VALUING MICROFINANCE INSTITUTIONS

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1. Introduction: Why Valuation Matters

1.1 The Role of Equity

There has been an enormous debate in recent years about the commercialisation of microfinance, particularly the importance of accessing the capital markets. If the ambitious client outreach targets associated with the Microcredit Summit and the Millennium Development Goals are to be realized, the MicroFinance Institutions ("MFIs") serving the rapidly growing number of clients must rely increasingly on commercial sources of financing, such as wholesale bank debt and private equity.

Equity is fundamental in itself, as NGOs transform to formal financial institutions, with share capital and minimum capital requirements imposed as conditions of obtaining a bank licence. Equity is also a more flexible form of funding, which then allows the MFI to take on commercial debt through the leveraging of its balance sheet.

According to the MIXMarket (www.mixmarket.org) there are now 77 investment funds offering capital markets services to MFIs, of which 67 provide debt and 46 make equity investments[2]. The number and approach of such funds prompted Elizabeth Littlefield of CGAP to comment at the Opportunity International Global Conference in February 2004 that there are now too few investment opportunities for such funds, because they are nearly all focused on the top 200 or so MFIs out of a global total estimated to be as high as 10,000.

What is the answer?

The obvious solution is for the **quality of MFIs to improve** so that they are more appealing to investors. Whilst part of the solution may be an organizational structure that allows for equity investment (ie not an NGO) and better communication by MFIs, improved financial performance will be the key.

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[2] It should be noted that some of these "funds" would not qualify as such in the commercial investment market. Some are really 'foundations', others do not allow for public investors to take up a shareholding in the vehicle and some are 'fund of fund' investors which produces some double counting. Goodman (2005) estimates that the net investments by microfinance funds is US$617m, with a further US$1,100m invested in microfinance by development agencies, foundations and NGOs.

Secondly, this transformation will then **attract a more commercial investor** to the field of microfinance. There are some private investors already investing in MFIs, either directly or through investment funds, including individuals and institutions. However, even where the shares in MFIs are "privately held … much of the investment capital of many 'private' investors originally comes from public sources": Kaddaras and Rhyne (2004).

A third solution is for the **microfinance industry to rationalize**, so that some of the smaller, unsustainable players are combined with others to produce MFIs more likely to attract commercial sources of funds. A small number of organizations in the microfinance sector have, as McCarter (2002) notes, already turned to "mergers or other forms of consolidation in order to reap the potential benefits of cost savings, efficiency, access to market, and ability to achieve scale and self-sufficiency". I believe that the number would increase if more MFIs were owned by investors motivated by profit rather than being managed as an NGO.

1.2 The Key Role of Valuation

In the discussion to date on each of the above paths for the industry, one crucial element for all three has been largely ignored, namely the valuation methodology to use with respect to MFIs[3]. Fernando (2004) has commented that: "It is not reasonable to expect a quantum leap in private investment in an industry that most private investors find difficult to evaluate for the lack of benchmarks and transparent data."

This paper argues that a robust, consistent valuation methodology is an essential part of attracting more microfinance investors, for the following reasons:

- Valuation is the most comprehensive way of objectively measuring the financial performance of an MFI. It can also be used to compare one MFI with another and to monitor improvements over time. Indicators, such as the many used by the MIXMarket and the MicroBanking Bulletin (MBB), are very useful, but they can be misleading in isolation. For example, a high Return on Equity could reflect the small net asset base of the MFI which may not be in its long-term interest.
- Secondly, by better communicating the value of MFIs, the attention of more investment funds can be extended to a broader universe of institutions. The method chosen should incorporate all of the investors' 'value' concerns into the analysis. Increasingly, investment funds will need to monitor the value of their

[3] Even the excellent publication by McCarter (2002) only mentions the topic twice (pp 76 and 79) and then only in the context of valuing assets not the MFIs as a whole.

investments and report the fund's Net Asset Value to its own investors: the minimum for a mainstream 'open-ended' investment fund is a quarterly valuation.

- Thirdly, by applying a greater focus on valuation, and the increment added through a merger, the appeal of such a combination of MFIs can be made more compelling. In most of the mergers between MFIs to date, there was no exchange of value other than assets and liabilities, meaning that each transaction generally had to be 'a merger of equals', which is often not possible. By attributing a value to the two or more entities, a cash consideration can be part of the transaction, making the whole process more feasible to achieve.

It is often said that "valuation is more of an art than a science". At the end of the day, the buyer or investor will pay what he believes the company is worth, taking into account a range of quantitative and qualitative factors, some of which will be personal to the particular party, for example synergy benefits. Any under-valuation of an MFI favours the investor and means that the MFI or its shareholders are issuing or selling shares at too low a price, or are giving away more equity than is really necessary, in order to raise the same amount of new capital or sale proceeds.

