

Financial Performance of Microfinance Institutions

A Comparison to Performance of Regional Commercial Banks by Geographic Regions

Michael Tucker and Gerard Miles

Abstract: The number of microfinance institutions (MFIs) making small loans to the developing world's poor has grown to over 7,000. With growth has come increasing competition for scarce funding. Few MFIs have reached self-sufficiency, and fewer still have made the transition to regulated financial institutions. Comparing the performance of MFIs that have attained self-sufficiency with those that have not and comparing both to regional commercial banks in developing countries on selected financial ratios reveals self-sufficient MFIs are strong performers on ROA and ROE. The majority of MFIs, however, are very weak and in need of continued subsidies. Providing financial services to the poor is an expensive proposition and may mean numerous MFIs will not reach self-sufficiency.

In the middle ground between wholly subsidized and regulated institutions, a growing number of microfinance institutions (MFIs) have attained sustainability without yet achieving regulated status. Many of these institutions are working on the time-consuming process of meeting requirements to apply to become regulated institutions. The greater levels of equity capital required to attain the status of a regulated institution are

available only to those MFIs with a high degree of reporting transparency and increased efficiency in business practices. Even for those MFIs not yet considered sustainable, an avowed goal of at least improving operational efficiency has become an important criteria expected by many organizations willing to provide capital. Comparing financial ratios and other operating data of the subsidized and the sustainable MFIs with each other and with regional commercial banks can provide insight into the progress MFIs have or have not made toward sustainability. Comparing performance with the commercial sector also points out where differences exist. These comparisons are made by matching regionalized aggregate data of MFIs as self-reported to the *Microbanking Bulletin* with data reported by commercial banks by region.¹ Aggregate data on sustainable MFIs worldwide and aggregate developing-world commercial banks are also compared for this purpose.

Sustainability

Sustainability is defined as “a program’s capacity to remain financially viable in the absence of domestic subsidies or foreign support” (Woolcock, 1999). Financial self-sufficiency requires the ability to cover at least 99.5% of expenses exclusive of subsidies or grants (Microbanking, 2001). By definition, sustainability includes generating sufficient profit to cover expenses while eliminating all subsidies, even those less-obvious subsidies, such as loans made in hard currency with repayment in local currency.

Paradox of Sustainable Microfinance Institutions

The poverty alleviation/self-sufficiency paradox underscores the trade-off between effective service leading to poverty

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Michael Tucher is a Professor of Finance at Fairfield University’s Dolan School of Business. He is also co-director of the Center for Microfinance Advising and Consulting (CMAC) at Fairfield University and Director of the Business Education, Simulation and Trading Classroom at Fairfield’s Dolan School of Business. Email address: Tucker@mail.fairfield.edu

Gerard Miles is finishing his law degree at Washington & Lee University. Email address: milesg@wlu.edu

reduction and financial self-sufficiency. Focusing on sustainability and profitability might lead MFIs to seek to make larger loans to better-off clients in order to gain economies of scale that would both minimize expenses per loan and increase the probability of repayment. Such a strategy, while moving an MFI toward sustainability, would once again leave the poor with limited access to capital. A balance between larger, more likely to be repaid loans and the continuance of smaller loans to the poor can serve both goals. The balance will be difficult to attain, but a financially sustainable MFI will be able to increase borrowing in private-capital markets, adding to its ability to loan money (Gibbons and Meehan, 1999). Without sustainability, MFIs are not a going concern, making the goal of poverty alleviation unreachable (Otero, 1999).

Since MFIs have only been able to reach several million of the many million poor, there is constant pressure to expand. Expanding to service more of the poor and, increasingly, the less able to repay, necessitates more capital. At the margin, added capital is more difficult to obtain, requiring higher levels of financial sustainability and all the associated reporting requirements that entails. One avenue to attain operating sustainability, although not necessarily without elimination of all subsidies, is to increase profits by raising interest rates, fees, or both. However this method shuts out those least able to repay and increases default rates.

The strategy of extending loan services to more people in order to achieve economies of scale can lead to increasing bad debts if not done properly (Gulli, 1998). Overall, through economies of scale attained by judicious expansion and loan diversification, the larger MFIs that reach more people tend to move closer toward sustainability.

Financial Sustainability

As the number of MFIs has dramatically increased, their main source of funds, nongovernmental organizations (NGOs), has gained leverage in demanding more transparent accounting, audits, and, in some cases, clear plans to attain financial sustainability.

