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Microfinance: An Emerging Asset Class for Equity and Debt Investors

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Introduction

When considered on a "comparable" basis, returns of Compartamos and ASA exceed 100%.

The microfinance sector is rapidly developing into a dynamic global financial services sector. In 2006 and 2007, the first IPOs were realized and many more are now brewing around the world. The author aims to increase visibility of the potential of the microfinance industry with this analysis of nine leading microfinance institutions in nine countries with significant microfinance industries. Based on several well-known performance indicators, the author will not only show the worldwide growth potential of the industry, but also its current strength. The author suggests using "comparable return on equity" (CRoE) as an improved return measure in microfinance. On a comparable basis, the returns of Compartamos and ASA exceed 100%. The author is of the opinion that microfinance will develop into a new "asset class" for equity and debt investors in the years to come.

The main conclusions are that microfinance:

- *Shows high growth and high returns on a global basis,*
- *Is still under-leveraged,*
- *Has high expense ratios,*
- *Has good asset quality and*
- *Has returns of a global nature that show no geographic bias.*

In the last decade, microfinance indicators and benchmarks have developed according to a common framework and terminology. This has been facilitated by the data on approximately 900 microfinance institutions (MFIs) published on www.mixmarket.org by the Microfinance Information Exchange (MIX). Microfinance rating institutions have generally used the same framework. There is also a common methodology to correct for non-comparable factors, like soft loans and donor contributions.[2] Most analyses in microfinance have concentrated on comparing regions rather than comparing MFIs to traditional financial institutions. These comparisons may have disadvantages. For instance if one groups together the major microfinance markets Bangladesh and India, the average data on leverage will distort the picture. The Indian market uses high leverage and significant commercial borrowing, whereas minimally leveraged NGOs dominate microfinance in Bangladesh. The average of those two markets is meaningless. Other analyses in microfinance compare relatively large samples of MFIs[3] on only one indicator. Although such analyses clearly show the leaders on each indicator around the globe, often the overall picture of the leading institutions is missing. Therefore in this article the analysis has been restricted to just nine institutions from leading microfinance markets around the globe. These institutions are compared and ranked on return, number of borrowers, size of portfolio, growth and expense ratio. Based on these indicators, a clearer overall picture of the industry leaders emerges.

Introducing the Nine Leaders

There is more subjectivity in selecting the nine leading microfinance countries around the globe than in selecting the leader in each country chosen. In this article the choice was made for four Asian countries, being Bangladesh, India, Cambodia and Mongolia; two African countries, being Kenya and Morocco, and three countries from the Americas, being Mexico, Peru and Bolivia. The sample offers a good spread around the globe and these organisations possess a multitude of styles. Although in most countries it is easy to pick the leader, in Bangladesh there are three: Grameen Bank, ASA and BRAC. In number of borrowers and assets, these institutions are of similar size. In Appendix I, the choice for ASA is detailed. In Mongolia XacBank is the best benchmark of a pure microfinance institution. For India the leading institution is SHARE, and for Cambodia it is ACLEDA. For Kenya with Equity Bank and Morocco with Al Amana, we have two clear microfinance leaders. In Peru a choice was made for MiBanco and in Bolivia for BancoSol. The Andean markets do have other contenders, but the selected institutions have clear and independent microfinance profiles. In Mexico Compartamos is clearly the institution of choice.

Introducing the Key Performance Indicators

The analysis is based on a sample of 2005 data supplied by MIX, the microfinance information clearinghouse.[4] Besides return on equity (RoE) this article introduces a new measurement: "comparable return on equity" (CRoE). In Appendix II, a detailed introduction to this measurement is given. In short, this measurement makes the returns comparable across different leverage and interest rate levels. CRoE is a zero-equity based return, applied to an assumed normative leverage. The return can be seen as the excess return above the risk-free rate in a particular country.

In Table 1, the nine institutions are compared on six indicators: RoE, CRoE, number of borrowers, portfolio size, portfolio growth and expense ratio.

Microfinance is a High-Growth Industry

Of the sample, ASA in Bangladesh has the largest portfolio with USD 255 million, whereas the smallest portfolio in this sample is from XacBank in Mongolia. Also in number of borrowers, these institutions rank as highest and lowest with over 4 million borrowers for ASA and only 50,000 borrowers for XacBank. This immediately points to the average loan amount in USD as introduced in Table 2.

