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International For-Profit Investments in Microfinance Institutions Equity

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Abstract. In recent years international investors are increasing the focus on the social consequences of their investments along with its financial returns. The microfinance sector, considered as an asset class is a relatively young concept but the microfinance industry is experiencing a tremendous growth and has a high potential for the future. Today most social responsible investments in microfinance are performed through loans or fixed income structured finance vehicles. The possibilities to invest in the equity tranche of the industry are still scarce since the number of listed microfinance institutions is reduced and the private equity investments are limited and difficult to reach for the majority of investors. In this document we present a study on the characteristics of the MFIs and we try to shed some light on this subsector of the equity assets universe that may become important in the coming future.

Keywords: Microfinance institutions, Micro-credits, Financial Institutions, Equity; Stock Exchange

1.1 The Boundaries of the Microfinance Market

During the 1970s and 1980s, the microcredit movement started by Grammeen bank and others led to the emergence of nongovernmental organizations that provided small loans for the poor. In the 1990s, a number of these institutions transformed themselves into formal financial (Brand 2010). Microfinance Institutions (MFI) are different from Commercial Financial Institutions mainly because are focused on providing funds (mainly in debt format) to poor people to invest in capi-

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tal goods, based on the premise that the poor have skills that remain unutilized or underutilized but suffer from a lack of capital and cannot access to funding for their business (Feasley 2011).

According the World Bank Development Indicators of 2009 there are 4.5 billion inhabitants in low income and middle lower income countries of which about 2.3 billion people have limited access to financial services. Some studies estimate that 60% of population have real demand for financial services (Brand 2010, Cole et at 2009), this may give an estimated total number of potential microfinance clients on 1.3b people.

According to the MIX (MicroFinance Information Exchange, www.mixmarket.org) report 2010:

- The total loan portfolio of 1,896 MFIs reporting to the MIX database was at the end of 2009 of $142 billion, which could be used as an estimation of the total microfinance market reached today.
- The total number of borrowers was 93 million, therefore the average loan amount per borrower was about $1,500.

Using a conservative approach for the total sector demand, the figures stated by MIX indicate that currently only a small fraction of the 1.3 billion potential microfinance clients are reached. An extrapolation of the current loan levels to 1.3billion borrowers would show a total maximum theoretical market asset size of $1.9trillion. Other researchers (Dieckmann 2008, 2009) using a much more restrictive social approach of microfinance, estimate that to fully satisfy the global demand for microfinance assets, the MFIs would need a total liabilities mix of debt, equity, deposits and subordinated debt of approximately $300b. In both cases it seems that only a small fraction of the total microfinance market is covered at present.

1.2 The Funding of the Micro Finance Institutions

According to the CGAP (Consultative Group to Assist the Poor) Microfinance survey 2010 and the MIX, the total amount of funds committed by international investors (Non For Profit and For Profit) to MFIs worldwide is about $60b in the form of debt, guarantees, equity and other instruments. Three main types of funding instruments can be distinguished (Brandt 2010, Gonzalez, 2010a):

- Own funds and equity
- Debt in the form of grants, bonds or loans. Most MFIs cannot access the standard debt capital markets but MFIs can access the multilateral organizations and international development agencies (Non For Profit) and the For Profit specialized international investors: private institutional investors, international banks and Microfinance Investment Vehicles

- Retail deposits.

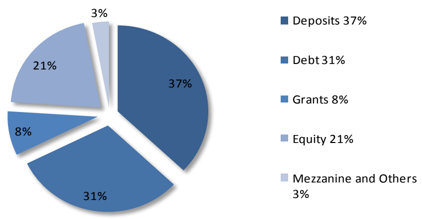

Fig. 1 Committed Funding Amount by Instrument for MFIs (average). Source CGAP 2010

