

# **FINANCING MICROFINANCE FOR POVERTY REDUCTION**

by  
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## I. ABSTRACT

There is no doubt that strong demand exists for microfinance services, among the poor. More than nineteen million of the poorest households around the world now have access. That is encouraging because the number has increased substantially since 1997 when the Microcredit Summit Campaign (MSC) was launched. But it is daunting that there are still 81 million poorest families to be reached before the Campaign target of 100 million is achieved.

There is no dearth of microfinance institutions (MFIs), but most of them are small. If only 10% of the 1,580 MFIs that have reported to the MSC and are serving the poorest could be scaled-up to serve an average of 500,000 very poor households each, then the shortfall of 81 million could be overcome.

A lot of effort is being put into institutional capacity building for MFIs that have the vision and willingness to provide micro finance services to large numbers of poor households. New effective management tools are being created and disseminated to microfinance institutions. Training is being provided from the Consultative Group to Assist the Poorest (CGAP) training hubs around the world, and by networks of MFIs.

Much less thought and effort has been put into sourcing the amounts and the right kinds of capital which will be required to scale up the next generation of microfinance leaders. The issue is not a lack of on lending funds, but the equity with which to leverage them – and financing to meet the inevitable operating deficits that arise with rapid scaling-up.

To overcome this major hurdle, a new Financing Paradigm is needed. First, alternatives to traditional equity must be identified. Equity-like financial instruments, or quasi-equity, such as subordinated debt, convertible debt, preferred stock, and Special Drawing Rights (SDRs), likely more acceptable alternatives to traditional equity financing for many funders, may be a large part of the answer.

Second, MFIs must adjust their balance sheets to present a truer and fairer picture of their financial health. Marking below-market rate borrowings, or soft loans, to market to capture the implicit subsidy inherent in its lower interest rates, and capitalizing that subsidy as a “grant” on the balance sheet as equity, is an important part of this solution. Finally, the prevailing microfinance standards on capital adequacy, that inflate the amount of equity (already in limited supply) MFIs should hold on their balance sheets, must be challenged.

Readers should understand that this is not a call for the kind of "creative" accounting that is getting big business into difficulty these days. Rather it is a proposal for analysis of already audited financial statements, so as to present a truer and fairer

picture of the financial health and capital adequacy of MFIs.

**The combined effect of these three initiatives is to: i) increase the availability of funds to meet operating deficits through quasi-equity; ii) minimize the amount of equity and equity-like financing MFIs must raise; and iii) maximize their ability to leverage onlending funds from banks and other commercial and semi-commercial sources. The bottom line – the equity hurdle can be overcome, allowing for more rapid scaling-up of outreach to the poor.**

CASHPOR Financial & Technical Services Limited (CFTS) has been working among the poor and poorest rural households in Mirzapur District eastern UP India, for the past 5 years. Institutional financial break-even has been reached by providing financial services to 25,000 of the poor and the poorest rural women. Loan portfolio quality is good, with less than 2% at risk. Most importantly, the deficits of CFTS prior to break-even were financed almost entirely by quasi-equity, which CFTS was able to leverage significantly in order to achieve its targets. The impact of marking soft loans to market to present a fairer picture of financial health moved CFTS's capital adequacy from negative territory to 10%, well in line with international standards. While CFTS may be an extreme case, financing its deficits exclusively with quasi-equity, it shows that that the three steps outlined above are a feasible approach to financing scaling-up.

CGAP, as the leader in organizing support services for the micro finance industry, is asked to take the lead in mobilizing quasi-equity from its member-donors, perhaps channeled through national and regional quasi-equity funds, for MFIs with the vision and will to build the necessary institutional capacity, including the necessary transparency, to reach large numbers of the poorest.

# FINANCING MICROFINANCE FOR POVERTY REDUCTION<sup>1</sup>

by  
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## II. THE NEED FOR A NEW FINANCING PARADIGM

### Demand for Micro Finance Services

There is no doubt that strong demand exists for microfinance services, among the poor around the world. Recent statistics on the global outreach of microfinance institutions (MFIs) report that as of December 31, 2000, over 30 million families had access to microfinance services, **of which more than 19 million qualified as poorest.** This is both encouraging and daunting. Encouraging because the number has increased substantially since 1997, when the Microcredit Summit Campaign was launched. Daunting because that still leaves 81 million poorest families to be reached by 2005 if the Campaign target of 100 million of the poorest is to be achieved. On a regional basis, coverage remains extremely low. In Asia, where almost 15 million poorest families have access to microfinance services, still only 9.3% of all poorest families are being reached. And in Africa and Latin America, only 6% of all poorest families have access to financial services.<sup>2</sup> It is not surprising, therefore, that NGO-MFIs wanting to increase their outreach to the poorest, having the necessary institutional capacity and access to the necessary funding, have no difficulty in attracting new clients<sup>3</sup>.