Table 2: Secondary Indicators for Nine Leaders in Microfinance

2005	Country	Capital/ assets (%)	Average loan (USD)	Financial revenue (%)
Compartamos	Mexico	37.7	399	74.7
ASA	Bangladesh	53.6	61	23.9
MiBanco	Peru	17.2	1342	30.7
Al Amana	Morocco	28.8	331	24.6
Equity Bank	Kenya	13.9	738	21.1
XacBank	Mongolia	16.1	599	23.4
ACLEDA	Cambodia	25.8	709	24.2
BancoSol	Bolivia	11.4	1531	18.4
SHARE	India	7.5	101	27.9
Average		*23.6*	*645.7*	*29.9*

Microfinance markets around the globe vary greatly on average loan size. The average ranges from USD 61 in Bangladesh and USD 101 in India to USD 1342 in Peru and USD 1531 in Bolivia. Another important aspect by which to compare the institutions is portfolio growth.[5] On this aspect, the leader is SHARE in India with 51.0%, closely followed by Equity Bank from Kenya with 50.6%. In addition to the 2005 growth, the three-year average growth (2005, 2004 and 2003) was reviewed. SHARE has been growing in portfolio size by 50% on average over three years and in number of borrowers by 55% in 2005 and 45% over three years. The

Table 1: Key Performance Indicators for Nine Leaders in Microfinance (2005 Data)

Name	Country	RoE (%)	CRoE (%)	Number of borrowers (*1000)	Portfolio (USD *million)	Growth (%)	Expense ratio (%)
Compartamos	Mexico	55.2	179.7	453	181	44	44.0
ASA	Bangladesh	28.2	123.6	4182	255	21	9.4
MiBanco	Peru	34.4	54.6	155	207	38	21.3
Al Amana	Morocco	16.5	39.7	250	83	40	18.9
Equity Bank	Kenya	24.8	28.9	110	158	51	15.4
XacBank	Mongolia	19.5	22.7	50	30	46	18.9
ACLEDA	Cambodia	14.3	24.3	141	124	34	19.2
BancoSol	Bolivia	22.4	20.0	85	130	16	14.8
SHARE	India	23.3	15.6	814	82	51	23.4
Average		*26.5*	*56.6*	*693.3*	*138.9*	*37.9*	*20.6*

growth percentages in India may be a reflection of the huge remaining potential in India, compared to more mature markets showing a higher penetration like Bangladesh and Bolivia. 2005 portfolio growth rates for ASA and BancoSol were more modest at 21% and 16%. On average in 2005, the portfolios of the institutions in the sample grew 38%, whereas they grew 33% in number of borrowers. Seven of the institutions (excepting ASA and SHARE) grew their average loan size over 2005, as are most institutions in microfinance around the globe. That is, their portfolios are growing relatively faster than their number of borrowers. This is true for the sample in 2005 with average portfolio growth of 38% and average growth in number of borrowers of 33%, as well as for the last three years at 34% and 26%. This trend could mean at least two things: Either (1) with repetitive loan cycles in their customer base, loan amounts for existing customers get larger once their experience with microfinance grows or (2) the institutions show a limited tendency of mission drift, with their credit officers concentrating on higher loan amounts and less on the poorer segment of the market. In practice both aspects do play a role in the market as a whole. The scope of this analysis does not cover which is the major driver. In summary, with a growth rate of 38%, accelerating from a three-year average growth rate of 34%, it is clear that microfinance is a high-growth industry.

The Microfinance Industry Is Still Under-Leveraged

In Table 2, the capital/asset ratio is given for the sampled institutions. A typical NGO like ASA is hardly leveraged at 53.6%. SHARE on the other hand is highly leveraged, with a ratio of 7.5%. The average leverage in the sample is 23.5% and is down by 5.1% compared to the three-year average. Given that most institutions in the sample are financial institutions, most are still under-leveraged. For regulated players, a 10% core capital ratio (close to BancoSol's 11.4%) should be sufficient. Higher leverage should make it easier to satisfy return requirements from shareholders and at the same time provide the lowest borrowing rates for customers. In Figure 1, the influence of leverage is clearly demonstrated for ASA and Compartamos, both underleveraged institutions. They show far higher CRoE of 123.6% and 179.7% compared to RoE of 28.2% and 55.2%. Should these institutions be leveraged further, the excessive CRoE should decrease. Higher leverage in the microfinance industry is also important from the perspective of social impact, as increased leveraging puts more cash in the hands of micro-entrepreneurs. Given the track records on asset quality and overall profitability and with major institutions now acquiring scale, it is anticipated that leverage in microfinance will increase in the years to come.