Examining the issue of valuation in much greater detail is important for the future of microfinance. A theoretically sound and thoroughly 'road tested' valuation approach will help the buyer, investor or merging parties find the right value for the transaction *and* be confident that it is right[4]. It will provide comfort to the MFI and other interested observers that an appropriate price is being paid for an MFI or attributed to an investment fund's assets.

As mentioned, there is a dearth of material available on the valuation of MFIs. Therefore, this paper starts with some basic principles in examining the matter.

2. Valuation Methods

2.1 The Position of the Owner and the Entity being Valued

A company or business will have different values depending on the situation of the owner, and its specific interest, as well as the entity itself. The valuer should apply a methodology that is appropriate in the light of the nature, facts and circumstances of the investment which range across the following spectrum:

[4] As said by de Sousa-Shields and Frankiewicz (2005), p 48: "the 'uninformed price' is obviously going to be the lowest"

1. **Portfolio interest in a company that is not listed** on a public stock exchange, which is the situation for virtually all MFIs: Because the shares are not traded, there is no readily identifiable share price. The lack of listing normally means that the value will be lower, although there are situations where informal markets between shareholders are conducted.
2. **Portfolio interest in a listed company**: The more liquid the stock, ie the greater the amount of trading in its shares, the more accurate will be the market share price, based on the argument that there will be a greater number of investors, and hence stockbroker and other research analysts, valuing the company. In this situation, the discount for lack of marketability is removed, as there are daily values placed on the shares in the market place.
3. **Total ownership, bringing a 'premium for control'**: Total or 100% ownership is needed to obtain direct access to cash flows and the ability to group for tax purposes. Other benefits, such as management control, can be achieved in many instances with as little as 30-40% of the shares, provided the balance is widely held: see Damodaran (2005).
4. **Ownership by an acquirer that can obtain synergy benefits** with its existing operations or other special value: In this situation, the valuing party may be prepared to pay extra for these special benefits, for example the cost savings or revenue enhancements it will accrue from merging the two or more entities.

It is normal for value to increase as the entity moves along the above continuum.

2.2 The Valuation Methodologies

The approaches taken in valuing a company normally fall into the following areas:

- Multiples of earnings or, where appropriate, dividends paid[5];
- Multiples of net assets (or shareholders' equity or book value); and
- Discounted CashFlow (DCF) based approaches.

The DCF approach assumes that the MFI has value only if it can generate positive free cashflows, ie cash that is available to the investors after the requirements for reinvestment. It involves projecting future cashflows over a period of time, normally five to ten years, to encompass the MFI going through a large number of changes in its business. To take into account the value beyond the forecast period, a 'terminal value' is added to the last year's cashflow. An appropriate discount rate, which attempts to reflect the many factors affecting the MFI, is then applied to each year's cashflow and the terminal value, so as to bring the total to the 'present value'.

[5] However, the paucity of dividend payments by MFIs precludes the broad use of this method

In the case of a financial institution, the business of which is to borrow funds from one group of customers (depositors) in order to lend it out to other customers (borrowers), it is normal to use the free cashflow to equity holders in a DCF valuation. The cashflow in the DCF valuation of an MFI will be similar to its Net Income, after retaining the amount needed to comply with its minimum capital requirements.

The multiple (or capitalization) methods involve applying a number (or capitalisation factor) to earnings or net assets. The multiple will usually be chosen from the available data for the acquisition of similar companies or the market prices for comparable listed companies.

With net assets, it is normal to use the historic Book Value, unless the capital structure is projected to change radically in the near future. It will also be important to conduct some detailed analysis of the key balance sheet items, to ensure they are held in the books at an accurate value.

A Multiple of Earnings approach is the most commonly used for normal company valuations. The actual 'earnings' used can be taken from different lines of the Income Statement, such as earnings before interest and tax (EBIT) or earnings before depreciation, interest and tax (EBITDA). But it is normal to use After Tax Earnings for a bank, as depreciation is not usually an issue and the Net Income figure represents the growth in the capital available to the institution. The Net Income figure chosen should be reasonably representative of the future outlook, or 'maintainable' position, and the MFI should be valued having regard to its total, fully diluted share capital.

3. Equity Investment Industry Survey

To garner a better understanding of the practice within the Microfinance industry, a survey on the subject of valuation was conducted by Opportunity International among members of the Council of Microfinance Equity Funds (the "Council").

3.1 Valuation Method

The survey found that:

- Book value or net assets is the 'starting point' for nearly all members, with a premium to book value paid, if it is considered to be justified, whilst some members would seek a discount;

- A DCF is performed by members "always" or "occasionally" (or, for one Fund, just "once"), depending on the stage of the MFI's development, its profit outlook and the percentage shareholding sought;
- The data gathered is usually three years of historic numbers plus 3 to 7 years of forecasts, always subject to adjustments made by the valuer; and
- An earnings-based (or dividend flow) analysis is used by only approximately half of those responding.

