount at least equal to 130% of the outstanding amount
- **Price of the instrument**: 6 months Cordoba deposit rate + 6.75% margin
- **Hedge of the instrument**: Natural hedging (diversified across countries/currencies)

</td></tr>
<tr><th>Expected development impact and FMO's role</th></tr>
<tr><td>

Expected development impact

- FAMA was expected to (i) provide LCY to Nicaraguan MSMEs, (ii) have a demonstration effect (more MFIs were expected to start offering LCY products), (iii) reduce FAMA's FX exposure and that of its SME clients
- FAMA was expected to contribute to environmental awareness among its clients through its Environment and Social Management System
- FAMA supported social and community charities regularly

MASSIF's role

- Long term LCY funding was N/A in Nicaragua before, so MASSIF was expected to play a catalytic role in an increasing demand for LCY loans in the country and the region overall

</td></tr>
</table>

Client Mapping: Locfund I and Locfund's Capacity Development Facility – Bolivia (I/IV)

Initiators and Fund Management (2006)

Initiators and shareholders

- The initial investment into Locfund I of USD 21M was divided among the initial shareholders:
  - MASSIF (USD 5M): USD 2.5 equity and USD 2.5 subordinated loans
  - MIF (USD 10M): MIF is IADB's private sector arm. It was already a shareholder in 6 microfinance funds (Profund, Gateway, Lacif, Solidus, AIM (Accion) & ELF) which raised over USD 105M for 35 microfinance institutions, reaching 1,000 micro-enterprises
  - Norfund (USD 3M): Norwegian Development Financial Institution; invested risk capital in profitable private enterprises around the world; ~ USD 400M capital base (2006) & was expected to grow; was a lead investor in Lacif; had an office in Costa Rica
  - Gray Ghost (USD 3M): USD 75M for-profit fund dedicated to investing in MFIs; had USD 32.9M commitments in 13 investments (2005)

Fund management

- BIM managed the fund with hubs in Bolivia and Costa Rica
  - BIM had capital market experience and assisted Locfund with pricing, macro-econ. environment and structuring transactions
  - An MASSIF employee brought LCY lending expertise and knowledge of the microfinance sector to Locfund
  - The San Jose hub reached MFIs in Central America, Mexico and the Caribbean; The La Paz hub reached MFIs in South America
  - A Board of directors provided Locfund with advice and perspective, and contributed to the fund's image in the market
  - A TA donor committee decided over the TA allocation and budget, and monitored expenses and results

Track record

- Track record was N/A since the fund was new with a new team, but risk was mitigated by the experience of the individuals and BIM's well-established reporting and investor relations, in combination with MASSIF's experience in LCY lending
  - A MASSIF study showed that LAC was the best performing region over the last 20 years for LCY loans (positive return)
  - BIM had not managed a microfinance LCY fund before, but had the operational infrastructure in place to manage Locfund and produce financial statements

Client Mapping: Locfund I and Locfund's Capacity Development Facility – Bolivia (II/IV)

Locfund I

Investment policy and strategy

- Locfund aimed to extend LCY financing to MFIs in LAC, including LCY loans, as well as other instruments (e.g., local bonds, notes, syndicated loans etc.) in the range of USD 250,000 to USD 1.5M; medium term (1-5 years)
  - Locfund focused on small, second tier MFIs that were growing rapidly but had no capacity to attract LCY funding, were sustainable, and were willing to become regulated in the foreseeable future
  - It was diversified over many countries/debtors to lower currency risks with country limit of 25% for first 2 years followed by 15% in later years
  - The first phase focus countries were Mexico, Nicaragua, Honduras, Guatemala, Ecuador, Peru, Bolivia, Argentina and Brazil; followed by Haiti, Jamaica, Dominican Republic, Paraguay, El Salvador, Panama, Costa Rica and Colombia
- The potential market was large and was growing at a rapid pace
  - Main Latin American microfinance institutions had an aggregated credit portfolio of USD 5 billion and were growing at a 30-50% rate a year, reaching out to over 5 million micro-enterprises in the region
  - The Fund management team identified a pipeline of ~ 44 institutions that could demand LCY funds for on-lending purposes
  - The investment process was similar to MASSIF's (macro-economic environment analysis, market analysis & MFI fundamentals)
  - Locfund relied on different internal and external sources for deal origination, using the investors' networks

Structure

- Locfund I was organized as a limited partnership under Delaware law with Bolivian Investment Management, Ltd (BMI) as the management company, Mrs. Pilar Ramirez as daily fund manager and Enrique Herrera responsible for managing the Fund overall
  - BIM capitalized 50% of its pre-operating costs as equity in the Fund
  - The Fund had aggregate commitments of USD 21M from the core group and a maximum closing of USD 30M
  - The total term of the Fund was 7 years with extension possibilities for up to 2 additional one-year periods for orderly liquidation

Corporate governance

- A board of directors (5-9 experienced fund managers and microfinance experts), an independent audit committee, and a conflicts of interest committee were established and an internationally recognized public accounting firm was selected to audit the Fund

Client Mapping: Locfund I and Locfund's Capacity Development Facility – Bolivia (III/IV)

<table>
<tr><th rowspan="4">Description and activities</th><th>Locfund I</th></tr>
<tr><td>• Description: Locfund I was a newly established fund with 4 key initial investors (MIF, MASSIF, Norfund and private investor Gray Ghost) and managed by Bolivian Investment Management (BIM)
• Size: Two offices (main: Bolivia; hub: Costa Rica); USD 21M total assets (2006); maximum initial fund size of USD 30M
• Products and services offered: Medium-term LCY loans & other LCY debt instruments (e.g., local bonds, notes, syndicated notes, etc.) between USD 250,000 and USD 1.5M with natural hedging
• Strategy: To extend LCY financings to small and underserved MFIs in the LAC region
• Focus: Second tier MFIs in LAC that had limited or no capability to attract local funding, that were growing and that would like to transform into a regulated institution</td></tr>
<tr><th>Capacity Development (CD) Facility</th></tr>
<tr><td>• Description: Established by MIF (IADB), Norfund and MASSIF to (i) ensure proper implementation of LCY framework and methodology at the fund manager level; and (ii) strengthen the MFIs in areas like ALM, risk management, as well as environmental and social issues
• Size: USD 700,000 (MIF: USD 300,000; Norfund: USD 150,000; MASSIF: USD 250,000)
• Components: (i) Developed and disseminated LCY funding model for Locfund; and (ii) trained Locfund's MFIs in ALM and risk management</td></tr>
<tr><th>Market position</th><td>• Second tier MFIs in Locfund's target countries had limited or no capability to attract LCY funding
– The capital market was (and still is) underdeveloped in LAC
– MFIs in LAC were funded by DFIs instead of commercial banks so Locfund did not have any significant competition in the LCY lending market
– Locfund's peers were funds that Locfund's investors already support, such as Profund, Gateway, Lacif, Solidus, AIM (Accion) and ELF (Emergency Liquidity Fund)</td></tr>
</table>

Client Mapping: Locfund I and Locfund's Capacity Development Facility – Bolivia (IV/IV)

MASSIF's objective

- MASSIF invested USD 5M in Locfund to complement its existing product by providing financial services to the lower end of the market
  - Locfund offered MASSIF a solid pipeline of potential future clients
- The Capacity Development Facility had two objectives:
  - Ensure proper implementation of local currency framework and methodology at the fund level
  - Strengthen the MFIs in areas like ALM, risk management, as well as environmental and social issues