1.2.1 Securitization

Structured Finance Vehicles (SFV) were created in an attempt to market more easily the microfinance securities. The SFVs repackage a pool of loans and structure them in a way easer to buy from international investors, creating different seniority tranches in the event of default, offering different risk-return profiles adapted to investors that sometimes cannot face directly the risk presented by the MFIs. In other cases the MFI sells part of its loan portfolio, in the form of an asset backed security (ABS) through the true or synthetic sale of the assets (microcredits) in the balance sheet of the MFIs, delinking the credit risk of the originator from the credit risk of the assets themselves (Gupta et al 2010b). The benefits of the securitization of loans for the MFIs are:

- Expands the capacity of the MFI by selling part of its balance sheet
- MFIs can concentrate its efforts on originating loans and collecting payments
- MFIs diversify its funding sources
- MFIs remove risky assets from its balance sheet

1.3 THE SIZE OF THE MFI EQUITY MARKET

The vast majority of the funds committed to MFIs are in form of debt. The equity of the MFIs is provided mainly locally in each country but four main groups of international equity investors can be distinguished (Brand 2010, Gonzalez 2010a):

1. Government development agencies, international development and supranational non for profit investors that normally invest in the form of

private equity investments. The aggregate equity portfolio of these investors was valued *at the beginning of 2010 on $761m* (based on the CGAP MIV 2010 survey and the MIX).

2. MIVs and specialized investment funds with a focus on microfinance equity. Their total equity assets under management were estimated to have grown from $670m in 2007 to *$1.9b at the beginning of 2010* (based on the CGAP MIV 2010 survey and the MIX).
3. Large commercial private equity firms, such as Sequoia Capita, Legatum and others, the total amount invested by these institutions is estimated in excess of *$400m at the beginning of 2010* (Rozeira de Mariz et al 2010).
4. US pension funds such as TIAA CREF, and Netherlands ABP and PGGM which perform asset allocations as part of their socially responsible investment strategies and as a diversification. Their commitments are estimated to be *$700m at the beginning of 2010* (Rozeira de Mariz et al 2010).

The four groups of international investors above give a *total amount invested in microfinance equity of nearly $3.7b at the beginning of 2010*. As a reference for comparison, the total microfinance loan portfolio registered by the 2010 Mix survey showed an amount close to $142b. The total deposit base of the MFI institutions registered in the MIX was $27b. The asset base of the MFIs registered in the MIX database totalled assets of $180b. The funds and liabilities needed to match the assets should be composed of debt raised internationally, local debt, grants and donations, local government funds, cooperative funds, local equity, international equity investments and deposits from clients. Therefore the numbers show that most of this equity is funded locally or thanks to the local public sector and only a fraction ($3.7b) is raised through international investors. The space for growth is important and International investors should play a relevant role in the future.

1.3.1 Listed MFIs

The MFI is a young subsector of the financial institutions world and therefore the number of listed MFI globally is reduced. Under a restricted selection, there are six listed financial institutions that may be, in our view, considered MicroFinance Institutions:

SKS Microfinance SKSMICRO:IN (India)
Compartamos Banco COMPARTO:MM (México)
Equity Group Kenya EQTY:NK (Kenya)
Bank Rakyat Indonesia BBRI:IJ (Indonesia)
Brac Bank BRAC:BD (Bangladesh)
Financiera Independencia FNCRF:MM (México)

1.4 COMMON CHARACTERISTICS OF THE MFIs

One of the objectives of this document is to define the specific characteristics of the MFIs that could signal that the MFIs are a subset of the Financial Institutions equity asset class.

1.4.1 Social Objectives

The MFIs provide financial services to the people previously unbanked, and help on the funding of the microenterprises that previously lacked of this support (Gupta et al 2010a) (Rozeira de Mariz et al 2009). Despite some criticism there is a general consensus about the very positive social benefits of microfinance for poor societies (Khandkeher 2008).