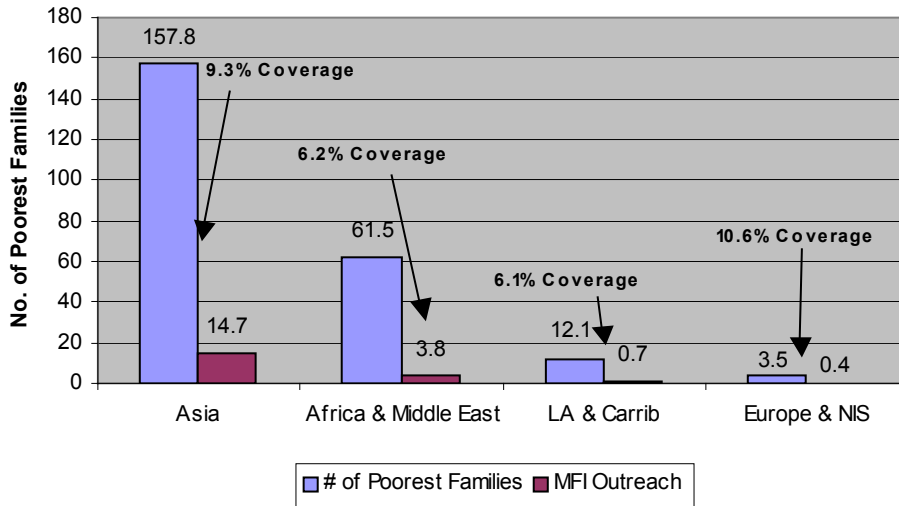
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<sup>1</sup> The authors would like to thank the Microcredit Summit for inviting them to write the paper and for extending full co-operation in the process. Valuable comments were received from a large number of readers to whom an earlier draft was circulated by the Summit Secretariat. Particularly valuable comments were received from CIDA, Ramesh Bellamkonda, Brigit Helms, Dushyant Kapoor, John Lewis, Benji Montemayer, as well as participants in the CASHPOR-PHILNET *Financing Microfinance for Poverty Reduction Workshop* in Manila, the Philippines, from June 5<sup>th</sup> to June 7<sup>th</sup>. We thank all commentators for the time they have taken out of their busy schedules. We have done our best to incorporate your suggestions, and feel the paper is much stronger because of them. Helen Todd proof-read the final draft and made valuable suggestions. Nevertheless, we take final responsibility for what we have written.

<sup>2</sup> State of the Microcredit Campaign Report 2001, p11.

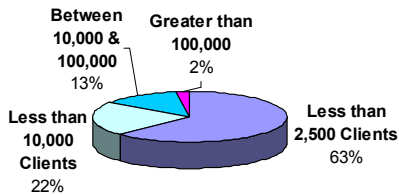
<sup>3</sup> Good examples are SHARE in India, CARD in the Philippines, FINCA in Uganda and CRECER in Bolivia.

### Regional Breakdown of Access to Microfinance

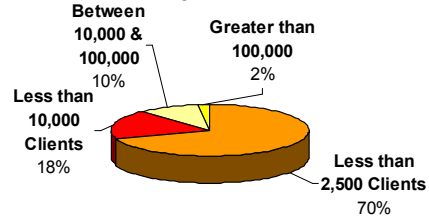


The failure of MFIs outside of Bangladesh to reach significant numbers of poor households in their own countries is not because of a shortage of MFIs. As of December 2000, over 1,600 MFIs (mostly NGO-MFIs) were reporting to the Microcredit Summit Campaign. **However, the significant majority of these MFIs are very small, serving less than 2,500 clients each.**<sup>4</sup>

#### Outreach to All Clients by Size of MFI



#### Outreach to Poorest Clients by Size of MFI



If only 10% of the MFIs currently serving the poorest, or approximately 162, could be scaled-up to serve an average of 500,000 very poor households, or 324 (approximately 20%) to 250,000 clients, then the goal of the Microcredit Summit of reaching 100 million could be achieved.

It is important to acknowledge up front that not all MFIs want to grow to reach truly large numbers (say 250,000-500,000) and certainly some will not be able to build the necessary institutional capacity. But there are many that do and can – certainly more

<sup>4</sup> Efforts of CGAP World Bank (CGAP) to "massify" microfinance, through such intermediaries as rural post offices and even public telephone kiosks, are welcome. But these efforts are new and it would be unwise to neglect the institutions that to date have provided most of the micro finance for the poor, that is, MFIs.

than 10% of all the MFIs reporting to the Microcredit Summit Campaign.

### **Capacity Building as an Ongoing Task**

The MFIs around the world that are interested in scaling-up their outreach to large numbers of poor households are already seeking the institutional capacity to do so. This is easier today than ever before because of the pioneering work of service providers in the industry, like CGAP World Bank, SEEP, the Microfinance Network, Women's World Banking, ACCION, FINCA, the Grameen Trust and CASHPOR, among others. Much of the training materials needed can be downloaded from the web sites of these organizations. New, more cost-effective management tools are being developed and disseminated continually and MFIs are being required to build the capacity to utilize them. Capacity for scaling-up is being built, and more will be built. There is little, if any, human resource constraint<sup>5</sup>.

Donors and other funders are also requiring more and better information from the MFIs, whether NGOs or formal financial intermediaries, that they finance. They are asking for greater financial transparency. USAID, for example, requires not only externally audited financial statements, but also that they be converted into the CGAP standard international format to make possible accurate financial analysis. So MFIs are having to build the institutional capacity to do this.

### **Recognizing Capital<sup>6</sup> as a Critical Constraint**

While we recognize the on-going importance of capacity building, we do not see it as the only constraint. Even when capacity is built, lack of capital blocks rapid expansion.

CGAP recently published an interesting and provocative Viewpoint titled *Water, Water Everywhere but Not a Drop to Drink*, which undertook an assessment of the funding environment for MFIs. It recognized that funding to the microfinance sector is on the rise, with donors and governments participating, often through apex and wholesale facilities as well as private investors. But then it asked the critical question; "With all the funds pouring into the sector, why do MFIs find it difficult to access needed financing?" Why do "managers of many high-potential MFIs face serious funding constraints"? The answer CGAP provided: "Much of the supply of funds to microfinance is ineffective – narrowly targeted and poorly structured."

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<sup>5</sup> In most poor countries, certainly in the bigger ones like India and Indonesia, there are huge pools of under-employed, educated youth. Experience tells us that within three months most of them can be trained to identify and motivate poor women to see micro finance as a good opportunity for themselves, and to manage the provision of micro finance services to them. We know also that educated young people in the rural areas, who have never touched a computer, can learn to use efficiently a user friendly software for purposes of data entry at the branch-level. The manpower is waiting for micro finance, at least in the poorer countries.