Expected development impact and MASSIF's role

Expected development impact

- Locfund was expected to reach out to over 35 fast-growing MFIs in over 10 LAC countries that MASSIF could not reach and contribute to their dev't
- Locfund was also dedicated to set up an Environmental and Social Management System to implement ESMS at each MFI and develop an E&S course to roll out to MFIs

MASSIF's role

- MASSIF was one of Locfund's initiators and played an important catalytic role in fundraising to set up Locfund
- MASSIF was expected to stay involved in fundraising using its contacts and network & provide references to other investors
- MASSIF had a board seat to monitor & transfer LCY knowledge (by providing an MASSIF employee for a min. of 1 year)

MASSIF's financing

Instrument 1: USD 2.5M Partnership Interest Equity

- **Currency**: USD
- **Tenor**: 7 years (2 year extension was possible)
- **Disbursement period**: 11/15/2006 – 11/15/2010
- **Hedge of the instrument**: The investment was funded from MASSIF and divided over relevant Latin American country limits; therefore country limits did not apply

Instrument 2: USD 2.5M Subordinated Loan

- **Currency**: USD
- **Tenor**: 7 years (repayment in 2 tranches in year 7)
- **Grace period**: 7 years
- **Disbursement period**: 11/15/2006 – 11/15/2010
- **Price of the instrument**: 8% fixed rate
- **Hedge of the instrument**: The investment was funded from MASSIF and divided over relevant Latin American country limits; therefore country limits did not apply

Instrument 3: USD 250,000 TA for Capacity Dev't Facility

- **Currency**: USD
- **Disbursement period**: 3 years

Client Mapping: ODEF – Honduras (I/II)

Local Context (2007)	Financial Sector (2007)
Political situation • In 2006, the Honduran authorities implemented policies that improved the economy's performance, with above-trend growth, moderate inflation, and a stronger external sector • Efforts were made to improve tax admin & enhance growth • However, in 2007 the overheating economy forced the Central bank to increase its reference rate **Macroeconomic outlook** • The economy performed well in 2006 (real GDP growth exceeded 5%), bolstered by a favorable external environment – Private consumption was fueled by strong remittances, while output in ag, construction & finance sector expanded – External current account deficit remained contained at ~ 1% of GDP, as higher remittances offset larger oil import bill – Net int'l reserves rose by USD 430M, but gross int'l reserves stayed constant at ~ 4½ months of imports – Public debt declined to ~ 40% of GDP (from 60% in 2005) **Regulatory framework for MFIs** • In early 2000s, the gov't passed a bill requiring debt forgiveness for ag. loans. It not only affected formal actors already financing ag, but also prevented others from investing in that sector • A new law (Ley de Microfinancieras) approved in 2000 allowed financial NGOs to become regulated as a new category (OPDF) – There were four OPDFs, but the law set a very restrictive legal framework, particularly regarding deposit mobilization – Some recently established OPDFs started looking to transform into a private finance company – Some non-regulated NGOs requested a license as financiera	**Financial sector outlook** • In '07, Honduras had many cooperatives & small village banks. A few banks also had a MFI component. Consumer credit was also gaining speed, as new foreign players entered the market – Comm. banks included state-owned Banadesa and two second tier state-owned FIs: Fonaprovi & Fonaders – The cooperative sector was huge and included two second-tier organizations: Facach & Finacoop – 58 NGOs were specialized microfinance organizations; 22 of them were associated with Redmicroh – SIFAR included multiple actors (e.g., 67 communal savings & loans associations, 963 village banks, 2,092 rural banks) • SIFAR orgs were small, weak, legally fragile, and couldn't offer large loans. But they represented an opportunity for MFIs to penetrate rural areas, especially with village bank technology **MSMEs and microfinance markets** • Honduras had many MSMEs with high unmet demand – In 2004, Honduras had a over 0.5M MSMEs, representing 90% of total enterprises, 25% of GDP, 75% of poor population and 75% were located in urban areas – A study showed that Honduras could have 1M MSMEs in 2007 & 17-25% would have unsatisfied demand for credit • Honduran MFIs serving to MSMEs – Honduras's 10 largest MFIs represented a total of 140,000 clients (Nicaragua's 10 largest MFIs had 240,000 clients) – Except for Finsol and ODEF, Honduran MFIs grew slowly – Many MFIs experienced governance problems

Client Mapping: ODEF – Honduras (II/II)

Organizational structure	Locfund's financing
Organización de Desarrollo Empresarial Femenino OPDF (ODEF) • **Description**: In 2007, ODEF was a regulated microfinance institution (MFI) operating in Honduras since 1985 • **Size**: 6 branches; 47,403 customers; total assets of USD 5.9Mn, USD 3.1M equity; loan portfolio of USD 5.1M (as of June 2012) • **Products and services offered**: ODEF offers credit and deposit services. It also works closely with its parent-NGO (OPDF) to provide non-financial services • **Strategy**: ODEF's main goal in the near future was becoming a private finance company, given the strong limitations regarding deposit mobilization that its legal status implied. Its second goals was to continue its institutional strengthening process (creation of a global risk assessment structure), further position itself in rural areas, and improve their product offering (consumer, housing and agricultural credit) • **SME focus**: A majority of ODEF's clients were in rural areas (four-fifth of portfolio) and peri-urban areas (including marginalized neighborhoods) • **Portfolio activities**: Solidarity/group loans (two-thirds of portfolio), individual loans and village banking (small portion) **Market position** • ODEF had a strong market position and had been in the market for many years, building up a strong name in Honduras – ODEF was the second largest MFI in Honduras and had a market share of 11% (portfolio wise) and 9% by number of clients – ODEF had 50% loan portfolio & 70% clients number of Finsol (largest MFI) • ODEF had good management and had been reinforcing its position through institutional strengthening, establishing more branches and products • By evolving into a regulated institution, it could eliminate several restrictions for its deposit mobilization and credit services	**Instrument: USD 1.5M Senior Loan** • **Currency**: Lempira • **Tenor**: 30 months • **Grace period**: 9 months • **Security**: The loan had no guarantees other than a promissory note (pagaré). ODEF did not have an important part of its portfolio pledged at the time (only 8%). The Locfund contract included mechanisms to control ODEF's portfolio pledge • **Price of the instrument**: Central Bank's reference rate + 6% margin (the reference rate was 8.04%, as of November 23) for a total rate of 14.04% **Intended value add of Locfund** • Locfund supported ODEF's expansion in rural areas and strengthened its position in the face of competition, allowing a lower concentration in sources of funding (from 28% to 17%) • The TA component supported ODEF's institutional strengthening, particularly in asset-liability management

Client Mapping: ADEMI – Dominican Republic (I/II)