The Expense Ratios in Microfinance Are High But Decreasing

In analysing the ratio of total expenses to average total assets, it must be concluded that microfinance still is a high-expense industry. ASA from Bangladesh is the overall leader with an expense ratio of 9.4%, and Compartamos from Mexico is the least cost-efficient in serving its customer base with an expense ratio of 44%. The average expense ratio of the sample MFIs is 20.6%, which is 1.8% lower than the average expense ratio over the last three years. To a certain extent, the expense ratio should be evaluated in combination with another ratio given in Table 2: the financial revenue ratio. This is a good indicator of overall yield (interest charges and fees) on the portfolio. Most institutions in the sample are charging less over time; for instance Al Amana and MiBanco are charging a 5% lower rate in 2005 than the average over three years. This is mainly because of either competition or a conscious effort by the MFIs to allow clients to profit from their scale by decreasing rates. The institution with the lowest financial revenue ratio is BancoSol in Bolivia with 18.4%.[6] A continued drop in expense ratios in the years to come is one of the major challenges for the microfinance industry. This should be accomplished by lowering both refinancing costs and operating expenses. The latter can only be achieved by scale, technology, operating model and ICT breakthroughs.

Most Institutions Show High Asset Quality and Mobilise Savings

Most of the institutions in the sample are regulated as financial institutions in their country and take savings. This is the case for MiBanco, Equity Bank, XacBank, ACLEDA and BancoSol. Over 50% of the liabilities of these institutions are savings. ASA is an NGO but does take about 15% of its liabilities as compulsory savings. The others did not collect savings due to the lack of a license to do so or due to government prohibition. The overall write-off ratio in the sample is below 1%, which is considered solid in the broader financial industry.

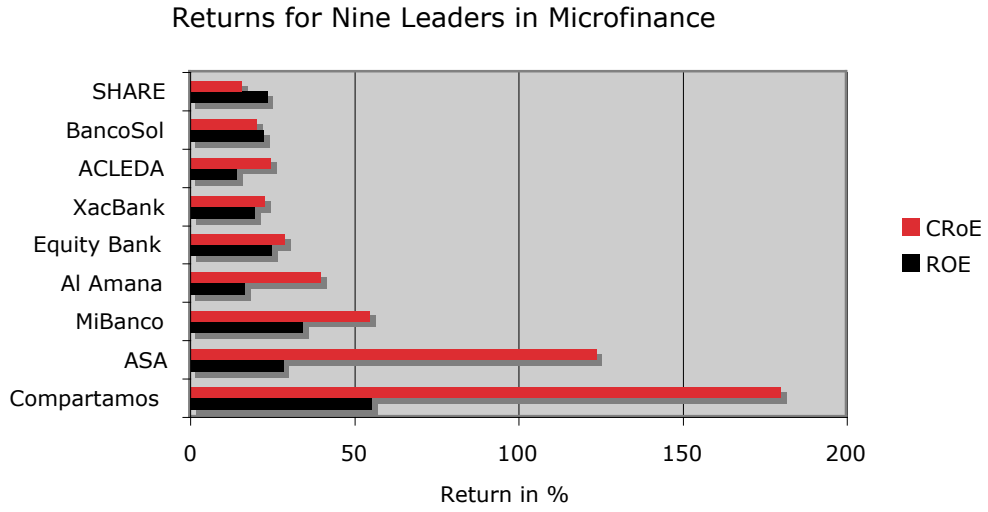
The Leaders in Microfinance Show Very Strong Returns

The RoE in the sample ranges from 14.3% for ACLEDA to 55.2% for Compartamos. Using the CRoE, which corrects for leverage and interest differences, returns range from 15.6% for SHARE to 179.7% for Compartamos. The institutions showing the highest CRoE are, in order: Compartamos, ASA, MiBanco and Al Amana from Mexico, Bangladesh, Peru and Morocco. Strong returns are geographically well-distributed.