<sup>6</sup> The term "capital" as used in this section refers to all sources of financing available to microfinance institutions. Please see Glossary, definition a.

The first problem is that while donors played a critical role in building the microfinance industry by providing early support to pioneers, they seem reluctant to graduate a new generation of industry leaders. Everyone wants to fund the established "winners," rather than take the risk of funding and helping to build new winners from among the hundreds of smaller MFIs looking for funding. This means that profitable MFIs get subsidized funding, crowding out the commercial investors who do have the vast resources to allow for rapid scaling-up. The venture capital role of the grant funding donors should instead be directed at potential winners, those with the vision to reach large numbers of the poorest, strong management teams, a commitment to transparency and professionalism and a drive towards efficiency and sustainability. As the CGAP Viewpoint states "...the principal task of donors should be to identify and bet on promising MFIs and leave the known winners to commercial investors."

A second problem is that donors have a hard time moving money – funding is not designed to meet the needs of the MFIs, but rather the priorities of donors or governments. These can include country or regional priorities and/or an unhelpful insistence that the funds be used only for onlending. Limitations can be compounded by internal organizational concerns – country-level vs. global programming – and a lack of local knowledge.

CGAP's current Peer Review exercise among its member donors, aimed at disseminating best-practice financing for microfinance, should result in a significant reduction of the current funding mismatch. However, it is not directed specifically at the main funding problem of MFIs, **the dearth of equity and equity-like financing for microfinance institutions at any stage of maturity. In fact, this is the major funding problem in the industry and will remain so for the foreseeable future – an issue that has yet to be accepted broadly by its non-practitioner actors.**

### **The Primary Obstacle is Equity**

In the lively discussion that followed the posting of the CGAP Viewpoint on the internet, it became clear that it is not just a lack of supply in general, which is hindering growth in outreach, but rather the type of financing being made available. Practitioners in particular focused on this point. Nejira Nalic, Executive Director of MI-BOSPO in Bosnia and Herzegovina noted that "our decision making processes are lead by our environment and we are in a way suppressed by lack of capital base..." Roshaneh Zafar, Managing Director of Kashf Foundation in Lahore, Pakistan also expressed the need for "socially motivated equity funds." Our experience in Asia, through CASHPOR, reaffirms these views. A recent workshop in the Philippines, *Financing Microfinance for Poverty Reduction*<sup>7</sup>, attended by leading MFIs from across the region, indicated that 72% of those attending were constrained in their growth specifically by a lack of funds to cover operating losses, prior to break-even of the expansion.

As we are targeting 81 million new clients, and if we assume an average loan outstanding of US100, then around \$8.1 billion would be needed in onlending funds.

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<sup>7</sup> CASHPOR-PHILNET workshop from June 5<sup>th</sup> – 7<sup>th</sup>, Manila, the Philippines.

Assuming a capital adequacy requirement of 8%, about US\$650 million would be needed as capital for leverage.

International financier George Soros, in his book *George Soros on Globalization*, observes that:

...The difficulty [of microlending] is in scaling it up. Successful microlending operations, although largely self-sustaining, cannot grow out of retained earnings, nor can they raise capital in financial markets. To turn microlending into a big factor in economic and political progress, it must be scaled-up significantly. This would require general support for the industry as well as capital for individual ventures<sup>8</sup>.

We agree – even when MFIs become profitable, accumulated profits will not support the kind of large-scale growth required to reach large numbers. Until now, many MFIs have utilized grants from donors to support their operations both in the early years and as they scale up. Yet such grants, already limited in size and availability, are becoming harder to come by as the pool of global MFIs grows. Unfortunately, beyond donors, there really are no private sources of equity financing available to MFIs around the world, particularly those working with the poorest.

We must start thinking more innovatively – as most commercial businesses do – about our financing strategies. This will require the microfinance industry to embrace the concept of quasi-equity, to adjust their financial statements to reflect a truer and fairer picture of their financial strength, to challenge prevailing standards for calculating capital adequacy and to set levels appropriate for different MFIS, according to their risk profiles.

### III. COVERING OPERATING DEFICITS

Two decades ago pioneers such as Muhammad Yunus of the Grameen Bank showed the world that poor, rural women without collateral were bankable. It is time that we recognize that microfinance institutions working with the poor, but lacking conventional capital adequacy, are also bankable. The reason is the same: most poor women, supplied with capital on reasonable terms, will invest it profitably and repay the loans, plus interest, faithfully in full on time. Just as this makes poor women bankable so too does it make MFIs servicing them bankable.

**The problem is not onlending funds.** Local commercial banks are being persuaded that MFIs are worthy, if somewhat unconventional, customers; experience and Asia and Latin America prove this true. Apex institutions have been established in some countries, particularly in Asia, with the support of the World Bank (PKSF in Bangladesh)

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<sup>8</sup> George Soros on Globalization, George Soros, pp. 83 and 84.

and the Asian Development Bank (PCFC in the Philippines and RMDC in Nepal), offering financing to MFIs on semi- or near-commercial terms. And social investors and large international NGOs still play an important role in financing loans for onlending. Savings, where MFIs are able to use this as a source of funds, can also play a critical role.

Operating deficits to break-even are typically covered by grants, and where possible, private investment. After that, gradual expansion can be covered by retained profits. But few MFIs working with the poor have been able to attract much investment. And few donors are keen to sink funds into what they see as the bottomless pit of operational losses. Some donors insist that their grants be used *only* to finance onlending, ignoring the reality that onlending costs money. Even were this to change, none of these traditional sources – grants, investment (for non-NGO MFIs) and profits -- are available in anywhere near enough supply to propel MFIs to meet the massive demand for microfinance that exists. **Given the potential of microfinance to reduce poverty, we must look for prudent alternatives to traditional equity that would allow for faster growth of its outreach to the poor.**

### **A Solution: Quasi-Equity**

The most important element of the new financing paradigm is to identify alternatives to traditional sources of equity financing to cover the deficits prior to break-even.