Local Context (2008)	Financial Sector (2008)
Political situation • The Dominican Republic showed a clear recovery from the 2002-2004 crisis: prudent macroeconomic policies in a favorable external environment in 2007 restored confidence and delivered strong macroeconomic performance • The re-election of President Fernández in May 08 reassured the continuation of the Economic Team and prudent macro policies **Macroeconomic outlook** • Recovery from the 2002-2004 financial crisis was impressive: – Rapid econ. growth, single-digit inflation, falling debt ratios, robust external position, strengthened financial sector – Key structural reforms allowed for better planning, fiscal spending and debt control – Electricity theft and fraud were criminalized, reducing the electricity sector's need for budgetary support • Reduction in international food and energy prices improved Dominican terms of trade and reduced pressure on the fiscal and external current accounts • Foreign direct investment was growing • The restrictive fiscal measures allowed the Central Bank to increase the flexibility of its monetary policy **Regulatory framework for MFIs** • Local Legislation had no specific legal status for MFIs – Most MFIs had chosen a non-regulated status (NGO or credit union); a few evolved into a regulated institution and were allowed to mobilize deposits (e.g., Credit Corporation, Savings & Loan Bank, a multiple bank)	**Financial sector outlook** • The formal financial sector was constituted by 67 orgs – ADEMI & ADOPEM were the only banks serving MSMEs – Credit corporations could also mobilize deposits and many of them were located in rural areas • In principle all financial institutions were regulated, but only banks were exposed to a more rigorous supervision – Credit corporations (Superintendence) only conducted one on-site visit at the beginning, then did desk supervision, with info sent by institutions periodically • The main non-regulated players were credit unions and NGOs – Credit unions benefited for many years of a long-term USAID project for institutional strengthening – Lobbying avoided the regulation of credit unions by the Superintendence **MSMEs and microfinance markets** • The MSME sector grew by ~100% between 2000-2006 (reaching over 600,000) & absorbed the labor force expelled from the formal sector • The Dominican microfinance market was highly underserved, with space for current and new MFIs to grow • Int'l microfinance actors were planning to enter the market, posing a threat to the industry and increasing competition

Client Mapping: ADEMI – Dominican Republic (II/II)

Organizational structure	Locfund's financing
Banco de Ahorro y Crédito ADEMI (ADEMI) • **Description**: ADEMI was constituted as a Banco de Ahorro y Crédito in 1983. It was once one of the best MFIs in LatAm, but went through a stand-still in the early 2000s, then started to advance at a more firm pace • **Size**: 33 branches; 197 business officers; total assets of USD 162M, total liabilities of USD 139M, USD 24M of equity, loan portfolio of USD 138M and net income of USD 3.3M (as of September 2008) • **Products and services offered**: credit, deposits, credit cards, insurance, remittances • **Strategy**: It was still dominated by institutional strengthening: (i) reduce costs; (ii) launch a training center for business & operations personnel; (iii) increase size & outreach – 200,000 credit clients & USD 200M portfolio by 2010, stronger presence in the North, establish alliances with non-banking institutions; and (iv) offer other services (credit card, foreign currency transactions and agricultural credit) • **SME focus**: ADEMI wanted to reach more micro enterprises **Market position** • ADEMI had a leading position in Dominican microfinances • Competition depends on region, services and MFI size. Some competitors: – ADOPEM (stronger when providing credit services to micro enterprises) – SME niche: Banco Popular and Banreservas (Servicing SMEs) – Outside Santo Domingo: credit corporations, credit unions & FONDESA – Deposit mobilization: Banreservas, Banco Popular and Banco del Progreso	**Instrument: USD 1.5M Senior Loan** • **Currency**: USD • **Tenor**: 4 years • **Grace period**: 1 year • **Security**: The loan did not have guarantees. The operation was covered by a promissory note (*pagaré*). ADEMI had 0% of its credit portfolio pledged. • **Price of the instrument**: Central Bank's reference rate + 4.5% margin (the reference rate was 14.64%, as of Nov 28, for a total rate of 19.10%) **Intended value add of Locfund** • Locfund helped ADEMI increase and diversify its funding portfolio • Locfund's TA component supported ADEMI's institutional strengthening, particularly in financial asset-liability management and global risk administration

Client Mapping: ADOPEM – Dominican Republic (I/II)

Local Context (2009)	Financial Sector (2009)
Political situation • The Dominican Republic showed a clear recovery from the 2002-2004 crisis: prudent macroeconomic policies in a favorable external environment in 2007 restored confidence and delivered strong macroeconomic performance • The re-election of President Fernández in May 08 reassured the continuation of the Economic Team and prudent macro policies **Macroeconomic outlook** • Recovery from the 2002-2004 financial crisis was impressive: – Rapid econ. growth, single-digit inflation, falling debt ratios, robust external position, strengthened financial sector – Key structural reforms allowed for better planning, fiscal spending and debt control – Electricity theft and fraud were criminalized, reducing the electricity sector's need for budgetary support • Reduction in international food and energy prices improved Dominican terms of trade and reduced pressure on the fiscal and external current accounts • Foreign direct investment was growing • The restrictive fiscal measures allowed the Central Bank to increase the flexibility of its monetary policy **Regulatory framework for MFIs** • Local Legislation had no specific legal status for MFIs – Most MFIs had chosen a non-regulated status (NGO or credit union); a few evolved into a regulated institution and were allowed to mobilize deposits (e.g., Credit Corporation, Savings & Loan Bank, a multiple bank)	**Financial sector outlook** • The formal financial sector was constituted by 67 orgs – ADEMI & ADOPEM were the only banks serving MSMEs – Credit corporations could also mobilize deposits and many of them were located in rural areas • In principle all financial institutions were regulated, but only banks were exposed to a more rigorous supervision – Credit corporations (Superintendence) only conducted one on-site visit at the beginning, then did desk supervision, with info sent by institutions periodically • The main non-regulated players were credit unions and NGOs – Credit unions benefited for many years of a long-term USAID project for institutional strengthening – Lobbying avoided the regulation of credit unions by the Superintendence **MSMEs and microfinance markets** • The MSME sector grew by ~100% between 2000-2006 (reaching over 600,000) & absorbed the labor force expelled from the formal sector • The Dominican microfinance market was highly underserved, with space for current and new MFIs to grow • Int’l microfinance actors were planning to enter the market, posing a threat to the industry and increasing competition

Client Mapping: ADOPEM – Dominican Republic (II/II)

<table>
<tr><th>Organizational structure</th><th>Locfund's financing</th></tr>
<tr><td>

Banco de Ahorro y Crédito ADOPEM S.A. (ADOPEM)

- **Description**: ADOPEM was first established as an NGO in 1982, then became a regulated microfinance institution (MFI) operating in the Dominican Republic
- **Size**: 32 branches; 224 business officers; total assets of USD 56M; total liabilities of USD 44.8M; USD 11.2M of equity; loan portfolio of USD 40.3M; net income of USD 1.6M (as of May 2009)
- **Products and services offered**: credit, deposits, insurances, remittances (credit cards were permitted but not yet offered as of 2009)
- **Strategy**: institutional strengthening: (i) improve training; (ii) increase size & outreach – serve all cities, become the largest MFI by 2013, reach more women and rural areas; (iii) offer other services (develop housing and SME products); and (iv) improve risk administration
- **SME focus**: ADOPEM's traditional focus was on microenterprises (average loan size was USD 400) and wanted to increase its focus on small enterprises

Market position

- ADOPEM had a leading position in the Dominican microfinance industry
  - Largest MFI clients-wise and second largest measured by loan portfolio
- Competition depended on region, services and enterprise size
  - ADEMI was a permanent competitor in all areas and became a stronger competitor after deciding to strengthen its microcredit niche
  - NGOs competed with ADOPEM for the microenterprise market in their region of influence, but they were not fierce competitors
- Between 2006 and 2008, ADOPEM's loan portfolio grew at an average rate of 52% per year (43% in number of clients), which was much higher than its main rival, ADEMI

</td><td>

Instrument: USD 1.5M Senior Loan

- **Currency**: USD
- **Tenor**: 4 years
- **Grace period**: 1 year
- **Security**: The loan did not have guarantees. The operation was covered by a promissory note (*pagaré*). ADOPEM had 0% of its credit portfolio pledged.
- **Price of the instrument**: Central Bank's reference rate + 6% margin (the reference rate was 5.9%, as of June 26th, for a total rate of 11.9%)