Given its "mission" to serve the unbanked, the high growth rates and RoE in the industry are provoking intensive debate, especially since the recent Compartamos IPO.[7] For certain high-growth industries, like the internet in the late 90s, investors accepted very low returns in initial years because returns were expected once the industry captured scale, as happened in the case of Amazon. In microfinance, conventional investors have however been largely absent due to perceived high risk of lending to the unbanked. Equity investors in microfinance have historically been development finance institutions and social investors. With the industry gaining scale and recognition, commercial investors have

entered increasingly over the last five years. With this trend and with increasing competition, returns (currently 26.5% on average for the sample) should approach RoE seen in listed companies in emerging markets, which are currently approximately 19%.[8]

Figure 1



ASA From Bangladesh Shows the Best Overall Ranking

To come to an overall comparison of the institutions in the sample, they are ranked below with equal weight given to: Comparable return on equity, number of borrowers, portfolio, growth in portfolio and expense ratio. The top players on this basis are ASA from Bangladesh, Compartamos from Mexico and Equity Bank from Kenya. Again the outcomes show no bias towards continents or regions. Results in microfinance seem to be of a global nature, despite differences in regulation and culture. One missing indicator is social impact. The industry is currently formulating an initiative to define appropriate measurements on social performance and add these to the key performance indicators.[9]

Microfinance Is Developing Into an Emerging Asset Class for Equity and Debt Investors

A picture has been presented of a high-growth and high-return sector that is gradually gaining visibility. The sector as a whole is developing rapidly, although there are still important issues to be resolved:

- Recently there has been lively debate regarding whether public and donor money is crowding out and distorting commercial investments in microfinance. It is clear that the roles of donor money, development finance institutions and commercial investors need to be sorted out for the continued healthy development of microfinance.[10]
- Legal and regulatory regimes relating to microfinance are the domain of national regulators and legislation. They have different leverage requirements and different approaches to whether microfinance institutions can collect savings. An international best practices regime promises to be of great help. Countries would be able to easily apply such a regime or explain why they deviate. With a more common regime for microfinance regulation, an improved capital weighting under Basel II may be implemented in the years to come.[11]

One sign of maturation is that the industry has recently begun to internationalise. ACLEDA is starting up in Laos and Vietnam; and ASA, in association with Catalyst investors, is seeking further expansion in Asia and Africa.[12] In August 2006, Equity Bank listed on the Nairobi Stock Exchange, and Compartamos listed 30% of its shares on the stock markets of New York and Mexico in April 2007.[13] The Compartamos IPO was initially offered at a price based on 2006 data: quoted at a price/earnings ratio of 26.3, a price/book ratio of 12.8 and a price/loan portfolio of 5.7. A 1999 investment of USD 1 was valued at around USD 270.[14] This transaction may put upward pressure on all valuations in microfinance,

Table 3: Ranking the Leaders

Ranking	Country	CRoE	Number of borrowers	Portfolio	Growth	Expense ratio	Average score	Total score	Ranking
ASA	Bangladesh	2	1	1	8	1	2.6	13	1
Compartamos	Mexico	1	3	3	4	9	4	20	2
Equity Bank	Kenya	5	7	4	2	3	4.2	21	3
MiBanco	Peru	3	5	2	6	7	4.6	23	4
Al Amana	Morocco	4	4	7	5	5	5	25	5
SHARE	India	9	2	8	1	8	5.6	28	6
ACLEDA	Cambodia	6	6	6	7	6	6.2	31	7
BancoSol	Bolivia	8	8	5	9	2	6.4	32	8
XacBank	Mongolia	7	9	9	3	4	6.4	32	8

especially for mature and highly profitable companies like those discussed in this article.[15] These successful listings may also be an indication of more microfinance IPOs to follow. To a certain extent, the companies discussed in this article and their successful peers may be seen as a "microfinance IPO pipeline." In May 2007, SHARE executed a capital increase of USD 27 million, with the aim to increase the institution's portfolio to USD 600 million in 2012 and its client base to six million people (both six times higher than current levels). Obviously IPOs may be more feasible in countries with a lower country risk and more-developed stock markets, like Mexico and India. In nations with a higher country risk, the acquisition of an institution by a strategic buyer may be an alternative. On the debt side, there is already widespread investment experience in the microfinance sector, both in international currency and increasingly in local currency.[16]

IPOs and equity investments will speed up the growing recognition of microfinance as an emerging asset class. With increased recognition and competition, the industry will mature, costs will be reduced and returns will converge with those of other investments in emerging markets. Quality data from sources such as the MIX and the use of tools such as CRoE will increase confidence among commercial investors, allowing for continued growth. This growth coupled with reduced costs will allow for increased total profits and more customers, in other words: fewer in developing countries will be left "unbanked."

Appendix I: Choice of the Sample MFI from Bangladesh.

For the three main institutions in Bangladesh, Grameen Bank, BRAC and ASA, the same analysis was carried out as for the main sample of nine countries, as shown in Table 4.