Equity-like instruments, or quasi-equity, are attractive for a number of reasons. First, they are able to absorb losses. Second, since they are legally subordinated to other borrowings of the institutions, they can be included in total equity for purposes of assessing the capital adequacy of MFIs. Finally, we believe that such instruments, particularly subordinated loans which have defined repayment terms and interest rates, would be more attractive to social investors and microcredit funds who prefer to lend, but who are able to be flexible on the terms and conditions of that lending.

Such quasi-equity must be structured to meet the needs of microfinance institutions; blindly adopting the instruments available generally in the market will not be appropriate. Key criteria that quasi-equity, in the form of subordinated loans, must include, are:

<b>Key Criteria</b>	<b>Explanation</b>
<b>Ability to Absorb Losses</b>	Without the ability to cover operating deficits, quasi-equity will not address the critical hurdle to growth among MFIs. These funds cannot be restricted for onlending. An adequate proportion must be available for financing deficits prior to break-even.
<b>Legal Subordination to Other Obligations</b>	In order to be treated as quasi-equity, it must be structured so that it is legally subordinated to any senior loans that the MFI may have from commercial or other sources. Think of it this

	<p>way, if your MFI is no longer a going concern, there would be a line of people outside your door trying to collect on loans and investments they made in your MFI. Where people stand in that line – in order of priority – depends on the type of financing they offered. First would be senior lenders. And last would be those that have invested in your organization – the owners. Somewhere in the middle are the quasi-equity providers who have agreed to “subordinate” their rights and take a position behind senior lenders, but who at the same time have greater certainty of repayment than equity holders.</p>
<p><b>Long Term w/ Grace Period on Repayments</b></p>	<p>This financing must be made available on a long-term basis with a grace period so that repayments can be made from profits after break-even; interest payments can be made from the start. We recommend a loan term of between 7-8 years, with a grace period of 3-5 years, depending on the MFI’s projections for break-even.</p>
<p><b>Minimal Interest Rate</b></p>	<p>As far as possible, interest rate on quasi-equity, particularly that used to finance operating deficits in the first year or two of scaling up, should be minimized. Generally speaking, the minimum rate should be equal to inflation in the country where your MFI operates; this allows funders to keep the value of their investment whole. However, as requirements for quasi-equity rise, so too might the interest rates. This must be taken into consideration in the business planning process. The ability to pay higher rates will depend on the MFI and its clients.</p>

As will be seen below, such quasi-equity, subject to certain limitations, can be considered as Tier II capital for purposes of calculating capital adequacy.

Some funders recognize the critical importance of such finance. The Grameen Trust and the Grameen Foundation USA currently offer such financing. At least one national microcredit fund, the People’s Credit Financing Corporation (PCFC) in the Philippines, extends parallel financing of 10% of the on-lending funds to MFIs for financing capacity-building. The Small Industries Development Bank in India (SIDBI), makes grants for capacity-building to its partner MFIs. But none of this has been anywhere near enough to overcome the shortage of capital.

**MFI Funding Requirements & Stage of Development**

Funders need to understand that MFIs have different funding requirements at different stages of development. The table below suggests the types and possible sources of funding at each stage.

Type of Expenditure	Start-up Years 1-2	Years 3-5	Operational Self-Sufficiency	Full Self-Sufficiency
<b>Operating</b>	<ul style="list-style-type: none"> <li>• Grants</li> <li>• Equity</li> </ul>	<ul style="list-style-type: none"> <li>• Quasi-Equity</li> </ul>	<ul style="list-style-type: none"> <li>• Interest Income</li> <li>• Social Investment</li> <li>• Quasi-Equity</li> </ul>	<ul style="list-style-type: none"> <li>• Interest Income</li> <li>• Social &amp; Commercial Investment</li> <li>• Quasi-Equity</li> </ul>
<b>Onlending</b>	<ul style="list-style-type: none"> <li>• Grants</li> <li>• Quasi-Equity</li> </ul>	<ul style="list-style-type: none"> <li>• Quasi-Equity</li> <li>• Savings</li> <li>• Near-Market Rate Loans</li> </ul>	<ul style="list-style-type: none"> <li>• Savings</li> <li>• Near Market Rate Loans</li> <li>• Guarantee Funds</li> <li>• Market Rate Loans</li> </ul>	<ul style="list-style-type: none"> <li>• Savings</li> <li>• Market Rate Loans</li> </ul>

Quasi-equity is critical in the years prior to break even, to cover deficits not financed by grants and to provide early on-lending funds that cannot yet be borrowed from banks. Savings only become large enough to be an important source of on lending funds, from about Year 3 onwards.

While this table may appear intuitive and simple, it has been largely ignored in financing MFIs in the past, as the CGAP Viewpoint highlights. It is essential that funders play their part in ensuring the efficient use of financing for microfinance, particularly operating deficit financing which is in such short supply. In order to get the most “bang for their buck,” funders need to make sure these resources are leveraged as much as possible with onlending funds from banks, savings, apex institutions, social investors, and other sources. This has not always been the case, particularly with MFIs that have enjoyed grant financing to cover both operating deficits and onlending needs.

An excellent example of efficient financing is SHARE, a Hyderabad, India based MFI working with the poorest, who in 1997 received a US\$2 million grant from CGAP. SHARE used this to increase outreach in its NGO and to establish a community owned non-banking finance company, SHARE Microfin Limited, which has rapidly scaled-up outreach to over 100,000 clients (from approximately 3,000) through more than 50 branches. With an equity base of US\$1.1 million, SML has been able to leverage approximately US\$6 million in loans from various domestic and international lenders.