Intended value add of Locfund

- ADOPEM increased and diversified its funding
- Locfund's TA component supported ADOPEM's institutional strengthening, particularly in financial asset-liability management and global risk administration

</td></tr>
</table>

Client Mapping: FDL – Nicaragua (I/II)

Local Context (2011)	Financial Sector (2011)
Political situation • President Ortega was re-elected in '11 for another 4 years • There were accusations of fraud by local leaders and international concerns about lack of transparency • The unconstitutional candidacy of President Ortega was the result of weak and politicized institutions in Nicaragua, which affected the Supreme and Electoral Courts, among others **Macroeconomic outlook** • The Nicaraguan economy grew strongly in the first half of 2011 despite deteriorating global conditions – Foreign investment inflows & official borrowing were expected to more-than-finance the high external current account deficit & contribute to reserve accumulation in '11 – Authorities' policies enhanced the resilience of the economy against downside risks • However, int'l commodity price developments posed risks – Inflation increased due to upswing in int'l food & oil prices – Projected external current account deficit also increase – But real GDP was still expected to grow by 3.5% (from 3%) **Regulatory framework for MFIs** • A microfinance law for regulating financial NGOs was approved in June 2011 and was implemented in 2012, focusing on: – Supervision, governance, social audits, risk admin, transparency, abolition of interest rate ceilings, client rights	**Financial sector outlook** • After declining in 2010, bank credit (real terms) recovered in 2011, with lending to agriculture and trade gaining strength – The share of nonperforming loans fell to 8% in 2011 – The average return on assets returned to 1% in 2011 (from close to zero in mid-2010) – Deposits in local and foreign currency continued to rise, in part fueled by foreign aid flows • The Nicaraguan banking system remained generally sound – Banks were well capitalized, profitability continued to improve, and liquidity buffers remained ample – Authorities intend to step up their efforts to improve coordination & information exchanges with other regional supervisors, and to monitor volatile aid-related deposits **MSMEs and microfinance markets** • Nicaragua had 24 MFIs (22 NGOs, ProCredit Bank & FAMA), but crises reduced demand & deteriorated portfolio quality – 70,000 less clients were financed between 2008 and 2010 – One of the three regulated MFIs disappeared (BANEX) – Several microfinance NGOs got in technical bankruptcy • Some of the major issues that affected Nicaragua's MFIs were: – External shocks: global crisis (lower aggregate demand due to lower remittance, foreign investment, export & tourism); decline in cattle purchases & prices; storms; etc. – Recession hindered MSMEs' sales and ability to pay loan – MFIs lacked risk admin. (e.g., avoiding focus on cattle)

Client Mapping: FDL – Nicaragua (II/II)

Organizational structure	Locfund's financing
Fondo de Desarrollo Local (FDL) • **Description**: FDL was a non-regulated microfinance institution (MFI) operating in Nicaragua since 1993. It used to operate as an NGO, but started the process to become regulated as a Financiera in 2013 • **Size**: 36 branches; 60,809 clients; total assets of USD 67.3M; USD 10.8M of primary equity, loan portfolio of USD 57.3M (as of Sep 2011) • **Products and services offered**: credit, deposits, insurances, remittances • **Strategy**: FDL was focused on improving the credit process and then becoming a regulated MFI by (i) strengthening its credit technology; (ii) formalizing its operations; and (iii) building alliances with non-financial actors to have small offices that facilitated promotion and that were close to clients • **SME focus**: rural (mostly agricultural), small and medium entrepreneurs with a focus on women (50% of its clients as of Dec 2014) **Market position** • FDL had a strong market position in Nicaragua as of December 2013 – It had the biggest portfolio among its competition (20% of total market) – It had 30% of total number of clients in the Nicaraguan market • FDL competed with most MFIs given its national outreach – FDL's main competitors were Financiera Fama, Financiera Finca Nicaragua, Pro Mujer Nicaragua and Financiera Fundeser – Its fierce competitors were Prestanic (also had a widespread rural operation), FAMA (well located in urban areas) and ProCredit (decided to concentrate in niches of larger average loan size)	**Instrument: USD 1.2M Senior Loan** • **Currency**: Córdoba • **Tenor**: 3 years • **Grace period**: 9 months • **Security**: The loan had no guarantees other than a promissory note (*pagaré*). FDL pledged 26% of its credit portfolio and the contract included a *pari passu* clause, in case the portfolio pledged was equal or above 50% • **Price of the instrument**: Central Bank's reference rate + 9.87% (reference rate was 2.26% as of Sep 2011, for a resulting initial return of 12.13% in LCY) **Expected Locfund value add** • FDL increased its funding, thus satisfying all the demand it was confronting and improving its mid-term liquidity management • Locfund's TA facility supported FDL's institutional strengthening, especially in financial asset-liability management • Locfund also supported FDL in corporate governance and global risk administration, as it moved toward a regulated status

Client Mapping: Pro Mujer – Nicaragua (I/II)

Local Context (2012)	Financial Sector (2012)
Political situation • The transparency of President Ortega's re-election in '11 was highly criticized by international observers and there were concerns about the municipal elections to be held in Nov 2012 • The Sandinista National Liberation Front had a comfortable majority in Congress and a great influence on the judiciary **Macroeconomic outlook** • Nicaragua's performance in 2011 was better than anticipated, but production growth was forecast to moderate in 2012, given the weak global economy – The increase in oil prices were a major risk in the short term – Income tax collections were expected to remain strong although expenditure-side pressures were accumulating • Key fiscal risks in '12 were increases in electricity subsidies & in current spending, including salary bonds (part of the wage bill) • However, the external financing flows were maintained in order to finance large deficits in the trade balance and current accounts, thus protecting the external viability of Nicaragua, foreign donors funds and international financial institutions • Under current policies, growth was estimated to stabilize at 4% – This growth did not result in higher poverty reductions – Increasing productivity was needed to achieve a higher rate – Fiscal and external vulnerabilities had to be reduced **Regulatory framework for MFIs** • In Jan 2012, a law to regulate financial NGOs was established	**Financial sector outlook** • Nicaragua's regulated financial sector faced the global crisis better than expected and exhibited indicators (e.g., liquidity) in line with international best practices – Banks' financial statements continued to be strong – Bank credit, especially in trade and agriculture, grew, particularly towards the end of 2011 **MSMEs and microfinance markets** • Nicaragua had 24 MFIs (22 NGOs, ProCredit Bank & FAMA), but the *No Pago* movemebt reduced demand & deteriorated portfolio quality – One of the three regulated MFIs disappeared (BANEX) – Several microfinance NGOs got in technical bankruptcy – After having 10 credit worthy orgs, a handful remained • Some of the major issues that affected Nicaragua's MFIs in addition to the *NO Pago* Movement were: – External shocks: global crisis (lower aggregate demand); decline in cattle purchases and prices; storms; etc. – Recession hindered MSMEs' sales and ability to pay loan – MFIs lacked risk admin. (e.g., avoiding focus on cattle) • However, by the time Locfund gave Pro Mujer the loan, the strongest impact of the international crisis was already over – Livestock prices rose again to attractive levels – The bulk of the industry had a positive expectation about the new law, hoping state supervision would reduce threats

Client Mapping – Pro Mujer (II/II)

<table>
<tr><th>Organizational structure</th><th>Locfund's financing</th></tr>
<tr><td>