The valuation approach chosen by the Member will often be governed by the availability of information and its quality. In regard to the latter, the issues are whether the historic balance sheets and income statements have been audited and the perceived reliability of the financial projections.

In any event, where more than one methodology is used, the Members surveyed indicated that they are cross-checked against each other. It is also worth noting that most of the Council members normally make only a portfolio investment, as opposed to acquiring control of the MFI.

3.2 Crucial Valuation Inputs

In calculating the value of an MFI, using one or more of the above methods, the following non-financial factors were identified as important by the Council members (in an approximate order of overall priority).

Box 1: *Qualitative Valuation Factors*

1. The senior management quality[6]
2. The sophistication of the MFI's governance and Board structure
3. The long term planning and 'vision' of the organization, normally exhibited in a detailed Business Plan
4. Its financial performance to date and growth potential
5. The customer base and loan portfolio quality
6. The level of competition and the MFI's position in the marketplace in general
7. The regulatory environment, in particular whether the MFI is licensed as a bank or otherwise able to offer a broader range of products
8. The MFI's future capital requirements and existing sources of funds, which may include savings and various forms of donor and wholesale debt facilities
9. Political and macro-economic factors pertaining to the country in which the MFI operates
10. The currency risk, as normally MFIs will reside in countries where the national monetary unit is perceived to be 'soft'

[6] See Kaddaras and Rhyne (2004) for more detail on the importance of this factor

One member highlighted the "institutional culture" which incorporates different elements of the first three factors. Whether the MFI is likely to pay a dividend on the shares held would also be a key valuation factor, as that will mean the investor's return is not limited to capital gain only. Finally, there may also be a change of attitude if the investee MFI is an NGO conversion as opposed to a newly created MFI.

3.3 Exit Strategy and Price

One particularly relevant factor that may convince the investor to pay a premium is the existence of an agreed exit process. For some of the Council members, this involves simply a fixed deadline for the Fund to sell down its shareholding and identification of the appropriate strategy, such as a listing, trade sale or disposal to existing shareholder(s) or employees. In other cases, there may be a 'put option' or another mechanism, normally set out in a Shareholders' Agreement, allowing the Fund to retrieve its investment at a pre-determined fixed price or on the basis of an agreed formula from an identified party such as a large shareholder.

Therefore, the issue of valuation, at both the time of investment and at the end of the anticipated holding period, is crucial for the members of the Council and other investment funds. The greater the certainty of exit price, the more the Fund will be able to value the MFI on the basis of projecting an Internal Rate of Return for the investment, thereby making the use of a DCF particularly appropriate. In this situation, the investor will be looking more at the cash flows from the investment itself, rather than a value of the MFI as a whole, with the terminal value reflecting the exit price[7].

4. Which Valuation Method to Use

4.1 Discounted Cash Flow

A DCF is particularly apt when recent performance is not representative of the outlook or the business has a fixed life, such as a coal mine. Use of a DCF in the microfinance sector would be most appropriate for fast growing MFIs or one transitioning into a regulated bank, with all the consequent changes to its management, culture and systems.

[7] More detail on the approach of one Council member, ProFund, that has recently exited a number of its MFI investments, can be obtained from Silva (2005)

One of a DCF's advantages is that it makes the future cashflows accruing to an MFI, and hence any investor, much more explicit. As Meehan (2004) notes, "a lack of understanding of the nature of microfinance cashflows" is one major reason holding back the interest of commercial investors.

However, whilst a DCF valuation is a more sophisticated method, allowing for the examination of a range of alternative possible scenarios, it is also more complex. The first issue raised is the quantity and quality of the forecast financial information. Secondly, it can be very difficult to project future cashflows beyond the years provided to the valuer in a reliable manner and to choose an appropriate discount rate.

Thirdly, small changes in the underlying assumptions, such as client numbers, branches, employees and loan default rates, can have a large impact on the result, as the company's projections are extrapolated by the valuer. Fourthly, where the future cash flows are very large, more than half of the value can be contained in the terminal value, which may not be capable of accurate forecasting.

4.2 Multiple of Net Assets

Because the factors identified above in regard to a DCF can make the exercise of valuing MFIs a complex one, the inclination of many experts is to start with Book Value, as it does provide at least a tangible base value. It can also be argued that it is more appropriate for a financial institution that derives its income mainly from leveraging its assets, such as the loan portfolio, as opposed to other industries that rely more on their intangible assets, such as technology or know how, which are not always carried on the balance sheet.

