

**ITEM4 - Financial inclusion: Lessons between the South
and the North**

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Lenders' Influence on Firm's Performance: Lessons from
Microfinance Investment Vehicles' loans to Latin American MFIs

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1. Introduction
2. Lenders' influence on firms' performance in microfinance
3. Data and methodology
4. Results
5. Discussion and conclusion

1. Introduction

- Last ten years: commercialization, increased interest from investors and development of **Microfinance Investment Vehicles (MIVs)**:
 - Most investments (82%) made in the form of **loans to MFIs**
 - Positioned as Socially Responsible funds (double bottom line returns)
- However:
 - Social performance is not central for investment decisions (Urgeghe, 2012)
 - Over 100 MIVs focusing on +-500 MFIs, mainly top-tier (De Schrevel *et al.*, 2009; Wiesner and Quien, 2010; Viada and Gaul, 2011)
 - This focus may lead MFIs to bad practices (Wiesner and Quien, 2010)
 - ➔ *Are tier 1 MFIs reinforced or spoiled by MIVs?*
 - ➔ *Is the situation different for tier 2 and 3 MFIs ?*

2. *The influence of debt on performance*

- **Lenders' governance:**

- ✓ Stronger monitoring by lenders and higher incentive to monitor than directors (Triantis and Daniels, 1995; Tung, 2008; Majumdar and Sen, 2010; Nini et al., 2011)
- ✓ Power exerted through **covenants violations** and **renegotiations** (Tung, 2008; Nini et al., 2011)

Hypotheses in microfinance:

Over-focus on top tier MFIs leading to bad practices, overlooking of social aspects:

H1(a): *There is a negative relationship between the total outstanding loan balance from MIVs and the MFI financial performance.*

H1(b): *There is a negative relationship between the total outstanding loan balance from MIVs and the MFI social performance.*

2. The influence of debt on performance

- **Lenders' governance:**

- ✓ Intensity of lending relationships:

- Relationship lending: positive and negative effects → depend on the lender's behaviour (Garriga, 2006; Guiso and Minetti, 2010)
 - Multiple lending: positive effects (signal theory and hold up theory) but also negative effects (coordination problems and competition among lenders, confusing messages) (O'Rourke, 2003; Brunner and Krahen, 2008)

Hypotheses in microfinance:

A long relationship with a single MIV has more chances to bring good SRI outcomes than multiple short relationships:

H2: *The fact to have only one MIV lending to the MFI is positively related to the MFI's financial and social performance as opposed to having multiple MIVs.*

H3: *The length of the relationship with the same MIV is positively related to MFI's financial and social performance*

4. Data and Methodology

Dataset

- **MicroRate**, MixMarket, World Bank
- Outstanding loans from 100 MIVs
- 62 Latin American MFIs in 13 countries, from 2002 to 2010
- Mostly sustainable and profitable MFIs : average ROA 5%, OSS 124%
- **Tiers** (Wiesner and Quien, 2010; Sinha, 2010)
 - Tier 1 = Total assets > 30 Mios \$
 - Tier 2 = 30 Mios \$ > Total assets > 10 Mios \$
 - Tier 3 = Total assets < 10 Mios \$

Methodology

- Mean comparison tests
- Fixed effects Panel OLS
- Direction of causality: explicative variables are lagged one year

4. Data and Methodology

MFI Performance Measure $it = \beta_0 + \beta_1$ *MIV relationship measure* $it - 1$

+ β_2 *Size* $it + \beta_5$ *Age* $it + \beta_6$ *Liquidity* $it + \beta_7$ *Leverage* it
+ β_8 *dmdeposits* $it + \beta_9$ *HDI* it

+ $\alpha_i + d_t + \mu_{it}$

Where:

- *MFI Performance Measure* is alternatively ROA, OSS, Costfunds, PAR30, Avloan, womenperc, avsalary.
- *MIV Relationship Measure* is alternatively MIVdebt, MIV_lending_rate, Number, dmsingle, shareMIV, Duration.
- α_i are MFI fixed-effects
- d_t are year fixed-effects
- μ_{it} is the error term

5. Empirical findings

Mean comparison test - Tier 1 against Tier 2 and 3 MFIs					
	Tier 1 MFIs (36% of sample)		Tier 2 and 3 MFIs (64% of sample)		Z-stat
	Mean	Std	Mean	Std	
Number	3,683	4,911	2,754	3,063	2,00
dmsingle	0,303	0,462	0,292	0,456	0,19
Duration	3,148	2,708	2,426	2,080	2,67
womenperc	0,576	0,149	0,686	0,205	-5,85
avloan	1,021	1,310	0,638	1,138	2,85
avsalary	3,943	1,602	4,134	2,745	-0,78
Significance level: 10%					

5. Empirical findings

Only Tier 1 MFIs - Financial Performance								
MIV Relationship Measure:	MIVdebt				Number			
Dependent Variable:	OSS	ROA	Costfunds	PAR30	OSS	ROA	Costfunds	PAR30
MIV Relationship	0.0347**	0.00540*	0.000783	-0.00393	0.0211*	0.00305*	0.000231	-0.00210**
Constant	4.509	0.336	0.390	-1.552***	1.767	-0.174	0.435	-1.052***
Observations	87	87	87	87	123	123	123	123
R-squared	0.432	0.366	0.588	0.659	0.464	0.380	0.403	0.432
Number of case	26	25	25	25	30	30	30	30