Pro Mujer Nicaragua

- **Description**: In 2012, Pro Mujer was an unregulated microfinance institution (MFI) operating in Nicaragua since 1996
- **Size**: 10 branches; 268 employees; 47,403 customers
- **Products and services offered**: group loans, and training and health services
- **Strategy**: Pro Mujer's medium-term strategy was to expand its geographic coverage, diversify products (develop agricultural and livestock credit), improve quality of life and empowerment of its associates, and achieve customer loyalty
- **SME focus**: mostly micro enterprises in rural areas
- **Portfolio activities**: Pro Mujer offered (i) microcredit (over 90% of the loan portfolio); (ii) opportunity credit or credito de Tinajita (to seize business seasons such as Easter, Mother's Day, Independence Day); and (iii) housing loans (improvement, expansion and progressive construction)

Market position

- Pro Mujer, like the other MFIs in Nicaragua, was in recovery & revival
- Pro Mujer faced aggressive competition from FAMA & FINCA, which were giving group loans and granting loans in larger amounts and longer terms
- After experiencing a contraction in 2009, Pro Mujer quickly recovered from the rest of the sector and kept growing with a loan portfolio of good quality
  - It expanded its products offered in health services and in remote areas
  - It piloted other financial products (e.g., individual housing loans) to keep clients who had attained a new maturity in handling credit and had improved their economic conditions

</td><td>

Instrument: USD 0.8M Senior Loan

- **Currency**: Córdoba
- **Tenor**: 4 years
- **Grace period**: 1 year
- **Security**: The loan had no guarantees other than a promissory note (*pagaré*). FDL pledged 12.6% of its credit portfolio and the contract included a *pari passu* clause, in case the portfolio pledged was equal or above 40%
- **Price of the instrument**: Monthly weighted average deposit rate of 3 months in Cordoba to banks + 12.5% (the reference rate was 2.02%, as of August 2012, for a total rate of 12.5% in Local Currency

Expected Locfund value add

- Locfund optimized Pro Mujer's liquidity management to meet the medium-term payment requirements and improve its currency matching position
- The TA component supported Pro Mujer in improving its risk management

</td></tr>
</table>

Sources: "Finance Proposal Banco LAFISE, Costa Rica & Honduras," LAC, 2007; "Finance Proposal FAMA Financiera, Nicaragua," LAC, 2007; "Financing proposal USD 2.5 mln subordinated notes LAC MFI Local Currency Fund (Locfund) form MASSIF, XL00016," LAC, 2006; LocFund's proposals for ODEF, ADEMI, ADOPEM, FDL and Pro Mujer (2007-2012); BIMInvestments.com; World Bank data; OANDA; Central America Data, Dalberg analysis

Client Mapping: Acorde – Costa Rica

Local Context (2009)

Political and economic situation

- Costa Rica's political stability, relatively high education levels, and the incentives offered in the free-trade zones attract foreign investors
- Costa Rica has attracted one of the highest levels of foreign direct investment per capita in Latin America, but many business impediments remain such as high levels of bureaucracy, legal uncertainty due to conflicting responsibilities between agencies, and weak investor protection

MSMEs and microfinance markets

- MSMEs are served by state banks, private banks, NGOs, S&LC among others.
  - State banks' national development programs had a loan portfolio of USD 2,891M in 2008
  - The cooperative sector had a loan portfolio of USD 1,322M in 2008
  - MFIs are limited due to the strong competition from state banks and cooperative
- In Costa Rica, state banks play an important role in financing (M)SMEs, such as Banco Nacional de Costa Rica
  - Costa Rica has the strongest state financial programs in Central America

Organizational structure

Asociación Costarricense para Organizaciones de Desarrollo (ACORDE)

- **Description:** Acorde is an unregulated NGO operating in Costa Rica since 1987 with the mission of being a change agent for the generation of wealth and entrepreneurship to MSEs
- **Size**: 1 office (4 branches as of 2012); ~450 (M)SME customers; USD 35.5M assets in 2009
- **Strategy**: In 2009, Acorde wanted to redefine the strategic course of its micro and small enterprise sector, in which it predicted to have the most growth, so it wanted to open offices that provide integrated service to support microenterprises
- **SME focus**: mostly micro and small enterprises in urban and semi-rural areas

Market position

- Most MFIs are set up as non-regulated NGOs, which tend to be small and undercapitalized; they have little incentive to formalize or expand, given limited opportunities in the market.
- Acorde and Adri are the main actors within the NGO microfinance market in Costa Rica
- Regulated FIs generally adhere to strict accounting and internal management

Locfund's financing

Instrument: USD 1.5M Senior Loan

- **Currency**: Colones
- **Tenor**: 4 years
- **Security**: The loan had no guarantees other than a promissory note (*pagaré*)
- **Price of the instrument:** Central Bank's reference rate + 8.5%

Expected Locfund value add

- Locfund increased and diversified Acorde's funding
- The TA component supported Acorde in improving its risk management

ANNEX F: TOR

FMO ex-post Effectiveness Study

Local Currency Financing of (M)SME Financial Institutions in Central America

Terms of Reference
December 2014

Background of the Evaluation

The Netherlands Development Finance Company (FMO) supports the private sector in developing countries and emerging markets in Asia, Africa, Latin America and Central and Eastern Europe. FMO does this by providing loans, participations, guarantees and participating in other investment promotion activities. FMO currently (end 2013) has a committed portfolio of EUR 6.6 bln. The goal is to contribute to the structural and sustainable socio-economic development in these countries and, together with the private sector, obtain healthy returns.

Apart from financing activities from its own balance sheet, FMO manages several Private Sector Development (PSD) programs on behalf of the Dutch government. One of these programs is MASSIF, which was established in 2006 as a successor fund of the Small Enterprise Fund, the Seed Capital Fund and the Balkan Fund. It has been set up to contribute, by means of a revolving fund, to constructing and improving the financial infrastructure in developing countries, aimed at serving entrepreneurs and consumers at the lower end of the financial market. As shown in the MASSIF Theory of Change in annex I, MASSIF financing seeks to contribute to:

- Poverty alleviation, by generating jobs and incomes through local enterprise financing;
- Financial sector development, by offering long term finance that is additional to other funding, improving financial institutions' risk profile (helping to attract further financing), and thus their ability to provide more – and more appropriate – financial services/products (particularly credit) to their clients;
- Implementation of good governance principles and sustainable environmental and social development.

The fund has a total committed portfolio consisting of over 120 projects, with an outstanding amount of EUR 325 mln by the end of 2013. Financing activities of the fund include the provision of equity, subordinated loans and medium to long term credit to banks with an SME focus, microfinance institutions, other nonbank financial institutions (such as leasing companies) and small enterprise investment funds. Both Asia and Africa make up one third of the MASSIF portfolio, the remaining third having been provided to globally operating funds and to/through financial institutions in Latin America and in the Eastern Europe and Central Asia region.

To date, there is little direct evidence available of the effect of financial services provided by financial intermediaries on (M)SME borrowers' growth, employment and profitability. The extent to which financing assists the financed intermediaries' ability to successfully expand their (M)SME-lending neither is investigated thoroughly. When considering Local Currency (LCY) financing only a few studies can be found. To add more evidence with regards to LCY financing, a cluster of MASSIF investments in financial intermediaries in Central America has been identified, to investigate the effect and advantages of LCY financing.