## **The Inherent Strain Between Growth & Profitability**

Funders also need to recognize the implications of rapid scaling up on profitability. Rapid growth inevitably generates significant upfront losses that place downward pressure, sometimes severe, on profitability. The result is that, all else being equal, a rapidly growing MFI will show lower profitability than one that is not. This can be seen in Asia with Activists for Social Alternatives (ASA), based in Thiruchirapalli, India. They were close to achieving break-even, but recently added 12 new branches with the goal of scaling up, pushing OSS down to less than half of its previous level.

In order to address this issue, more work needs to be done on scaling-up microfinance in sustainable modules, perhaps as separate legal entities, that are designed to maximize outreach, efficiency and profitability; each would have its own financing strategy. One possible solution is for MFIs to form holding companies, and then operate separate sustainable modules (perhaps at the district or regional level) underneath the holding company. Alternatively, most NGO-MFIs that have established regulated financial intermediaries maintain some of their microfinance operations in the NGO. The NGOs could form new branches and scale-up until break-even, at which time branches could be transferred to the regulated entity.

**We do not believe traditional equity, especially in the form of private investment, will be available in the huge amounts required to finance the deficits of providing micro finance to another 80 million poor households around the world. To the extent that such investment is available, it should be utilized. Quasi-equity offers an alternative that meets both the needs of the MFIs and the needs of funders and stake-holders in microfinance.**

**But quasi-equity does not provide a complete solution. There are other considerations that must be taken into account, including the stringent capital adequacy requirements widely applied in the microfinance community and the need to adjust MFI financial statements to present a truer and fairer picture of financial health of MFIs. These two issues are addressed in the next section.**

## **IV. PRESENTING A TRUER & FAIRER PICTURE OF CAPITAL<sup>9</sup> ADEQUACY**

Internationally recognized standards for microfinance have developed dramatically over the last few years, with a particular emphasis on profitability, efficiency and portfolio quality. One issue that has been somewhat overlooked, however, has been capital adequacy. Capital adequacy is a ratio used globally to assess the financial strength of financial institutions. In very general terms, it compares an institution's capital to its total assets. If the ratio falls below a certain limit, which based

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<sup>9</sup> Use of the term capital in this section is more limited to that used in Section 1. It refers to the financial strength of the organization, and includes equity and quasi-equity only. Please see the Glossary, definition b.

on current international standards developed for banks in 1988 by the Basel Committee<sup>10</sup> is 8%, then the bank is said to be under-capitalized. In other words, the bank does not have the level of capital deemed necessary to protect or insure against future, unexpected losses, based on the riskiness of its asset base<sup>11</sup>.

As MFI reliance on commercial and development banks (who possess the vast resources that will allow for scaling-up of onlending to the poor and poorest) and savings (where appropriate) increases, there is no denying that capital adequacy will take on increasingly more significance. It already has for many of the NGO-MFIs in Latin America and Asia that have transformed into regulated financial entities. From a financing perspective, the greater the capital adequacy ratio of an MFI, the less risky it is deemed and therefore the greater will be its ability to collect savings and to borrow. Another way of putting it is that an MFI's potential for borrowing – and thus its ability to grow -- is limited by the amount of equity it has.

### **Stringent Requirements for Microfinance**

In microfinance, there is as yet no formally agreed-upon standard for MFI capital adequacy, but donors and social investors often seek capital adequacy ratios – measured simply as equity to average assets<sup>12</sup> – in the 20% range, as compared to the international standard for banks of 8%. This is primarily due to the perceived riskiness of an MFI's business as compared to that of a conventional bank. The logic appears to be that because they are often group-based, MFIs can experience sudden steep increases in their non-performing loans. This is true. It is difficult for the poor to repay faithfully. When they see a group member not paying and, apparently, nothing happening to her, there is great temptation not to pay also. In this way repayment problems can become crises quickly, especially in solidarity group programs. What is not so well known, however, is the good record of MFIs in overcoming such repayment problems.<sup>13</sup> That is how many of them have been able to maintain enviable overall repayment rates.

There are a number of ways in which the definition of capital adequacy does not reflect realities in microfinance. First, it does not recognize the nature of, and thus disallows the inclusion of, quasi-equity in the numerator of the capital adequacy ratio. The result is that MFIs are not able to use their quasi-equity to leverage additional financing, even if they are able to raise it to cover operating deficits. Second, despite

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<sup>10</sup> The Basel Committee is a group of central banks, bank supervisors, and regulators from the major industrialized countries that meets every three months at the Bank of International Settlements in Basel. Through papers and reports, they provide broad policy guidelines that the supervisors of each country can use to determine supervisory policies in their own countries.

<sup>11</sup> Those being protected include both depositors and lenders.

<sup>12</sup> It should be noted that the Microbanking Bulletin, a leading industry newsletter of standards, does allow for the inclusion of quasi-equity in the numerator of its capital adequacy calculation. Total adjusted equity is defined as total equity, including quasi-equity and adjusted net income.

<sup>13</sup> The Grameen Bank itself has a history of overcoming repayment problems: first in Tangail District in 1984 and then in Rangpur District in 1991/92. Currently it has re-engineered itself to bring back nearly all of the large number of defaulters that left it after 1995. See *Credit for the Poor 34*, available from [cashpor@yahoo.com](mailto:cashpor@yahoo.com) Other well-known GB-type MFIs that have overcome serious repayment problems are Ahon Sa-Hirap and Dungganon in the Philippines.

historical long-term trends of better portfolio quality among MFIs than conventional banks, a much higher equity cushion is required for MFIs. And finally, the current practice does not recognize the different risk levels of individual assets MFIs hold on their balance sheets.