Most of the estimated 7,000 MFIs have fewer than 3,000 clients and less than a 95% repayment record (Garber, 1997). Many of these organizations have been unable to control administrative costs. For some MFIs, high administrative costs are simply a way of doing business that enables staff members to earn a living through the generosity of NGO subsidies. Job creation in the MFI itself was not the original goal, though for some, job sustainability may have become more important than minimizing expenses. This is no longer a viable strategy. Competitiveness in the market for funds is prompting a return to the original MFI mission motivated by a need for continuing access to capital.

The possibility of comparing publicly available audited statements of a significant number of MFIs with any MFI seeking funding may inspire some MFIs to alter financial figures to reflect a more robust performance than actual (Woolcock, 1999). Lack of transparency or even outright dishonesty creates difficulties for NGOs seeking to determine which MFIs can best use funding. Increasingly, NGOs require MFIs to adapt standard accounting practices to ease comparisons. Accion Camel has been adopted by a growing number of MFIs to report a variety of financial measures, such as capital adequacy, asset quality, management, earnings, and liquidity management (Saltzman & Salinger, 1998). Accion Camel is a modification of the Camel system used by U.S. commercial lenders. Using the same principles applied to commercial banks, Accion Camel adjusts some of the figures to account for differences between commercial lending and MFI practices. The result of an Accion Camel audit is a rating on a scale of one to five, providing a basis for comparing MFIs' performances. Adaptation of Camel to MFIs is useful but imperfect. Benchmarks are useful when standardized commercial banks are being compared but they can be less helpful when comparing far more diverse MFIs, which differ by region, client base, size, and culture. A specific MFI could have few comparable institutions to be benchmarked against. The cost of the Accion Camel system also effectively limits such an audit to the more successful MFIs.

Many MFIs have avoided audits or the more expensive Accion Camel for lack of funds or expertise or because of a desire to limit outside examination. Moving the process of formalized financial reporting to a greater level of transparency inevitably will be up to the NGOs that supply capital. In some cases, it may be necessary to subsidize audits.

The lack of widely used comparable accounting standards makes comparing MFIs difficult. The data contained in the Microbanking Bulletin, released by the Microbanking Standards Project, which this study examines and many NGOs have relied on, is self-reported. The vast majority of MFIs do not submit data, which creates selection bias. Those who do provide data tend to be more successful. Any conclusions from the proceeding analysis will therefore be somewhat limited. That has been the nature of MFI analysis—limited data followed by limited conclusions. Nevertheless, continuing to examine the financial information that is available establishes benchmarks that funding organizations can refer to and perhaps use as leverage to encourage greater transparency and more participation in reporting.

Aggregate MFI financial data is segmented by region while MFIs identified as sustainable cut across all regions, with no indication of how many of these elite institutions are from any particular region. Within regions there can be large economic and demographic disparities. For example, Sri Lanka and Bangladesh are in the same region but differ greatly in population density and levels of poverty. Commercial bank data is combined by region for comparison to regional MFIs and aggregated across all developing countries for comparison to sustainable MFIs. Commercial banks are by no means immune to mixed levels of prosperity and business practices within the same region. Africa includes institutions from such diverse countries as South Africa, Morocco, Kenya, and Zimbabwe. An additional problem is that within regions, commercial banks reporting may be from countries different from those of reporting MFIs. Since there is no way of knowing the specific

countries due to the anonymity of MFI reporting, regional comparisons will be broadly assumed.

Methodology

Five financial ratios from three different categories are the basis for the comparisons. In the first category, the ratio of operating expenses to assets measures efficiency. The second category, gauging profitability, includes the return on assets (net income divided by total assets), return on equity (net income divided by total equity), and net profit margin (net profit divided by sales). The final category, measuring leverage, is represented by the debt-to-equity ratio (total debt divided by total equity).

Commercial bank data is obtained from FISonline, covering four geographic regions: Africa (14 banks), Asia (61 banks), eastern Europe (10 banks), and Latin America (72 banks). The information obtained is most often from 2001 filings, with earlier fiscal years used when they are the most recent available. Banks from South Africa, Zimbabwe, Kenya, Ghana, and Morocco represent Africa. Sri Lanka, Malaysia, India, and Thailand represent Asia. Eastern Europe is represented by the Czech Republic, Poland, Croatia, and Latvia. Representing Latin America are Brazil, Venezuela, Bolivia, and Colombia.

The second and third data series are as reported by the Microbanking Standards Project (MSP). All of the data in this set comes from the November 2001 issue of the Microbanking Bulletin (MBB). MFIs submitted information dated from March 1999 to March 2001, with most of the information dated December 2000. The second series is an aggregated group of 57 financially self-sufficient MFIs.