However, the uncomplicated nature of a Book Value approach to value can also betray its shortfalls. The net value figure itself is a reflection of historical performance by the MFI. The multiple can be an over-simplified composite of many different factors, such as growth and risk. Whilst it may appear to obviate the need to make the sorts of projections required for a DCF, the same sorts of factors are implicit in the choice of multiple. Moreover, a small change in the multiple, say from 1.0 to 1.1 times, increasing the valuation by 10%, could have a resulting price impact of many millions of dollars.

4.3 Earnings Multiple

The use of a price/earnings ratio will be more appropriate for a mature company that requires less capital expenditure. Its use shows that the valuer believes the entity should be run as a profitable business.

This approach can reasonably be employed if the MFI has a profit history. If not, a 'maintainable' earnings figure can be deduced either from a number of recent historic periods and/or reliable forecasts, some or all of which may need to be adjusted. To the resulting figure is then applied a multiple based on precedent transactions or comparable companies.

4.4 Choice of Methodology

As to which method is the best, assuming all three can be applied, commercial investors will normally be more comfortable taking equity in MFIs if they are asked to do so on the basis of robust, transparent valuations that deal with the types of factors identified as important by the Council members. If they are approached to pay simply a multiple of Book Value, their naturally conservative inclination may be to attribute only a very small premium. For that reason, this paper favours a DCF, provided reasonably reliable data can be found.

However, whilst it is common for a valuer to concentrate on one valuation method, no single approach will cater for all of the factors pertaining to a particular MFI. The use of only one methodology is normally unwise; at the very least, other methods can provide a helpful cross-check. For example, current Book Value is often used as a 'sanity check' for the Terminal Value calculated in a DCF.

A multiple of earnings may also be used as a cross-check. In certain circumstances, such as where there is a lack of reliable forecast data, an Earnings Multiple method, based on an appropriate 'sustainable' earnings figure, could be used as the primary valuation method.

Also relevant will be the particular circumstances of the transaction, for example:

- whether it is a new share issue, the sell down of existing stock or an acquisition;
- the time that each shareholder has held any shares that are being sold;
- the size of each parcel, particularly whether a control premium or minority discount is warranted;
- the liquidity, or 'tradability', of the shares;
- if there is a pre-existing document, such as a Shareholders' Agreement, that sets out the sale price or a formula for calculating it; and
- any other special rights or obligations that attach to the shares, such as provisions preventing some or all of the shareholders from selling shares over a set period.

As always in any commercial transaction, the pricing will need to be negotiated between the parties. The outcome will result from considering a mixture of the valuation calculation, the above factors and the strength of each party's bargaining position.

5. Precedent Transactions and Comparable Listed Companies

Regardless of which valuation method is used, the current market values or prices paid for similar MFIs are important indicators. In addition, a price/book approach and a price/earnings multiple valuation may be difficult to perform if relevant comparable companies and precedent transactions are not in existence.

5.1 Original Purchase

The most obvious precedent is what the current shareholders paid at the time they took up their shares. However, this may not always be relevant for reasons such as:

- Much of the equity in MFIs is subscribed for or purchased at par value;
- The price may reflect other services provided by the investor, such as technical assistance not explicitly costed, an implicit guarantee that the MFI will be broadly supported or the investment may be part of a 'corporate restructuring';
- The shareholders may have invested over a period of time and different rights may attach to the different tranches of shares;
- The buyer may have certain 'mission-related' preferences which cannot be 'valued', such as for a rural as opposed to an urban program or for female clients as opposed to male ones; and
- It is also possible that any investment is motivated more by other strategic considerations, such as to enter a particular country or market, rather than the purely commercial.

In any event, the circumstances at the time of the original capitalization may be greatly different to those at the time of valuation, for reasons such as a change in the prospects of the MFI or market conditions. As you would expect, the relevance of the original prices paid for shares in the MFI will be less the greater the intervening period that has elapsed.

5.2 Precedent Transactions

Set out below is a table for those transactions involving MFIs for which there is reliable publicly available data.

Table 1: *Precedent Microfinance Deals*

Country	Entity	Date	% Purchased	Price/ Historic Book Value	Price/ Historic Net Income
Peru	Mibanco	20/12/04	5.02	1.48	6.52
		2/12/04	22.8	1.35	5.95
		12/10/04	7.80	1.36	5.99
		20/7/04	0.41	1.08	4.74
		12/7/04	4.61	1.07	4.71
		Average		*1.27*	*5.58*
Bolivia	BancoSol	December04	47.2	0.98	4.31
			*	1.0	n/a
Colombia	Finamerica	November04	90.1	1.80	42.8
			*	1.4	n/a
Ecuador	Solidario	October 04	2.6	0.85	4.32
		August 03	19.8	0.86	4.69
			*	1.0	n/a
Nicaragua	Confia	2002	*	0.9	n/a
Average: Latin America				*1.08*	*5.15*[8]
Ghana	First Allied S & L	April 2004	33.5	n/a[9]	17.2[10]
	SASL	August 2004	100[11]	1.0	n/a
Kenya	K-Rep	September04	13.4	0.62	5.35
	Equity Build Soc'y	April 2003	15.9	1.59	7.86[12]
Malawi	OIBM	March 2003	30.5	1.13	n/a
Average for Africa				*1.09*	*6.6*[13]
AVERAGE[14]				**1.09**	**7.50**