1. Objectives, evaluation questions and methodology

1.1 Main-assignment: Local Currency Financing and Financial Inclusion

Objectives

It has been decided to focus this study on (M)SME intermediaries that are financed by Local Currency because it is one of MASSIF's aims to provide this type of financing which is scarcely available in emerging markets. When available, this is typically only for short durations and therefore tenors of (M)SME's loan will be short. When financed by hard currency, the FI will be exposed to a currency mismatch, leading to high risk and/or high costs of hedging currency risks, or intermediaries would pass on the exchange risk to their (M)SME clients.

Effectiveness

The primary objective of the study is to assess MASSIF's support to financial intermediaries and the effectiveness of Local Currency (LCY) financing in terms of expanded and/or improved provision of financial services to (M)SME's. MASSIF's long term LCY financing is expected to lead to:

a) improved availability of LCY finance,
b) more appropriate LCY financing products for (M)SMEs (e.g., duration, scope of financing), and
c) increased access to LCY financing for new target groups, sectors and regions that differ from those reached with hard currency financing.

Additionality

A secondary objective is to address the additionality of FMO financing at (a) Financial Institution (FI) level and (b) product portfolio level.

At FI level FMO would like to know to what extent the FMO financing was crucial for the FMO client's development and clients' financial inclusion. Most FMO clients cannot find long-term LCY financing on workable terms & conditions from commercial parties in the market or LCY financing at all. Another aspect of additionality is that the FMO financing might contribute to an improvement of the capital ratio due to which the risks profile of the FI changes. In most cases this leads to the opportunity to attract additional debt financing which is used for further expansion of loan portfolios.

At product portfolio level FMO would like to investigate whether the LCY financing to FIs led to different financial products in the market compared to financial products of FIs financed with hard currency financing. FMO LCY financing might lead to LCY products with longer tenors for (M)SMEs that do not generate foreign exchange. This might facilitate investments financing which is mostly longer term compared to working capital financing which is mostly short term. Does this lead to a competitive advantage for Intermediaries which are financed with MASSIF LCY and can offer LCY loans?

Attribution

The evaluation should consider to what extent the development results can be attributed to FMO. In other words, can it be concluded that the established change in development effects has been caused by the FMO financing (or a similar form of financing) or that the FMO financing at least contributed to the established results? Therefore, ideally, the results of the FMO clients - and their financial products - should be compared with benchmarks in the region, for example statistic data at country level.

Sample

The scope of the study is defined by the following FMO clients that have been financed by MASSIF in Local Currency financing in Central America (see case studies in Annex II):

- Locfund (and three to four of its clients in Guatemala, Nicaragua and Honduras)
- Banco Lafise SA (Honduras)
- Financiera Fama (Nicaragua)

One of the FMO clients in the evaluation sample, Locfund, is financed with equity, while its goal is to provide LCY financing to small Microfinance Institutes (MFIs) that serve (M)SME end-users. Thus, compared to the other Financial Institutions in the sample, Locfund is one step further away from the end clients. FMO will include Locfund's client MFIs (indirectly supported by FMO), in the study.

While a quantitative data collection for the assessment of effects at the final beneficiary level is beyond the scope of this study, the evaluation will clarify causal relationships between (M)SME banks and final beneficiaries in terms of employment creation and (M)SME revenues. Only if the FI has quantitative data available at beneficiary ((M)SME) level, then effects at this level will be considered as well.

Key Evaluation Questions

The evaluation questions focus mainly on the relevance, effectiveness and additionality of MASSIF / Locfund support to financial intermediaries. The questions are related to the above mentioned objectives of the study:

- To what extent were anticipated effects of the FMO LCY financing in line with MASSIF / Locfund objectives and aimed at resolving local constraints for access to financial services? How relevant were MASSIF inputs to the intermediary?
- Does the LCY product bring (financial) benefits for the FMO client (the intermediary) which recover the charge for the LCY feature? Does LCY help to reduce risks at FI level and how?
- How has provision of financial services to (M)SMEs improved as a result of FMO's LCY financing? Did any side effects occur?
- What are the effects of different LCY instruments and different conditions on intermediaries' incentives and performance with regard to improving access to finance for (M)SMEs?
- Did the risk profile of the FI fall as they were provided with LCY?
- To what extent has MASSIF / Locfund LCY financing helped intermediaries to (simultaneously or subsequently) raise additional funds and / or strengthen the internal organization?
- Are the loan benefits for the FMO client passed over to their clients (alignment in tenors and pricing (fixed/floating))? Are FMO's LCY products well structured, or could it be improved in certain ways to further benefit the client? Have (M)SME client performance ratios improved? Or has their ratings changed?
- Additionality of funding:
    a) To what extent has the MASSIF / Locfund LCY financing been financially additional? Were there commercial players in the domestic or international market which could also have provided appropriate financing on workable terms? Or was the financing additional in terms of risk taking (e.g., providing equity or subordinated debt financing due to which capital ratios became healthy and due to which more debt could be attracted for expansion)?
    b) Did MASSIF / Locfund LCY financing lead to providing additional financial products reaching additional sectors and/or target groups in the local market?

Methodology

FMO expects the following components to be part of the effectiveness study.

I Mapping of client cases

For all projects cases, the background and objectives shall be mapped. This includes:

- the project objectives as stated in the finance proposals,
- a portrait of the respective intermediaries and their ((M)SME market) position in the country's financial sector,
- a brief project description, including the terms and conditions of MASSIF funding provided, as well as the national and regional situation regarding (a) financial intermediaries' access to appropriate funding for (M)SME financing and (b) (M)SMEs' (constraints in) access to appropriate and responsible financial services.

II Evaluation of ex-ante assessment FMO

The evaluation team is expected to assess the extent to which the effects of MASSIF support on provision of financial services to (M)SMEs and on institutional strengthening, as anticipated ex-ante, have been correctly and realistically assessed. This can be based upon a review of documents supplied by FMO. Expected development effects may be mapped and can be related to the DAC criteria[1]. If expected effects were insufficiently spelt out or quantified, efforts shall be made to reconstruct the intervention logic post facto.

[1] http://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm

III Literature review

In order to place clients and their performance in the local context, a literature review of the respective financial sectors and existing bottlenecks shall be done. Furthermore a literature review on particularly (M)SME sector development via supply-side approaches (with reference to local currencies) shall be done in order to get a good view on which approaches are generally considered successful and to help specify relevant hypotheses. As a result, the evaluation team will produce a refined intervention logic, which will constitute the basis for further empirical work in this evaluation.

IV Ex-post evaluation based on research questions

Evaluation questions shall be set out in an evaluation design matrix, outlining how the study seeks to answer each of the questions, the measures and/or indicators to be used, the data (from FMO, their intermediary clients, others) to be obtained and analyzed, and the design/methods to be employed.

V Benchmarking

The consultant shall analyze to what extent the actual developments can be attributed to the financing and other support offered by MASSIF. The evaluation team will explore if they can identify a group of non-partner institutions (comparison group or benchmark data on type of financial products when financed with HCY) to compare the effects of MASSIF with (at FI level). A field visit to Central America (accompanied by a FMO representative) is to be undertaken in order to provide a more nuanced understanding of the facts.

VI Distil Lessons Learned

Apart from assessment on the project level, the evaluators will distil lessons learned for (M)SME banking in general, and, more specifically, for the MSME banks being investigated and LCY financing.

1.2 Sub-assignment: Currency risks in Local Currency Funds

Objectives

A further aspect to be investigated is Locfund's vs MASSIF's pricing and diversification strategy (e.g., how are currencies correlated), through which it is able to take on currency risks. Instead of hedging currency risks via derivatives, currency risks for both funds are mainly mitigated through diversification of the LCY loan portfolio (limits in country exposure). For Locfund hedging only takes place in case of more than 10% country exposure (up to a maximum of 15%). The two methods (MASSIF vs Locfund) need to be compared and lessons learned will be drawn. Next to that a comparison with principles of TCX (The Currency Exchange Fund which was partly initiated by FMO) will be made.