The data series includes aggregated information from all regions of the world and consists of average ratios by region for all MFIs and globally for all self-sufficient MFIs. Standard deviations across all self-sufficient MFIs are provided, but regional standard deviations are not given, precluding statistical tests.

Of the 148 reported MFIs, 57 are self-sufficient. The total includes 59 from Latin America, 36 from Africa, 29 from Asia, and 24 from eastern Europe. Because the MSP's policy is not to release information on individual banks, in order to protect privacy, it releases information on an aggregate basis. The MSP uses subcategories such as cooperatives and institution size within a geographic area. To obtain the aggregate data for one particular region, an average consisting of the individual components is calculated. Ratios and intermediary data not directly reported in MFI data are calculated on the basis of reported information.

Total

It is also necessary to derive one ratio for commercial banks as well. Both assets and equity are taken as reported at the end of the reporting period for both MFIs and commercial banks. Since assets and equity can vary during the course of a year, taking quarterly averages would provide more accurate ratio calculations. Such an adjustment, while possible for some of the commercial banks reporting, was not possible for the annual data available for MFIs and was therefore not done for any of the data. The practice of using end-of-year balance-sheet figures to calculate ratios is widespread and should not greatly affect the results since it is done consistently.

MBB adjusts raw MFI data for inflation, subsidies, and loan-loss provisions in order to standardize information. MFIs submit data by completing a questionnaire on accounting practices and auditing to aid in the elimination and minimization of any data that might be suspect. Accounting standards may vary by region.

Analysis

Table 1 compares self-sufficient MFIs with commercial banks. On both return on assets and return on equity, self-sufficient MFIs are statistically significantly superior to commercial banks from comparable countries. MFIs likely have smaller equity and asset bases than commercial banks, in part explaining their superior performance. Smaller equity bases magnify

Table 1. Comparison of self-sufficient MFIs with all commercial banks' sustainability

Category	MFI average aggregate	Commercial bank average difference (MFI-Commercial bank)
Assets	0.260	131.54
ROE	15.5010	462.19 ^a
ROA	5.101	495.03 ^b
Net profit margin	15.4011	451.94
Debt/Equity	1.45	1.60-0.33

T-statistic oper. exp./ ^a p < 0.01 ^b p < 0.05

the impact of profitability. The origin of MFI equity is also typically quite different from equity invested in commercial institutions. More often than not, MFI equity is donated. Equity in commercial banks is invested or represents retained earnings. MFI equity donors may initially expect social returns but likely reach a point where they want to see the MFI become self-sufficient. The MFIs that achieve self-sufficiency, such as those in the sample compared with commercial banks, are making financial profits and are achieving positive ROE. Therefore, the MFI sample of those that have attained self-sufficiency is likely biased toward more profitable MFIs, whereas the commercial bank sample does not eliminate banks that are losing money.

There is the possibility that self-sufficient MFIs with positive ROEs may be attaining those results by reducing levels of services to the poorest of the poor—those with the greater needs. The cost of servicing the poorest with smaller loans can reduce financial-profit margins. There is a trade-off between financial ROE and social returns. Increased pressure to attain self-sufficiency, even from initial equity donors, could have motivated some MFIs to make larger, more profitable loans to more viable clients, reducing servicing costs. Self-sufficient MFIs are likely to have been operating for a longer period of time and benefit from repeat borrowers who have both a track record of repayment and a basic understanding of the loan process.

Operating expense as a percentage of assets is considerably higher for self-sufficient MFIs than for commercial banks, though not statistically significant. It is also true that the mission of MFIs is quite different from that of commercial banks and often includes borrower education, which significantly increases operating expenses. Commercial banks also have a larger asset base than MFIs, which would also tend to make this ratio appear more favorable for them.

MFIs have higher profit margins than commercial banks, though not statistically significant, in part because they charge higher interest rates. In conjunction with lower operating profits to assets ratio, this seems to indicate that it is in fact the smaller asset base that is the major factor leading to better operating to assets ratio for commercial banks. Superior net profit margins for MFIs shows that expenses, though they are higher relative to assets, are more than adequately covered most likely due to higher interest rates charged by MFIs than commercial banks.