**Since the capital adequacy ratio is meant to ensure that a financial institution has enough capital to cover its underlying risk, current requirements for MFIs reflect neither real access to capital to cover losses, nor the real risks of microlending. A new more appropriate standard should be adopted for MFIs - to allow for more efficient management and growth of their businesses based on capital requirements that reflect more accurately the risks of doing micro finance with the poor.**

### **The International Capital Adequacy Standards**

In July 1988, the Basel Committee issued a paper entitled *The International Convergence of Capital Measurement and Capital Standards*, or the "Basel Accord" which outlined new standards for international capital adequacy for the banking sector. The primary focus of the paper was determining minimum capital adequacy requirements through calculation of the capital adequacy ratio, which compares total capital to risk adjusted assets. That was 14 years ago; these standards are in general use within the banking world; but microfinance has not yet caught up with them! In fact, these standards address each of the three weaknesses in the current thinking in the microfinance industry about capital adequacy.

### ***Recognizing Quasi-Equity as Capital***

First, international standards recognize a broader definition of "capital," the numerator of the ratio. Capital is divided into two components: Tier 1 and Tier 2. Tier 1 capital is referred to as core or basic equity and is comprised of paid up capital, capitalized grants and accumulated, reported retained earnings (e.g. profits) of a banking institution. Tier 2 capital, or supplementary capital, includes subordinated debt, hybrid debt/equity capital instruments, general provisions, loan loss reserves, asset revaluation reserves and undisclosed reserves. So Tier 2 capital can include quasi-equity – the financing we propose for covering operating deficits going forward! These two elements of capital are combined to meet the minimum capital requirement of a bank. The one catch is that Tier 2 capital is limited to a maximum of 100% of the total of Tier 1 Capital. So of the minimum 8% capital required, Tier 2 capital can meet up to 4%.

There is nothing tricky nor imprudent about including quasi-equity in this calculation, as the Basel Committee recognizes. It states that "there are a number of other important and legitimate constituents of a bank's capital base which may be included within the system of measurement<sup>14</sup>" that meet both the needs of the banking institutions themselves and their funders. The same reasoning should hold for MFIs.

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<sup>14</sup> Basle Committee on Banking Supervision, International Convergence of Capital Measurement & Capital Standards, July 1988, p. 4.

### ***Not More Risk, Less!***

The basic intent of capital adequacy is to cover the major risk that all financial institutions face, whether MFIs or conventional banks: credit risk, or the risk that a borrower will not repay a loan according to the original terms of a loan agreement and may eventually default, exposing the financial institution to losses. Put another way, it is to offset a potential decline in loan portfolio quality.

It should be increasingly difficult to ignore the overwhelming evidence -- track records of well over 10 years in many institutions -- that microfinance is *less* risky than conventional finance. Statistics from the Microbanking Bulletin<sup>15</sup>, a leading industry newsletter on professional standards, in November 2001, offers the following evidence:

	<b>Avg. Portfolio- At-Risk &gt; 90 Days</b>	<b>Standard Deviation</b>
All MFIs (148)	2.1	1.9
Financially Self-Sufficient MFIs (57)	2.1	2.1

That on average, MFIs have portfolio-at-risk of only 2.1%, with the majority of those reporting falling within the range of .2% and 4.0%, is compelling. Regional averages, as well as cross-sections of data based on age of institution, size, and legal structure, all reaffirm the above results. Such portfolio quality is enviable. This evidence suggests that perhaps MFIs are less risky than even commercial banks in developed countries, particularly in retail financing services offered to the general public. In developing countries, there is no comparison.

According to an April 2002 report from the Asian Development Bank, non-performing loans as a percent of total loans (including those not disposed of by asset management companies set up to sell bad loans) were 50% in Indonesia, 25% in Thailand, 18% in the Philippines, and 12% in Malaysia<sup>16</sup>. Similar statistics for China and India have been cited at 50% and 25%, respectively<sup>17</sup>. In Japan, one of the most significant areas of banking sector concern in Asia, the Financial Services Agency (FSA) estimates that as of September 2001, banks had Yen 36.8 trillion (over US\$294.4 billion) in bad debt on their books. Some private estimates of bad debts reach Yen 100 trillion (or US\$800 billion) and the FSA “has admitted that the total potential problem loan pile, including ‘watchlist loans,’ could be as much as Yen 150 trillion” (approximately US\$1.2 trillion)<sup>18</sup>.

<sup>15</sup> Microbanking Bulletin: Focus on Transparency, November 2001, Issue No. 7, p. 52.

<sup>16</sup> Asian Development Bank, Asia Economic Monitor, April 2002, pp. 17-19.

<sup>17</sup> Thomas Au Yeung, The China Post, *NPLs of Taiwan banks estimated to reach 18%*, April 25, 2002.

<sup>18</sup> Hiroshi Inoue, *Interview: Ex-BOJ Tamura: Japan FSA, Banks Lag in Reform*, The Wall Street Journal Online, June 18, 2002.

That MFIs should then be required to have higher capital adequacy ratios than conventional banks does not logically follow. At the very least, MFIs should be subject to the same international standards as traditional commercial banks – currently 8%.

### ***Risk Adjusting Assets***

Finally, overcoming the third weakness of the microfinance industry thinking on capital adequacy for MFIs, is risk adjustment of an MFI’s assets. Recognizing the varying levels of risks of different types of assets, the Basel Committee has provided a schedule for weighting assets, the denominator of the capital adequacy ratio, according to broad categories of relative riskiness.