Source: ACCION, www.africapfund.com, www.procredit-holdings.com and Silva (2005) (marked *)

[8] Excluding Finamerica

[9] Using the price of $600,000 to be paid by AfriCap for new shares equivalent to 33.5% and existing equity as at 31 December 2003, an approximate price/book ratio of 1.8 times can be deduced

[10] Discussions with AfriCap suggest that the multiple paid was 4-5 times adjusted forecast earnings

[11] This was the original capitalization of Opportunity International's commercial bank in Ghana

[12] Based on 2003 net income

[13] Excluding First Allied (see above note)

[14] Based on the average for all Mibanco transactions and excluding the outlying values for the other transactions, being Finamerica at the top end

The above table exhibits a range of Price/Book multiples of between 0.6 and 1.6 times for the purchases of equity in those MFI organizations, excluding the sale of 90% of Finamerica, where a control premium would have been paid as the purchase was strategic. The range is consistent with the comments made in two recent papers that:

- the "price range currently being paid [for MFIs] would appear to correspond to the MFI's 'book value' plus or minus 20 percent to 30 percent": de Sousa-Shields and Frankiewicz (2005); and
- the "rule of thumb used by [MFI equity funds] is 1x book value, though a strong MFI with superior returns might command a premium of up to 1.5x book value": Meehan (2004).

The PE ratio range for the above transactions, again excluding the Finamerica deal, is 4.3 to 17.2 times.

It is self-evident that the sample of deals is very small and none of the transactions occurred in Eastern Europe or Asia[15]. It is also worth bearing in mind that many of the MFI transactions are not totally 'private sales' because the ready market for MFIs is not extensive. Rhynne (2005) notes that "such sales cause shares to change hands without changing the nature of ownership" because the buyers are often restricted to the MFI's own management, its existing shareholders or socially responsible investors. A recent example of this phenomenon is the reconstruction of the investment company, IMI.

5.3 Comparable Listed Companies

In regard to share market valuations of MFIs, there is virtually no available data. The last trade recorded for BancoSol on the Bolivian stock exchange was in 2001 at a price equal to approximately 0.8 times book value[16].

Bank Rakyat Indonesia was floated in November 2003 at approximately 1.4 times book value and now trades at around twice that multiple. However, only approximately one-third of BRI's total loan portfolio could be called 'microfinance' in nature.

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[15] There is additional data available from market sources on other share purchases in other MFIs, such as KMB (Russia), EuroBank (Montenegro), ABK (Kosovo) and AgBank (Mongolia), but there is insufficient detail to calculate the relevant ratios.

[16] The only trades since then have been off-market between private buyers: see King (2005)

6. Other Relevant Valuation Data

6.1 Comparable Banks

Given the lack of detailed information on MFI valuations, due to the short history for the sector, the private (or in-house) nature of many of the deals and the absence of any meaningful stock exchange data, it is necessary to broaden the scope of what are comparable companies.

In any event, it is quite reasonable to look at banks in relevant countries, particularly where the MFI has obtained a banking licence and is competing with banks, at least at the smaller end of the market. Meehan (2004) believes that Microfinance can be categorized as "a sub-sector of small-sized financial institutions."

Table 2: *Data for Commercial Banks*

Indicator: Region (number in each sample)	**Price/ Historic Book Value (x)**	**Price / Historic Net Income (x)**	**Return on on Equity (%)**
Bank Transactions:			
Eastern Europe (28)+	2.0	19.8	13.0
Asia (29)	2.5	15.0	n/a
Bank Trading Multiples:			
Eastern Europe (15)	2.3	14.3	15.4
Asia (18)	2.8	15.8	21.7
Latin American (9)	2.9	14.4	22.7
South Africa (4)	2.6	13.0	19.9

Source: ING, Citigroup, Bloomberg
+: Averages exclude the outlying values for these transactions

The following comments are relevant to the above data:

- All of the small bank transactions in Eastern Europe except two involved the acquisition of a controlling stake, which will normally be at a premium to a portfolio acquisition and arguably more so for a developing market;
- For those two transactions[17], the multiples paid were much lower than the average;
- The three regions have been chosen as the most relevant to those countries in which MFIs operate;