It is not surprising that commercial banks, with historically greater access to capital, use their larger equity (and asset bases) to gain greater leverage, as represented by the higher debt and equity ratios. What is interesting is that the difference is so small and not statistically significant. MFIs are borrowing approximately at the same rate, adjusted for their smaller equity base. Excluding subsidies, it is also quite likely that MFIs borrow at a higher interest rate while still achieving stronger profit margins. Commercial banks can obtain broader equity investment and borrow more against that equity at lower interest rates, lowering their operating-expense-to-assets ratio, but they are apparently less efficient in generating profits than self-sufficient MFIs. Commercial banks likely have higher salary structures and appear to have overall greater operating costs than self-sufficient MFIs even though it is well known that smaller MFI loans are more costly to service. As suggested before, self-sufficient MFIs may have migrated toward larger, less costly loans and, problematically to their mission, away from loans to the poorest.

Superior ROA for self-sufficient MFIs further illustrates how well MFIs use their smaller asset base. The difference in ROA is the only measure that is statistically significant, at the 1% level. This difference further demonstrates that the lower operating-expenses-to-assets ratio achieved by banks is largely due to a larger asset base. Self-sufficient MFIs, which have smaller assets, are able to employ them more efficiently.

When the data is taken in the aggregate by region as reported by MBB, the superiority shown by self-sufficient MFIs is overwhelmed by both the greater number of MFIs that have not reached self-sufficiency and their poorer performance.² One factor that could explain some of the large performance gap is that MBB requires MFIs to report expenses for training not directly related to lending. This inclusion seems appropriate since it is important to educate first-time borrowers, but it makes comparisons with profit-seeking commercial banks somewhat more difficult because commercial banks have no social obligation to serve the poor. Such expenses dampen profits and even more so for MFIs that have not attained self-sufficiency. The superiority of commercial banks to MFIs overall also points to the fact that self-sufficient MFIs are quite different institutions from MFIs in the aggregate. Self-sufficient MFIs may have moved away from the more expensive mission of servicing the poorest of the poor.

Both ROA and ROE, so favorable for self-sufficient MFIs, are negative for aggregate MFIs across all regions. Since the 57 self-sufficient MFIs of the 148 reporting performed so strongly on ROE and ROA, the other MFIs are necessarily performing quite poorly to have reduced the ratios to such a degree. Negative profit margins across all regions emphasize the gap between all MFIs and the subsample of self-sufficient MFIs. Without subsidies most MFIs would cease to exist.

African commercial banks are the strongest, with the lowest operating expenses as a percentage of assets, just 2%, considerably ahead of the second best performer, eastern Europe, at 8%. Some of the African commercial bank superiority may be

Table 2. Comparison of MFIs and commercial banks by region

Category	Africa		Asia		Eastern Europe		Latin America	
	MFIs	CBs	MFIs	CBs	MFIs	CBs	MFIs	CBs
Operating expenses	0.28	0.06	0.45	0.15	0.29	0.08	0.28	0.14
ROE	15.59	20.20	15.29	6.29	14.17	13.51	8.84	11.45
ROA	8.45	3.12	0.77	1.12	4.20	1.51	4.061	1.48
Net profit margin	33.95	26.97	9.90	7.21	16.97	21.74	18.50	10.45
Debt/Equity ration	1.5	10.68	2.86	2.00	0.79	2.81	1.45	0.81

because this sample includes South African banks with large amounts of assets. African MFIs are also the strongest regionally on the same measure, though they are quite comparable to MFIs in eastern Europe and Latin America. The weakest region is Asia, both for commercial banks and MFIs. This could reflect the financial damage done by the Asian economic crisis, which may have left both banks and MFIs with lower levels of assets because of still-weakened currencies. These lower levels of assets would magnify operating costs as a percentage of assets. Other factors contributing to differences across regions could be government regulations and the extent of competition, including the presence or absence of foreign-owned banks.

African MFIs are the weakest on profit margin, with considerable losses that would make them clearly unsustainable without subsidies. Asian MFIs are the strongest on profit margin, though still losing money. Asian commercial banks are the weakest compared with other regional commercial banks, possibly somewhat due to continued write-downs of losses from prior years. It may be that Asian MFIs weathered the Asian currency crisis better than their commercial counterparts, possibly because of maintaining loans in only local currency while retaining the ability to obtain hard-cash infusions from NGOs. MFI loans are also short-term unlike commercial loans, which are still at risk of default for years after an economy recovers. Asian commercial banks have yet to recover from the reduction

in the value of their assets; recovery will make ROA stronger if there are more than meager profits. The fact that Asian MFIs have the best ROA and the weakest profit margin, both negative, indicates their asset bases are also small.