1.4.2 Reliable Debt Funding

MFIs attract soft lending public organizations, supranationals and socially responsible investors. These loans received by the MFIs tend to be:

- Below market rates (for the same risk profile)
- Longer maturities. The average maturity of the loans to MFIs from a international development organization is 60 months (Rozeira de Mariz 2009)
- Loans are easily rolled over and emergency liquidity lines are available

1.4.3 Business Model

MFIs asset and liability management enjoys a favourable duration mismatch, since their assets are short term (loans typically with maturities of less than one year) and liabilities are long term. Additionally MFIs client base operate in sectors of the basic economy, concentrated in the production or acquisition of essential products for local consumption. These sectors are less exposed to international economic adverse movements. It seems that MFIs are reaching an enormous part of the global economy that is more stable and that was previously unreachable.

1.4.4 Stable Deposit Base

Globally, as much as 37% of the balance sheet of the MFIs reporting to the MIX and CGAP is funded through deposits, most of them from its own client base. But not all the MFIs in all the jurisdictions have the ability to raise deposits from customers. The ability to raise deposits should give MFIs more resilience against future market movements.

1.4.5 Low Financial Leverage

In general MFIs have lower leverage than traditional banks (when the leverage is defined as Total Equity/Total Assets, lower leverage means a higher ratio), this is probably due to the immaturity of the sector and the scarcity of standard debt funding for MFIs (Brand 2010). According to the BIS the 15 year average Total Equity/Total Assets (leverage) of the developed nations banks reporting to BIS is 5.4%. This leverage ratio is close to 22% for MFIs reporting to the MIX.

1.4.6 Relatively High ROE

The RoE reveals how much profit a company obtained in comparison to the total amount of shareholder equity on the balance sheet, but this ratio is influenced by the capital structure of the company. The more leveraged a company the higher the ROE is. Despite the fact that most MFIs have a social objective, the RoE of the MFIs that are profitable tend to be very high (Feasley 2011). And most important the financial leverage of the MFIs is very low compared to standard banks.

1.4.7 High Interest Margin

MFIs have higher net interest margins (Feasley 2011) than commercial banks driven by the fact that the interests rate charged to its client on average are higher due the scarcity of competition, the informal lenders offer less quality and the borrowers are very robust microenterprises (Gupta et al 2010b, Mersland et at 2011)

1.4.8 Strong Asset Quality

Statistically MFIs have stronger asset quality than global commercial banks and that emerging markets mainstream banks (Gonzalez 2007). The average write-off ratio from 1996 to 2009 for all the MFIs reporting to the MIX was 0.51%. Notwithstanding at the beginning of 2010 the write off ratio sharply increased to 0.80%. The write-off ratio of the UK banks on the first half of 2010 was 1.5%, according to the Bank of England statistics.

1.4.9 Risk Management Techniques

Because the clients of the MFIs generally do not posses collateral as a guarantee for the loans, MFIs issue loans that are given for entrepreneurial activities and lending decisions are based on personal characteristics, credit history, group pressure and business cash flow, instead on collaterals, business capital or holdings. In order to encourage the repayment of the microcredits, MFIs involve the community, group lending (Feasley 2011). One of the most powerful tools used in the loan concession process is the shared liability group (group lending), jointly with neighbours, clients and providers and social pressure. Other risk management techniques are:

- Small loan amounts
- Borrower diversification
- Large client base
- Short loan maturities
- Very small proportion of consumer loans, MFIs concentrate mostly on microenterprises lending

1.5 MFIs Capital and the Financial Crisis

The MFI sector earned its reputation as a countercyclical industry in the Asian Financial crisis of the late 1990 (Patten 2001) but recent worldwide shows that the delinquency levels expressed as the PAR30 increased from January 2008 to January. MFIs low leverage ratio (high proportion of equity against total assets), the fact that the average maturity of the liabilities is longer and more stable than the average maturity of assets increase its stability against crisis. Additionally MFIs keep a high proportion of benefits as loss reserves and maintain a very prudent dividend policy. In general solvency is not a concern for listed MFIs whose ratios are very strong (Hamilton et al 2009). Leverage or equity over asset ratios in 2010 (Total Equity/Total Assets) reached 23.2%. And for profit international investors have demonstrated their commitment in the financial crisis providing new equity when required and not cutting losses. As a comparison, solvency in developed countries measured as Tier I levels vary from 7% to 14% and measured as total Equity/Total Assets is in the range of 3.7% to 5% (MIX database survey 2010)

1.6 Conclusion

A further strong growth in the Microfinance industry is expected in the coming years since globally a very large number of poor people and microenterprises are underserved in terms of financial services and in particular in terms of loan products. Microfinance can be considered as one of the new frontiers of the global banking industry.