[17] The November 2003 purchase of 25% of Banca Commerciala Romana by the IFC and EBRD, where the price/book ratio was 0.9x and the PE ratio was 10.8x, and the recent acquisition of 7% of BRD in Romania by Societe Generale, for 1.7x and 17.1x, respectively

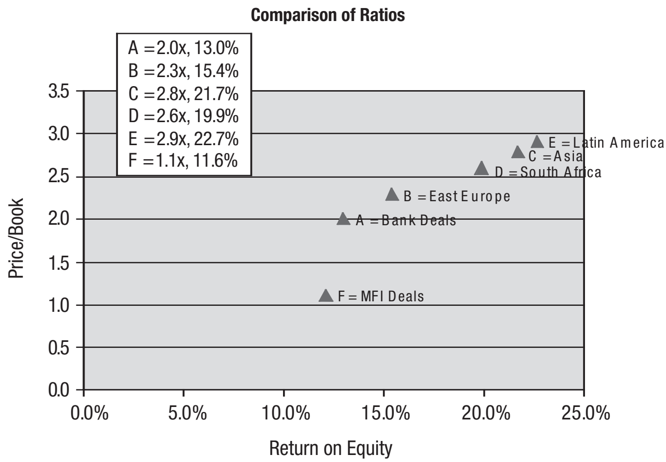
- South Africa has also been shown because it represents approximately 90% of the total capitalization for all stock markets in Africa, even though the sample in that country is small in number; and
- The market capitalization of each of the 46 listed banks is at least ten times the size of the largest MFI transaction.

As with the MFI transactions, there is some other bank deal data based on less formal sources[18].

6.2 Comparison with MFIs

What stands out from the above data is that the multiples paid for banks, or at which banks in emerging markets are trading, are much higher than those identified above for MFIs. Compared to the average Price to Book ratio for the MFIs deals of just 1.1 times, the bank transactions and share prices are at around 2 to 3 times Book Value, as shown below.

Table 3: *Comparison of MicroFinance Institution Deals and Bank Trading Multiples*



[18] Such as Hebros Bank (Bulgaria) (2.2x book), Nova Banka (Croatia) (2.6x), Delta Bank (Serbia) (3.2x) and Savings Bank (Albania) (2.5x).

Before seeking an answer for this discrepancy, the ten MFI transactions in Table 1 should be compared with the latest statistics for MFIs, to determine whether the deals are representative of the industry. The statistics for the ten MFIs have been taken as at the date as close as possible to that at which each sale of shares took place, which in all but two cases was in 2004, which makes the use of the average historic 2003 data for the 231 MFIs contained in the MicroBanking Bulletin (2005) appropriate.

Table 4: *Comparison of MicroFinance Institution Deals and the MFI industry*

MFI	Type	Number of Borrowing Clients	Loan Portfolio (US$m)	PAR (>30 days) (%)	Return on Equity (%)	Operating Sustain -ability (%)
BancoSol	Bank	43,000	94	4.3	13	114
Confia	Bank	13,500	13	8.1	-16	n/a
Equity Building	Building Society	64,000	23	n/a	24	n/a
Finamerica	NBFI	21,000	19	4.3	-1.0	101
First Allied	Savings & Loan	7,400	2.4	n/a	27	n/a
K-Rep	Bank	45,000	20	6.9	12	138
MiBanco	Bank	121,000	117	3.4	27	129
OIBM[19]	Bank	1,700	1.4	0.2	-76	45
SASL	Savings & Loan	53,029	4.2	1.0	-4	94
Solidario	Bank	136,000	130	2.3	23	114
Average		*56,000*	*46.5*	*4.3*	*11.6*	*119*
All MFIs (231)	All	47,688	19	2.8	5.9	123
Bank MFIs (31)	Bank	34,006	87	2.8	41	130
RuralBank MFIs (12)	Bank	6,422	1.9	3.9	22	138
LAC MFIs (49)	All	31,424	25	2.5	1.2	131
African MFIs (57)	All	26,285	5.8	3.9	-4.6	117

Source: The MicroBanking Bulletin, Opportunity International, www.africapfund.com and www.procredit-holdings.com

[19] The amount raised was for the original capitalisation of OIBM; therefore, figures are included for the next full year (2004) but excluded from the averages

The above data shows that the ten MFIs are at the top end of the 231 MFIs surveyed by the MBB, and also when compared to statistics for the two relevant regions, in terms of all indicators except for Portfolio at Risk. But, in comparison to MFI Banks, the ten MFIs do lag behind, except for client numbers.