The strength of African and eastern-European commercial bank profit margins compared to very negative performances by African MFIs and negative figures by eastern-European MFIs points out the type of market segmentation discussed earlier. Commercial banks focus on highly profitable loans while MFIs service the poor. Although self-sufficient MFIs did very well matched against commercial banks, when combined with MFIs that are not self-sufficient, overall profits are impacted greatly by the need to spend money to support and educate borrowers. Even with higher interest rates, most MFIs are not covering expenses. It may be that the majority of MFIs cannot attain profitability without radically altering their operations through cutting expenses and the cost of servicing loans. Doing so, however, would preclude loans to the poorest clientele, who incur the highest costs.

Commercial banks in eastern Europe have the highest debt-to-equity ratio among banks while eastern-European MFIs have the lowest debt-to-equity ratio among MFIs. It could be that eastern-European MFIs are attracting more equity in the form of donations than MFIs in other regions. Also, it is likely considerably easier for commercial banks in eastern Europe to borrow from the developed world, and certainly Europe, the region their efforts are focused on. In Asia, MFIs have greater leverage than commercial banks. This could be due to the more rapidly shrinking equity base likely to be denominated in local currency versus the commercial banking sector's substantial portion of debt obligations in foreign currency. African and Latin American MFIs also have higher debt and equity ratios than commercial banks. One explanation for this could be a shift from outright grants to MFIs to greater reliance on market-based or subsidized loans.

Conclusion

In the aggregate sample, MFIs in every region are unprofitable and far worse performers than their geographic commercial peers. It is encouraging that the 57 self-sufficient MFIs are profitable and even performing better than developing-world commercial banks in the sample. These MFIs can stand on their own and survive. However, the larger universe of MFIs, including the thousands who do not report to MBB, are likely doing considerably worse than even the aggregate MBB sample, which itself is well below the self-sufficient MFIs.

Would the poor be better served if efforts and funds were concentrated on the self-sufficient MFIs? Without detailed data it is difficult to answer this question; however, it is likely that the self-sufficient MFIs are “skimming” the best clientele as well as operating more efficiently. They may not be servicing the smallest and costliest loans to the poor.

If it is the goal of MFIs to become more like commercial banks, then the sample of self-sufficient MFIs indicates they are progressing toward that aim. However, if MFIs are to continue to service the poor and to expand that service to the even larger multitudes that have not yet had any access to capital, profitability will necessarily be elusive. The market economy cannot impose market-based efficiencies on all MFIs and expect the poor to have access to capital. Some, if not the large majority of MFIs, will continue to require subsidies since their mission is not just to provide capital to be repaid with interest but also to service and educate the borrowers in managing that capital. Without this additional service, only providing loans to the poor would not succeed in improving their lives. This does not mean that MFIs should get a free ride and not be subject to financial scrutiny. Allocation of scarce capital by NGOs to the most successful MFIs should be a priority, but allocation cannot be solely based on profitability of recipient institutions. Wider social criteria should be included, some of which are part of the Accion Camel analysis. A first step to attaining

transparency and the most efficient allocation of capital would be mandatory reporting of financial data to MBB with the assistance of supporting NGOs. Included with the standard financial data should be some standardized reporting to demonstrate the attainment of social goals.

Notes

1. *Microbanking Bulletin* is now part of MIX Market, a much more accessible database of MFI information. MFI comparisons can be made using a variety of financial data of 133 MFIs worldwide by using various screening and search criteria. MIX Market also includes information on sources of funding information.

2. Since this analysis, the creation of MIX Market cited above allows for different aggregations of data, which makes possible more specific regional combinations of MFIs and may enable more elaborate analysis.

References

- Garber, C. (1997). *Private investment as a financing source for microcredit*. Dante Fascell North-South Center, University of Miami.
- Gibbons, D. S., & Meehan, J. W. (1991). The microcredit summit's challenge: Working toward institutional financial self-sufficiency while maintaining a commitment to serving the poorest families. *Journal of Microfinance*, 1(1), 131-191.
- Gulli, H. (1998). *Microfinance and poverty: Questioning the conventional wisdom*. Washington, D.C.: Inter-American Development Bank.
- Microbanking Standards Project. (2001). Retrieved April 2002, from DiMenna Nyselius Library, Fairfield University: <http://www.microbanking-imbb.org/>
- Otero, Maria (1999). Bringing development back, into microfinance. *Journal of Microfinance*, 1(1), 8-19.
- Saltzman, S. B., & Salinger, D. (1998). *The Accion Camel Technical Note*. Bethesda, MD: Accion International. Retrieved September 1998 from http://www.mip.org/pdfs/mbp/accion_camel.pdf
- Woolcock, M. J. V. (1999). Learning from failures in microfinance: What unsuccessful cases tell us how group based programs work. *American Journal of Economics and Sociology*, 58(1), 17-42.