MFIs have a set of characteristics that could make them different to other financial institutions. These attributes may make them an interesting diversification asset subclass for international equity investors. Presently, international for-profit investors have very few ways of investing in microfinance equity. Most of the equity of the MFI equity is funded locally or thanks to the local public sector, our estimates show that only a fraction of the MFI equity are investments from international investors. The space for growth is important and international investors should play a relevant role in the future, but this requires listing in stock exchanges. The listing in stock markets can provide the MFIs with a new source of capital to maintain growth and to expand lending and therefore to reach new microfinance borrowers and help the development of the poorest population. The stock exchange listing should also drive the MFIs towards a more professional management, more transparency and to follow stricter regulations.

1.7 References

Brand, D. (2010): *The Asset Class of Microfinance during the Financial Crisis*. Swiss Banking Institute of the University of Zurich

Cole, S. Simpson, T. Zia, B. (2009*) Prices of Knowledge. What drives the Demand for Financial Services in Emerging Markets?* Harvard Business School Working Papers 09-117

Dieckmann, R. (2008). *Microfinance: An Attractive Dual Return Investment*. Research Document, 1st October 2008. Deutsche Bank Research

Dieckmann, R. (2009). *Microfinance: An Emerging Investment Opportunity*. Research Document, 19th December 2007. Deutsche Bank Research

Feasley, A. (2011): *SKS Microfinance and ForProfit MFIs, Unscrupulous Predators or Political Prey? Examining the Microfinance Credit Crunch in Andhra Pradesh and Assessing the Applicability of the UN Global Compact "Protect Respect Remedy" Framework*. Cornell Law School Student Conference Papers. Paper 49. 11 April 2011.

Gonzalez, A. (2010a): *Microfinance Funders Profiles*. June 2010. Working Paper. Microfinance Information Exchange, MIX

Gonzalez, A. (2010b): *Microfinance at a Glance*. Working Paper. Microfinance Information Exchange, MIX

Gupta, A., Ramineedi, D. (2010a): *India Financials Sector*. Research Document, 15th January 2010. Credit Suisse Research

Gupta, A., Ramineedi, D. (2010b): *SKS Microfinance: Banking the Unbanked*. Research Document,24th September 2010. Credit Suisse Research

Hamilton, S. et al, (2009) *Microfinance: Testing its Resilience to the Global Financial Crisis* Research Document. 22 Jan 2009. Fitch Ratings

Mersland, R. Strom, O. (2011): *What Drives the Microfinance Lending Rate*. 10 May 2011. University of Groningen

Patten, R (2001). *Microfinance Success Amidst Macroeconomic Failure: The experience of Bank Rakyat Indonesia during the Asian Crisis"* World Development Vol 29. 2001

Rozeira De Mariz, F., Reille, X., Littlefield, E., Kneiding, C. (2009): *Microfinance. Shedding Light on Microfinance Equity Valuation. Past and Present*. Research Document, 3rd February 2009. JPMorgan & CGAP

Rozeira de Mariz, F., Martinez, S. (2010a): *Compartamos Banco. Bank Beats Consensus again*. Research Document, 19 October 2010. JPMorgan Research

Rozeira De Mariz, F., Reille, X.r, Rozas, D., Kneiding, C. (2010b): *All Eyes on Microfinance Asset Quality. Microfinance Global Valuation Survery 2010*. Research Document, 2nd March 2010. JPMorgan & CGAP