6.3 Qualitative Factors

There is a range of other issues relevant to applying data from the above bank transactions and listed banks to MFIs:

- *Business Activity:* Commercial banks are very different 'animals' to MFIs. The former have the advantage of a more diverse range of products compared to as few as one or two for MFIs. On the other hand, it is arguable that MFIs should command a premium due to the margins that can be achieved, at least whilst competition is lacking.
- *Risk:* Many would regard 'grass roots' financial services as a more stable business, with average loan repayment rates of 98% or more. Krauss (2006) found that "MFIs show … only low correlation with domestic GDP [and] are significantly less exposed to systemic risk than emerging market commercial banks."
- *Returns on Equity:* The MicroBanking Bulletin (2005) shows that the ROE for all MFIs is 5.9% and 40.8% for the 31 Bank MFIs. Although the median figures are 4.9% and 15.8% respectively, demonstrating the variability of returns, these figures still compare well with the banks contained in Table 2, the ROEs for which range between 15.4% and 22.7%. Another source[20] indicates that the average ROE for commercial banks in relevant countries is just 14.2%.
- *Liquidity:* There is no real secondary market for MFI investors. The discount that is applied for this lack of liquidity is normally assessed in the range of 10-30%, with developing countries possibly at the top end.
- *Critical mass:* MFIs are much smaller than banks, as demonstrated when one considers the market capitalisation of the 'small' banks contained in the above table. The lack of a large capital base could make the MFI more susceptible to an event that may impact its business.

[20] Based on an unpublished analysis by Adrian Gonzales of MIX/CGAP, using BankScope reporting by 952 commercial banks in the 36 countries in which more than 3 MFIs reporting to the MBB operate

- *Under-leveraged:* On the other hand, most MFIs are under-capitalised[21]. This provides many MFIs with an opportunity to access increasing amounts of debt to fund expansion.

- *Social and Financial Objectives:* Investors in commercial banks are normally motivated by financial considerations. By contrast, the universe of investors for MFIs is quite limited and many of them may be motivated more by social concerns. Few MFI investment funds are seeking only a financial return and some are satisfied if they can just retrieve their capital plus a modest yield. Many investors in microfinance will be looking more to see the impact of their investment on poverty alleviation.

- *Profitability:* As a result, most MFIs have not reached the stage of making a profit. Of the 231 MFIs in the MicroBanking Bulletin (2005), only 139 have reached Financial Self Sustainability. The early stage in the growth cycle at which most MFIs operate has broader valuation implications, with some analysts using the analogy of a venture capital type company.

- *Industry Growth Rate:* The expansion of the industry has been spectacular. Since the establishment of the MicroCredit Summit in 1997, the number of the poorest families reached by microfinance has grown from 7.6 million to over 66 million at the end of 2004, according to Daley-Harris (2005), an annual rate of 36%. Whilst investors will focus on the future performance and capital required by the specific MFI, microfinance is regarded by many, such as Meehan (2004), as "a high-growth, niche industry with tremendous opportunity for future growth [where] competition is currently limited or non-existent in most markets, particularly in Asia and Africa".

- *Regulations and Market Environment:* The degree of regulation and the general operating environment can have a very significant impact on the value of an MFI. Factors such as political stability, civil unrest, corruption and foreign investment restrictions can greatly reduce the potential sustainability of an MFI. In some countries there may be a lack of regulation, to the MFI's advantage. However, certain interventions, such as interest rate caps and capital controls, may affect an MFI more than a bank and, hence, its comparative value.

[21] The MicroBanking Bulletin (2005) states the median debt/equity ratio for all MFIs to be 1.5x and 3.9x for Bank MFIs, whereas a ratio of 6x or more is common in the banking sector

6.4 Implications for Valuing MFIs

On the basis of an analysis of the above issues, the key questions in valuing an MFI are:

1. How much weight to place on these precedent transactions and comparable companies?
2. What discount (or premium) should be applied in total to those multiples in arriving at a final value for the MFI?

The answer will differ for each set of circumstances, particularly the quality of the particular MFI. But it is possible to make some comments as to how MFIs in general compare with banks. Table 5 attempts to categorise whether the relevant factor is a 'plus' or a 'minus' for an MFI compared to a commercial bank.

Table 5: *Comparison of Characteristics of MFIs and Commercial Banks*

Plus

- ✓ High loan repayment rates
- ✓ High ROE for Bank MFIs
- ✓ Opportunity to increase leverage
- ✓ Industry growth rate
- ✓ Less regulation in some countries

- × Less diverse product range
- × Lack of liquidity
- × Smaller balance sheet
- × Social 'mission' of Not for Profit MFIs
- × Business limitations (eg. capital adequacy requirements, interest rate caps)

Minus

On balance there are approximately the same number of factors 'above and below the line', although it is necessary to place a weighting on each of them. (The lack of liquidity is probably the most important factor, and this is a 'minus' for all MFIs.)