Key Evaluation Questions

- What can be learned from Locfund's strategies vis-à-vis TCX pricing (which is also used as a reference to determine MASSIF pricing)?
- How does Locfund's methodology and pricing (LCY base rate + margin) compare to TCX quotes/ pricing provided to similar (or in some cases the same) clients?
- Is Locfund's pricing more competitive than TCX pricing, and if so, does Locfund's pricing still provide adequate compensation for the currency risk?
- How does the MASSIF currency risks (diversification) model perform compared to the Locfund model?

Methodology

I Literature review

A literature review of pricing and diversification strategy for local currency risks of funds will be done.

II evaluation based on research questions

Evaluation questions shall be set out in an evaluation design matrix, outlining how the study seeks to answer each of the questions, the measures and/or indicators to be used, the data to be obtained and analysed, and the design/methods to be employed.

III Distil Lessons Learned

The evaluators will distil lessons learned for (ricing and diversification strategy for local currency risks of (LCY) funds.

2. Target audience

The scarcity of available evidence on the effectiveness of support for (M)SME lending, specifically through providing LCY funding to intermediaries, should make the study highly relevant to FMO and other DFIs. The evaluation is also aimed at other stakeholders, particularly the Dutch government, to inform them on the effectiveness of operations in support of access to (M)SME credit. Results will also be used for broader external communication purposes.

3. Responsibilities and duties

The evaluation is managed by a steering committee, consisting of at least a member of FMO's Evaluation Unit (main contact), the MASSIF fund manager and an Investment Officer. An independent Evaluation Advisory Panel is in place, consisting of external evaluation experts, which will comment on (draft) evaluation study reports received. Ultimately, the steering committee is responsible for contracting, monitoring and final acceptance of the deliverables. The evaluation team will report directly to the steering committee.

FMO and Locfund will support the evaluation team in organizing field visits and will participate in the visit. It is the responsibility of the evaluation team to set up travel arrangements and arrange meetings. Furthermore, FMO will be responsible for providing the evaluation team with all relevant documentation on the projects, and for securing the cooperation of the clients with the evaluation team's assessment.

4. Profile of the evaluation team

The evaluation team is preferred to possess the following knowledge or experience:

- Independent expertise in financial sector development, private sector development and (M)SME development.
- Prior and relevant experience (with the financial sector) in Central-America;
- Prior experience in working with Development Finance Institutions.
- Expertise on Currency Exchange risks and (on balance and off-balance) hedging techniques.
- Fluency in Spanish.

Within the evaluation team, one expert shall function as team leader, being in charge of coordinating the setting up of a detailed evaluation methodology, of drafting the final evaluation report including an analysis of the overall sector-oriented lessons learnt, and of maintaining good communication with members of the steering committee.

5. Selection process, timetable and deliverables

5.1 Selection process proposal

Proposals need to be submitted by January 19th 2015. FMO will select the most suitable proposal.

Proposals (max 15 pages excluding annexes) will be assessed on the following aspects:
- The extent to which the proposal addresses the evaluation questions set out in the ToR;
- Considered existing literature (and presented methods which can be used) (max 1 page);
- The proposed ex-post evaluation methodology (including how attribution, additionality and benchmarking will be approached in the study);
- The main and sub-assignments a) LCY Financing and Financial Inclusion; and b) Currency risks in LCY Funds will be separately addressed in the proposal. Emphasis will be lay on a) LCY Financing and Financial inclusion, since this is the main objective of this effectiveness study.
- The relevant experience and expertise of the proposed study team; and
- The proposed budget, including details on each of the proposed study team members roles, hourly/daily rates, and approximate number of hours/days.
- The budget will be divided in two: a) Main-assignment: LCY Financing and Financial Inclusion; and b) sub-assignment: Currency risks in LCY Funds. Also in terms of budget emphasis will lay on a) LCY Financing and Financial Inclusion. If there is a large difference in the proposal between the qualities of the two sub-assignments, then FMO might ask you to only perform one of the sub-assignments (though this is not FMO's preference).

The budget for the study shall not exceed EUR 140.000,- (including VAT).2

2 EUR 10,000 might be added in case an additional FMO client in Guatemala is added. It is not sure yet if this additional client wants to participate.

Until January 5th 2015 it is possible to submit specific questions with regard to these terms of reference (contact Miriam Valstar, m.valstar@fmo.nl). Once the deadline has passed, answers are circulated to all bidders. The steering committee is expected to award the contract ultimately February 9th 2015.

5.2 Tentative timetable actual effectiveness study

The tentative timetable for the actual effectiveness study is as follows:
1. Kick-off with steering committee Week 8, 2015.
2. Analysis of relevant documents and development of evaluation design Week 9/10, 2015.
3. Draft and submission of inception report March 9th, 2015.
4. Acceptance of inception report March 13th, 2015.
5. Implementation of evaluation study according to inception report, including (week 12-16, 2015):
a. Assessment of projected and de facto development effects
b. Field visit Central America: interviews with clients and relevant stakeholders
c. Preparation of draft report
6. Submission of draft report April 17th, 2015.
7. Interim panel meeting presentation on findings, May 1st 2015.
8. Feedback on draft report Week 19, 2015.
9. Finalization and submission final report May 15th, 2015.
10. Dissemination presentation of evaluation results (workshop format, audience)

5.2 Deliverables effectiveness study

The deliverables for the assignment are to be delivered in three phases:

Inception report

An inception report (10 to 15 pages) will be submitted before the field visit takes place. This will be based on project information provided by FMO when the initial proposal has been approved. The inception report will provide a detailed description as to how the objectives and questions described in the TOR will be addressed in the specific client cases. This inception report shall include the following:

i. Key data on the client cases to be studied (including specified indicators and research questions);

ii. Findings and trends based on literature study;
iii. Specified evaluation design and methodology (including a description of data collection instruments);
iv. Status of evaluation preparation (e.g., methodology, division of labour within the team, planning);
v. Draft outline of evaluation report (general structure according to evaluation questions and proposed methodology).