All three institutions have a very good track record. Grameen Bank serves the highest number of borrowers and has the largest portfolio, but it also charges the lowest rates (has the lowest financial revenue ratio). ASA is the clear leader in return, growth and expense ratio and therefore has the overall best ranking. Based on this overall ranking, ASA was chosen to represent Bangladesh in the global analysis.

Appendix II: Introducing Comparable Return

"Comparable return on equity" (CRoE) is a zero-equity based return applied to an assumed normative leverage. Once the net profit of an MFI has been calculated, a correction is made for the interest earned over the average equity. This correction is made at the domestic interbank offered rate, at which prime banks can borrow in the currency local to the country in which the MFI operates. Given the average lending period of MFIs, the interest rate selected for this correction is the one-year interest rate. The (moving) average of the one-year rate best matches an MFI's gradual renewal of the book during the year.

For the assumed normative leverage, 10% of total assets is taken as the norm. In the recent Accion Conference, "Cracking the Capital Markets," David FitzHerbert of Gray Ghost stated that average leverage rose from 3:1 to 5:1 in 2006. Leverage of 9:1 for the core capital of a fully-licensed bank is seen as well-capitalised in most jurisdictions. Over time larger players generally start to run their microfinance activities as regulated banks. Therefore, due to the significant growth of microfinance, a 10% capital/assets ratio is becoming the optimal proxy of appropriate leverage in microfinance as it is in the financial industry as a whole.

The comparable return concept is now illustrated by means of a calculation for MFIs A and B. MFI A is a typical commercial MFI, whereas MFI B is a typical NGO-style MFI. All other parameters are the same. (The interest rate is 10%, the tax rate is 30% and the interest spread is 1.5%.)

Whereas RoE of 26.15% and 13.0% for MFI A and MFI B make the former appear much more profitable, on a CRoE basis the returns are much closer at 22.8% and 28.7%. Based on CRoE, MFI B is more profitable, due to its unused leverage potential.

Table 4: Key Performance Indicators and Ranking of Three Leaders in Bangladesh

2005	ASA	BRAC	Grameen Bank
RoE (%)	28.2	18.1	2
CRoE (%)	123.6	42.1	-3.7
Number of borrowers (1000)	4182	4160	5050
Portfolio (mio USD)	255	269	424
Growth (%)	21	10	20
Expense ratio (%)	9.4	17.9	14.4
Capital/assets (%)	53.6	29.7	15.3
Average Loan (USD)	61	65	84
Financial revenue (%)	23.9	23.4	14.9

Ranking	ASA	BRAC	Grameen Bank
CROE	1	2	3
Number of Borrowers	2	3	1
Portfolio	3	2	1
Growth	1	3	2
Expense ratio	1	3	2
Average score	1.6	2.6	1.8
Total score	8	13	9
RANKING	1	3	2

It Is Not Notable to Run an MFI Which Generates a Return Equal to the Interbank Interest Rate

Suppose that the total return of MFI A is equal to the interbank interest rate. Without going though the trouble of running an MFI, the

same income and RoE can be earned by simply depositing the money in the interbank market. The CRoE is therefore an excess return (on top of the interbank money market rate) that is generated by running a business. Whereas an investor should require a higher RoE for a high inflation/high interest rate environment, the CRoE adjusts for this aspect and the investor theoretically requires the same CRoE in both environments. This aspect, as well as the adjustment for leverage differences, makes the CRoE a highly effective concept in comparing returns in microfinance around the globe.

Table 5: Sample Comparable Return on Equity (CRoE) Calculation

Balance sheet A			**Year X**	**Balance sheet B**			**Year X**
Portfolio	8,000.00	Equity	1,100.00	Portfolio	8,000.00	Equity	4,400.00
Other assets	800	Borrowings	6,900.00	Other assets	800	Borrowings	3,600.00
		Other liabilities	800			Other liabilities	800
Total	8,800.00		8,800.00	Total	8,800.00		8,800.00
			Year X+1				**Year X+1**
Portfolio	10,000.00	Equity	1,253.83	Portfolio	10,000.00	Equity	5,013.55
Other assets	1,000.00	Borrowings	8,700.00	Other assets	1,000.00	Borrowings	4,900.00
		Other liabilities	1,046.18			Other liabilities	1,086.45
Total	11,000.00		11,000.00	Total	11,000.00		11,000.00