7. Conclusion and Next Steps

The prices paid in the MFI transactions for which data is available indicate a discount of approximately 50% to the precedent acquisitions and trading multiples for comparable banks.

Based on the analysis conducted in this paper, it is considered not appropriate that the prices for profitable, financially sustainable and licensed MFIs, such as the ten at the top end of the industry for which data exists, should be at a discount as high as the current figure of 50%. To value MFIs at or near to book value means that the valuer is attributing nothing for the business goodwill or intangible assets not explicitly recognized on the balance sheet.

To advance the issue of MFI valuation and to engender a more sophisticated approach to valuing MFIs, four initiatives are suggested:

1. *More Data Collection:* As indicated, there is a great shortage of public information on transactions in MFIs. This is not surprising as there is virtually no stock market information for MFIs and many of the transactions are done 'in house' between donors, employees or existing investors, sometimes undergoing restructuring exercises[22]. Despite the lack of mandatory disclosure, the industry as a whole would benefit from a higher degree of knowledge of the prices at which shares in MFIs change hands. An initiative in this regard has been made recently by ACCION and the Council of Microfinance Equity Funds, which all stakeholders are encouraged to support.

2. *Dissemination of Valuation Methodology:* There is also a paucity of data on the valuation methods used by those parties investing in MFIs. It is to be hoped that this article, including the results of the survey conducted of Council members, goes some way towards remedying this problem. Most commentators and practitioners believe that more funding is essential for the future of microfinance. In order to attract the required capital into the sector, the potential investors, both the existing socially oriented funds and the more return focussed, need to be part of this debate, so that the valuation approach utilized by the MFIs meets their needs.

3. *Greater Transparency:* A transparent and robust valuation methodology may be only one of the pre-requisites for the future commercial funding of MFIs, but it is

[22] There are certain exceptions, such as Pro Fund (see Silva (2005)) and AfriCap (see www.africapfund.com), which provide a considerable amount of public data on their investments.

an important one. The other key non-financial elements have been discussed elsewhere[23], and many were raised in the Council member survey, including: better corporate governance; frequent and standardised reporting; a more understandable legal status; and the application of corporate finance principles.

4. *Improved Marketing of MFIs:* At the same time, MFIs should not be reticent in 'putting their best foot forward'. If they are to 'play' with the big boys of the commercial world, in raising capital or conducting mergers, they may need some of the same 'equipment'. That may include employing advisers who are familiar with the requirements of such investors[24]. The key marketing messages that the MFIs can run, in order to generate some competition among investors, have also been touched on in this article. The main point raised by the discussion on valuation is that MFIs should not undersell themselves, by allowing their value to be linked too closely to Book Value.

Over the last decade or more, financial institution valuations in general have moved away from Book Value to more complex models, such as Discounted Cash Flow. As MFIs are increasingly marketed to institutional investors, who are also shareholders in listed banks and other companies, the same degree of sophistication should be applied.

Whilst there are characteristics that distinguish MFIs from commercial banks, the differences are becoming less pronounced. When MFIs, at least those that are more formal and regulated, can exhibit the same (or even better) investor returns and operating statistics as commercial banks, there are fewer reasons not to seek the same pricing. A buyer is always reluctant to pay a high price. But most buyers eventually become sellers, at which time they will also benefit from the upward quantum shift in the parameters for MFI valuations that, on the evidence, is justified.

[23] For example, see Kaddaras and Rhyne (2004), de Sousa-Shields and Frankiewicz (2005) and Meehan (2004).

[24] McCarter (2002) recommends the use of a "professional, mutually respected, paid intermediary [to] make the first approach and facilitate the [merger] deal".

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Abstract

This paper examines the main approaches taken in valuing a Microfinance Institution (MFI). A survey of the Council of Microfinance Equity Funds revealed that, whilst many of its members use a Discounted CashFlow (DCF) method, most favour a multiple of Book Value approach to valuing MFIs, with some reluctant to pay a premium to current Book Value. This paper recommends the use of a DCF or, where it is not feasible, an Earnings Multiple method. A number of qualitative factors are also identified as being important in any valuation exercise.

Given the potentially crucial role that valuation may play in the future development of Microfinance, it is suggested that the collection of more data on transactions conducted by MFIs would aid the debate on which methodology to use. The paper also argues for more transparency in how MFIs are run and improved marketing of their shares to investors.

The paper concludes that, on balance, the prices paid for financially sustainable and regulated MFIs may be at too great a discount to those applied to a commercial bank, based on an analysis of the characteristics that distinguish such MFIs from banks. At the very least, MFIs should take a more commercial approach to their own valuation, if they are to access the additional sources of funding, that are essential for the industry to grow, at a fair price.