Continued								
MIV Relationship Measure:	dmsingle				Duration			
Dependent Variable:	OSS	ROA	Costfunds	PAR30	OSS	ROA	Costfunds	PAR30
MIV Relationship	-0.0381***	-0.00243	0.00273	0.00408	0.00885	0.000372	-0.00113	0.000346
Constant	4.723***	0.386**	0.130	-0.815***	3.574	0.0547	0.393	-1.178***
Observations	82	78	78	78	123	123	123	123
R-squared	0.449	0.439	0.493	0.401	0.383	0.286	0.408	0.405
Number of case	25	25	25	25	30	30	30	30

All regressions include firm and year fixed-effects.

*** p<0.01, ** p<0.05, * p<0.1

5. Empirical findings

Only Tier 1 MFIs - Social Performance						
MIV Relationship Measure:	MIVdebt			Number		
Dependent Variable	avloan	womenperc	avsalary	avloan	womenperc	avsalary
MIV Relationship	-0.0165	-0.00114	0.111**	-0.00699	0.00231	0.0155
Observations	85	74	85	121	107	121
R-squared	0.526	0.274	0.617	0.294	0.182	0.558
Number of case	26	24	26	30	29	30

Continued						
MIV Relationship Measure:	dmsingle			Duration		
Dependent Variable	avloan	womenperc	avsalary	avloan	womenperc	avsalary
MIV Relationship	0.151**	-0.00360	0.116*	-0.0483**	-0.0111	-0.0113
Observations	81	70	81	121	107	121
R-squared	0.405	0.306	0.675	0.324	0.196	0.556
Number of case	25	23	25	30	29	30

All regressions include firm and year fixed-effects.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

5. Empirical findings

Tier 2 and 3 MFIs - Financial Performance								
MIV Relationship Measure:	MIVdebt				Number			
Dependent Variable:	OSS	ROA	Costfunds	PAR30	OSS	ROA	Costfunds	PAR30
MIV Relationship	0.0183	0.00568	0.00926**	-0.0214	-0.0107*	-0.00403***	0.000469	0.00490**
Constant	2.020***	0.254	-0.00545	0.236	1.962***	0.265	-0.0226	0.636
Observations	113	105	104	103	133	126	125	124
R-squared	0.403	0.239	0.403	0.464	0.302	0.248	0.328	0.385
Number of case	39	36	36	36	43	42	42	42

Continued								
MIV Relationship Measure:	dmsingle				Duration			
Dependent Variable:	OSS	ROA	Costfunds	PAR30	OSS	ROA	Costfunds	PAR30
MIV Relationship	-0.0247	-0.0113	-0.00411	-0.0221	0.0281	0.00541	0.00350	-0.0288**
Constant	5.739**	1.736*	-0.142	-0.975	1.757***	0.238	-0.0671	0.600
Observations	98	90	90	88	135	126	125	124
R-squared	0.519	0.399	0.490	0.427	0.383	0.216	0.334	0.458
Number of case	37	36	36	36	43	42	42	42

All regressions include firm and year fixed-effects.

*** p<0.01, ** p<0.05, * p<0.1

5. Empirical findings

Tier 2 and 3 MFIs - Social Performance						
MIV Relationship Measure:	MIVdebt			Number		
Dependent Variable:	avloan	womenperc	avsalary	avloan	womenperc	avsalary
MIV Relationship	-0.00545	0.0130	-0.135	-0.00841	0.00158	0.0169
Constant	-20.64*	0.826***	-89.10***	-14.73	0.830***	-60.94***
Observations	98	108	96	118	126	116
R-squared	0.407	0.235	0.452	0.365	0.174	0.326
Number of case	34	38	33	38	41	38

Continued						
MIV Relationship Measure:	dmsingle			Duration		
Dependent Variable:	avloan	womenperc	avsalary	avloan	womenperc	avsalary
MIV Relationship	-0.143	0.0576**	-0.974***	-0.0209	0.00701	-0.159
Constant	-37.27**	-0.159	-149.9***	-14.55	0.758***	-58.21**
Observations	89	93	87	118	128	116
R-squared	0.600	0.356	0.655	0.362	0.199	0.328
Number of case	33	34	33	38	41	38

All regressions include firm and year fixed-effects.

*** p<0.01, ** p<0.05, * p<0.1

6. Discussion and Conclusion

- This study unveils two paradoxes in MIVs strategy:
 - ✓ Although positioned as SRI, their over-focus on a few MFIs (compared to the thousands available) does not enhance social performance and is in fact detrimental to smaller MFIs.
 - ✓ Tier 2 and 3 MFIs have higher social performance in terms of reaching women client and poorer clients than top-tier MFIs; yet they are still largely underserved.
- Results suggest an investment approach that would be beneficial to both top tier and small MFIs:
 - ✓ Invest as groups in tier 1 MFIs in a multiple lending way, as tier 1 MFIs seem more suited to this kind of relationship;
 - ✓ and invest in more exclusive relationships with second and third tier MFIs

Thank you for your attention !

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