Profit & Loss A		**Profit & Loss B**	
Interest income	2,520.00	Interest income	2,520.00
Interest expense	1,000.50	Interest expense	563.50
Interest margin	1,519.50	Interest margin	1,956.50
Expenses	1,080.00	Expenses	1,080.00
Pre-tax profit	439.50	Pre-tax profit	876.50
Net profit	307.65	Net profit	613.55
Profit retention	153.83	Profit retention	613.55
RoE	26.1%	RoE	13.0%
Profit correction	82.38	Profit correction	329.47
Comparable profit	225.27	Comparable profit	284.08
CRoE	22.8%	CRoE	28.7%

[1]Marco Coppoolse founded Microfinance Partners (www.MicrofinancePartners.com) in November 2006 after over twenty years in banking (ABN AMRO) and leasing (LeasePlan, the world second-largest fleet leasing company). At LeasePlan he was Chief Financial Officer from 1999 until 2005.

[2]Fabio Malanchini of Microfinanza and Alice Nègre of Planet Rating, "Use Caution when analyzing adjusted MFI performance data: Adjustment methodologies may have different impacts," MicroBanking Bulletin, March 2005.

[3]MFI League Tables, 2005 MIX Global 100, Microfinance Information Exchange, November 2006.

[4]At the time of analysis 2005 data were the latest available for all institutions. For SHARE, data for the year ending March 31. 2006 are taken as a proxy for 2005 data and data for the year ending March 31. 2005 for 2004 data, etc.

[5]Although growth is not generally used in the analysis, portfolio growth and the growth in number of borrowers can be easily calculated from the data as supplied by MIX, the microfinance information clearinghouse.

[6]David L. Wright and Dewan A. H. Alamgir, Microcredit interest rates in Bangladesh, March 2004, gives an interesting discussion of interest rates in microfinance in Bangladesh, also touching upon experiences outside Bangladesh.

[7]Richard Rosenberg, "CGAP Reflections on Compartamos Initial Public Offering: A case study on Microfinance Interest Rates and Profits," June 2007; "Bringing Microfinance to Scale: Lessons from the Compartamos IPO," Accion International web conference, June 27. 2007, and discussions on MicrofinancePractice@yahoogroups.com.

[8]Skagen Kon-Tiki, investor presentation, page 32, April 2007, see also www.skagenfondene.no.

[9]See, for instance, MFC Annual Report 2006, page 7, www.mfc.org.pl.

[10]Julie Abrams and Damian von Stauffenberg, "Role Reversal: Are Public Development Institutions Crowding out Private Investment in Microfinance?", February 2007.

[11]Marijke Hoogendoorn, "Microkrediet vraagt om toezicht op maat," DNB Magazine, Number 6, 2006, makes reference to the October 2006 conference of the Financial Stability Institute of the Bank of International Settlements. At this conference there were speeches by Her Royal Highness Princess Maxima of the Netherlands and Nout Wellink of DNB. Princess Maxima pleaded, given the solid repayment record in microfinance, for a lower capital weighting for microfinance than the standard weighting under Basel II.

[12]Www.catalyst-microfinance.com.

[13]Bank Rakyat Indonesia (BRI) was listed on the Jakarta Stock Exchange in November 2003. This listing may be seen as the first microfinance IPO. Compartamos was however the first organisation to start as a pure microfinance institution and later be listed on a stock exchange.

[14]Data derived from MicroCapital Monitor, May 2007, Volume 2 Issue 5; www.mixmarket.org; David Bornstein, "How to change the World," May 8. 2007; Elisabeth Rhyne and Andres Guimon, "The Banco Compartamos Initial Public Offering," Accion InSight, Number 23, June 2007; Richard Rosenberg, "CGAP Reflections on Compartamos Initial Public Offering: A case study on Microfinance Interest Rates and Profits," June 2007 and "Bringing Microfinance to Scale: Lessons from the Compartamos IPO," Accion International web conference, June 27. 2007.

[15]For a comprehensive article about valuations in microfinance see: Barclay O'Brien, "Valuing Microfinance Institutions in Savings and Development, Number 3, 2006.

[16]Elisabeth Littlefield, presentation at "Cracking the Capital Markets," hosted by Accion and Credit Suisse, New York. See www.accion.org/cracking_the_capital_markets.asp.

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MicroCapital is a news and research initiative on international microfinance investment housed in Prisma MicroFinance, a for-profit microfinance institution (MFI). Since microfinance is currently dominated by governments and charities, objective information with a business orientation is scarce and buried under academic jargon. We seek to provide candid information on microfinance as an emerging investment class. Feedback is welcomed. Special thanks to Jonathan Rollins for this publication.

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