Final evaluation report

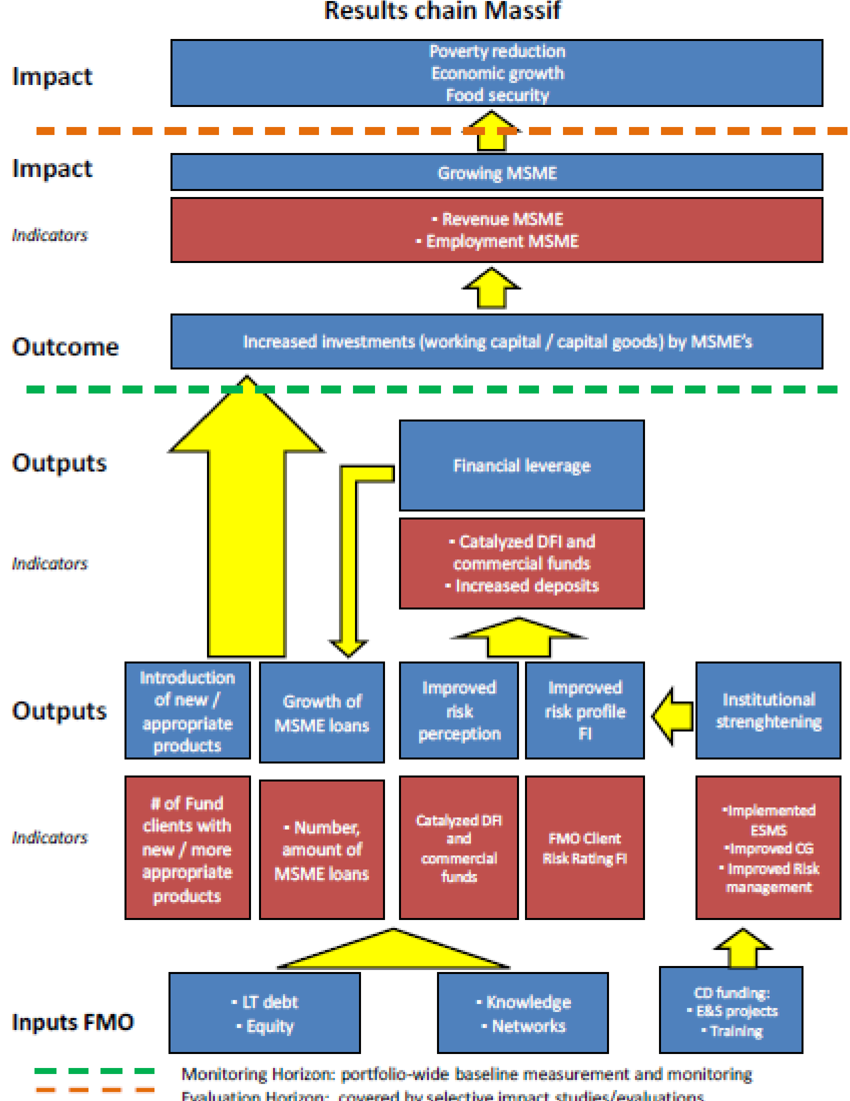
A final evaluation report not exceeding 40 pages (excluding annexes) shall be submitted and shall include the following:

i. Executive summary of up to 4 pages, including the key findings and recommendations;
ii. Background;
iii. Methodology;
iv. Key findings;
v. Conclusions;
vi. Recommendations for both client organizations and MASSIF/FMO (current and future investments);
vii. (vii) Annexes (TOR, list of interviewees, consulted literature and documentation, details on individual projects evaluated, information on benchmarks).

Dissemination of results

A PowerPoint presentation, containing the key findings of the evaluation is to be submitted, in a form that may be used by FMO as a tool for disseminating the evaluation results to a broader audience.

Annex I: Generic theory of change MASSIF



Annex II: Short description of the FMO LCY financing deals Central America

Locfund – Nicaragua, Guatemala and Honduras

Locfund I is a USD 30 local mln currency debt fund which provides financing to Tier II/III microfinance institutions in Latin America and the Caribbean. It was established by Bolivia Investment Management with strong support from FMO and IDB-MIF, making use of FMOs Local Currency (LCY) knowledge to develop a model that allows Locfund to provide LCY loans while its liabilities are in USD. FMO invested USD 2,5 mln equity and USD 2,5 mln subdebt from the MASSIF fund. Additionally it contributed a grant for Technical Assistance. As follow-up, Locfund II is set up in 2013. It has a double fund size of USD 60 mln and aims to provide both LCY loans and to act as underwriter for debt instruments such as senior bonds, issued by MFIs in local markets. The Fund is targeting a minimum of 50% urban end-clients.

Since 2007 Locfund I provided a total of 99 LCY loans to 45 MFIs in 13 countries in LAC, disbursing a total of USD 69 mln. The number of beneficiaries (final micro loan takers) is 1,793,080 who, on average take loans with a size of USD 936. Around 64% of the beneficiaries are female and 39% live in rural areas.

The financial results are reasonably good. Only one MFI loan was restructures and no defaults occurred. Foreign exchange risks are well managed. Despite volatile rates, the results averaged out to zero over the fund lifetime (using only limited hedging derivatives). The debt side of the FMO deal performs as targeted (IRR of 8%), though the fair value of equity stays behind (IRR 5% compared to target of 6,7%).

FMO seeks to evaluate Locfund's transactions in three countries in Central America: Nicaragua (4.19% of Locfund assets), Guatemala (2.83% of assets) and Honduras (2.43 of assets). Special interest goes to the pricing and diversification model of Locfund.

Banco Lafise SA – Honduras

2008 - LAFISE Honduras is a subsidiary of the Central American LAFISE Group. It accounts for 14% of the assets of the group. In 2008 LAFISE Honduras has 19 offices and 390 employees. Services offered are mortgages, commercial finance and consumer loans. Credit card services are also starting to make out an increasing part of the bank's activities. The activities have traditionally been concentrated in housing and commercial loans, though diversification is an important focus for the future. Its strategy is to divide its activities between consumer finance and corporate finance in a 50/50% share. Therefore it is planning to increase its presence in local SME-sector. Since this sector is more dependent on local currency income than the corporate sector, FMO's LCY loan will support this strategy. Lafise is planning to increase financing in sectors as Energy, Agriculture, telecommunication, Maquila (assembly for re-export), Tourism, Leasing and construction.

FMO provided long-term local currency subordinated debt financing for SME loans to further strengthen the capital base of LAFISE Honduras. Two facilities are provided: I. an equivalent of USD 7 mln with a tenor of 7 years and a 1.5 grace period with as security a pledge over SME sub-loans; II. an equivalent of USD 5 mln subordinated loan, tenor of 10 years and 7-year grace period with a non-linear pricing grid in case of a change in country rating. The loan will be used to finance SME Loans and enforce Lafise Honduras's capital base in order to increase the level of investments in Honduras.

Financiera FAMA – Nicaragua

Financiera FAMA is one of the five largest regulated microfinance institutions in Nicaragua with total assets of USD 28,8 and 24 branches end 2006. It started as an NGO in 1991 and turned into a regulated financiera as from 2007. It extends financial services to micro-small and medium enterprises in Nicaragua and low-income households. FAMA's mission is to improve the living conditions of the very low end of Nicaragua's economically active population by providing credit, financial services and training to micro-entrepreneurs. Most of FAMA's customers are female. In 2007, FMO provided FAMA with a senior secured local currency

loan equivalent to USD 4 mln (tenor 5 yrs and 1-year grace period). The purpose of the loan is portfolio growth. With this funding FAMA can provide LCY financing to small entrepreneurs and/or micro enterprises for productive investments.

The Nicaraguan microfinance industry suffered a profound crisis in 2009 and 2010 as a result of the international financial downturn (a.o. bankruptcy BANEX) and the domestic No Pago (No Payment) Movement. Organizational changes within FAMA and the adjustment in business strategy (deviation from the original micro finance methodology, original target sector and original conditions of the loans) did not lead to better performance. A liquidity shortage in 2010 caused a slowdown in acceptance of new clients. Shrinkage in asset size was the result of funding constraints. FAMA suffered losses through NPL's and the portfolio shrunk to USD 20 mln. To get back on track FAMA decided to return to their core strategy: providing short term (12 months max.) microfinance loans to the lower segment of the market. FAMA slowly recovered in 2010 and has produced profit again in the last month of this year. New financing was crucial to continue the positive trend. In 2011 FMO provided a facility which is part of a larger rescue package to ensure FAMA's survival and secure FMOs current exposure. FMO provided a USD 3 mln loan plus the equivalent of USD 1 mln in local currency with a tenor of 5 year and grace of 1.5.