**Table 1: Risk Weights for On-Balance Sheet Assets**

<b>Risk Weight</b>	<b>Asset Account for Which Risk Weight Applies</b>
<b>0%</b>	<ul style="list-style-type: none"> <li>• Cash</li> <li>• Balances due from Central Governments &amp; Central Banks (e.g. Federal Reserve or US Government in the US)</li> </ul>
<b>20%</b>	<ul style="list-style-type: none"> <li>• Demand Deposits, Fixed Deposits</li> <li>• Checks in Process of Collection</li> </ul>
<b>50%</b>	<ul style="list-style-type: none"> <li>• Loans Fully Secured by Mortgage on Residential Property</li> </ul>
<b>100%</b>	<ul style="list-style-type: none"> <li>• Unsecured Loans &amp; All other Assets</li> </ul>

For purposes of calculating the denominator of the capital adequacy measure, to meet current standards, each of your MFI’s asset accounts would be multiplied by a certain risk weight to determine the asset base against which the level of capital necessary to meet the 8% requirement is determined. In all cases, the risk adjusted weight will be lower than that pure asset balance reported on the balance sheet. The impact then is to increase the ratio.

### ***Do The International Standards Go Far Enough?***

More properly assessing the risk of MFIs and calculating the ratio according to international standards would have the combined effect of reducing the amount of new core equity – extremely difficult to raise in the existing funding environment – an MFI must raise in order to grow and would allow for more leverage of MFI's existing capital bases.

But the international standards, designed for large international banks rather than microfinance institutions working with the poor, have one major weakness that must be overcome to arrive at an appropriate standard of capital adequacy for microfinance. That is that the use of Tier 2 capital (quasi-equity) is limited to 100% of Tier 1 capital. If we

seek to use quasi-equity as a financing method for rapid scale-up in microfinance, this limitation will have to be overcome. A significant part of the solution of this problem is marking an MFI's below market-rate debt to market, thereby recognizing the true nature of an MFI's financial strength.

### **Marking Debt to Market**

There is a subsidy element in soft loans. It is the difference between the interest rate of the soft loan and the rate that MFIs would have to pay to borrow the funds commercially from the money markets. For example, if the interest rate payable on a soft loan is 2% p.a., and the commercial rate for the same amount of funds is 15% p.a. (not uncommon in poor countries), then the element of subsidy in the soft loan would be 13% pa. Since the funder explicitly intended this "subsidy" element, it must be quantified and capitalized it on the adjusted balance sheet as equity (Tier I capital) like any other grant, for purposes of calculating capital adequacy.

This is not an attempt to rival Enron's creative accounting. Such a "reclassification" of soft loans on the balance sheet is for analytical purposes only, in order to get a better picture of the financial strength of the institution. Thus, marking to market is not something that an MFI must get approval for from its external auditors. Rather, audited statements serve as the basis of this analysis. The logic of this post-audit accounts analysis is very similar to those adjustments made to financial statements, for subsidies and inflation, universally accepted within the microfinance industry today.

How does marking to market work? The market value of a soft loan is determined by discounting the two primary cash flows that take place during the life of a loan, both principal and actual interest payments, by the commercial rate of interest. So conceptually, if an MFI has two identical loans, except one is at the commercial rate of 15% and the other is at a subsidized rate of 2%, the only difference between these cash flows that take place during the life of the loan is the difference in interest rates of 13%. If the loan size is 100,000, then the interest payment on the commercial loan is 15,000 each year and the interest payment on the soft loan is 2,000 each year, for a difference of 13,000. But we cannot simply say today that 13,000 is the value of the subsidy inherent in a soft loan. Why? Because these interest payments are made in the future – say at the end of each year – so the difference of 13,000 is the future value of the difference. Since we want to know the value of the subsidy today, we must discount, or divide, the different interest rate payments by the commercial interest rate<sup>19</sup>. The difference between the discounted value of the interest rate payments on the commercial loan and the soft

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<sup>19</sup> If the payment is one year in the future, the payments would be discounted by the commercial rate of interest, which is 15%; for purposes of the calculation, (1+15%) or 1.15 is used. If the interest payment is 2 or more periods in the future, the commercial rate would have to be adjusted to reflect the compounding effect of more than one period. For example, if the payment was in two years, and you wanted to know today's value, you would have to divide the payment by 1.15 and then again by 1.15; more simply, you would divide by 1.15 squared (raised to the power of 2). If the payment was in three year's and you wanted to know today's value, you would have to divide by 1.15, again by 1.15 and then again by 1.15; more simply, you would divide by 1.15 raised to the third.

loan is equal to the subsidy element inherent in the soft loan<sup>20</sup>.

Let's take a very simple numerical example to illustrate this point and to take the analysis one step further. As above, assume that an MFI received two loans of US\$100,000 on January 1, 2002, both repayable in one-time, bullet payments in 5 years time. All other conditions are the same, except Loan A bears a commercial rate of interest of 15%, while Loan B is a soft loan with a rate of 2%. Interest is paid annually. As of January 1, 2002, the subsidy element of the soft loan and today's market value of the debt are calculated as follows:

	Jan-02	Dec-02	Dec-03	Dec-04	Dec-05	Dec-06
<b>Loan A</b>						
Interest Payments (a)		15,000	15,000	15,000	15,000	15,000
Principal Repayments (b)		0	0	0	0	100,000
Total Cash Flows (c)		15,000	15,000	15,000	15,000	115,000
Discount Factor (d)		1.15	1.32	1.52	1.75	2.01
<i>Sample Calculation (As of January 1, 2002)</i>						
Interest Discounted by Year (a/d)	50,282	13,043	11,342	9,863	8,576	7,458
Principal Discounted by Year (b/d)	49,718	0	0	0	0	49,718
Present Value of Cash Flow	100,000	13,043	11,342	9,863	8,576	57,175
Book Value of Debt per period	100,000	100,000	100,000	100,000	100,000	100,000
Market Value of Debt per period	100,000	100,000	100,000	100,000	100,000	100,000
Grant Component per period	0	0	0	0	0	0
<small>* Discount Factor in each year is equal to 15% commercial rate adjusted for the number of years since the loan was issued.</small>						
<b>Loan B</b>						
Interest Payments (a)		2,000	2,000	2,000	2,000	2,000
Principal Repayments (b)		0	0	0	0	100,000
Total Cash Flows (c)		2,000	2,000	2,000	2,000	102,000
Discount Factor (d)		1.15	1.32	1.52	1.75	2.01
<i>Sample Calculation (As of January 1, 2002)</i>						
Interest Discounted by Year (a/d)	6,704	1,739	1,512	1,315	1,144	994
Principal Discounted by Year (b/d)	49,718	0	0	0	0	49,718
Present Value of Cash Flow	56,422	1,739	1,512	1,315	1,144	50,712
Book Value of Debt	100,000	100,000	100,000	100,000	100,000	100,000
Market Value of Debt	56,422	62,885	70,318	78,866	88,696	100,000
Grant Component	43,578	37,115	29,682	21,134	11,304	0
<small>* Discount Factor in each year is equal to 15% commercial rate adjusted for the number of years since the loan was issued.</small>						
<b>Comparison of Discounted January 2002 Interest Rates</b>						
Loan A Discounted Interest (a)	50,282					
Loan B Discounted Interest (b)	6,704					
Difference (a-b)	43,578					

<sup>20</sup> The marking to market analysis cannot be used on loans that are callable, since request for early payment of those loans rests with the Lender.

In the case of Loan A, since the commercial rate of interest and the actual rate charged were equal to 15%, there is no difference between the book value and market value of the loan, either at January 1, 2002 or in the future – so there is never a subsidy element that can be capitalized as a grant on the balance sheet. In the case of Loan B, however, there is a difference between the market value and book value, representing the difference between the market rate of 15% and the soft rate of 2%. Today's value of the subsidy element is equal to 43,578, which is equal to the difference between the discounted interest payments of 50,282 of Loan A and 6,704 of Loan B. As you can see in the above table, the discounted value of principal is identical in both examples, at 49,718.

Now that we have made these calculations, we can reclassify the soft loan to more accurately reflect its true nature. Instead of recording 100,000 on the books as a loan, the MFI would record the subsidy element of 43,578 as a grant, thereby increasing Tier 1 equity as of January 1, 2002. In order to keep the balance sheet in balance, the value of loan is decreased by the amount of the subsidy, 43,578, with the resulting market value of 56,422.

This is not a static analysis. The market value of soft loans and their subsidy element must be recalculated regularly in order to reflect payments (both interest and principal) that have been made on the loan. As the loan moves closer to maturity, the amount of the debt obligation will rise while the grant component declines, until finally, on the date of maturity, they are equal. This makes logical sense. If the only difference between Loan A and B in the example above is the interest payments, as there are fewer and fewer interest payments left as you move closer to maturity, the value of the subsidy declines. This dynamic is reflected in the above table where the subsidy element of Loan B declines, while the market value of debt rises, as it moves towards maturity.

Once the adjustments for marking debt to market and for inflation and subsidies are completed and reflected in the audited financial statements, capital adequacy can be recalculated using international standards, where Tier I now includes the grant component of the soft loan. **By increasing the amount of Tier I equity, we can increase the amount of Tier II equity that can be used in the numerator, thus increasing the capital adequacy ratio to reflect a truer and fairer picture of the MFIs financial position.**

### **Is Capital Adequacy a Major Constraint?**

It is not yet widely accepted in the microfinance industry, particularly by donors, that capital adequacy is a constraint to growth – to leveraging of funds from commercial institutions. Yet, it is frequently cited as an obstacle by those institutions seeking to reach large numbers, particularly larger, regulated, specialized MFIs.

## V. CFTS Ltd.: Crucible of the New Paradigm

CASHPOR Financial & Technical Services Limited (CFTS), a Grameen Bank adaptor, has been working among the poor and poorest rural households in Mirzapur District eastern UP India, for the past 4.5 years and has developed and implemented an approach to scaling-up an MFI working with the poorest that is effective in that difficult part of India.<sup>21</sup> Institutional financial break-even and best practice levels of efficiency will be reached within 5 years (i.e., by September 2002), as opposed to the historical average of 8 to 9 years for GB-type MFIs, by providing financial services to 23,000 of the poor and the poorest rural women. Loan portfolio quality is good, with less than 2% at risk. **Most importantly: the deficits of CFTS prior to break-even were financed almost entirely by quasi-equity. And CFTS is using marking-to-market to show its true capital adequacy.**

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<sup>21</sup> Although CASHPOR Financial & Technical Services Ltd (CFTS) in Mirzapur, eastern UP India, is only 4.5 years old, but institutional financial break-even is projected before the end of its 5th year of operation (30 September 2002), at which time it will be providing financial services to about 23,000 poor, rural women who will have about 78 million rupees (around US\$1.6 million) loans outstanding in their hands, with less than 2% of it at risk.

As of fiscal year end March 31<sup>st</sup>, 2002, CFTS's actual performance against target in a number of key areas was as follows:

<b>Key Indicators<sup>22</sup></b>	<b>Targets</b>	<b>Actual Performance</b>	<b>% Achieved</b>
<b>1. Outreach to the Poor</b>			
a) Scope: Savers	22,283	18,035	81%
Borrowers	19,246	15,048	78%
b) Depth: Total Savings (US\$)	\$130,445	\$110,203	84%
Total Loans Outstanding (INR)	\$1,528,051	\$1,124,752	74%
c) Dropouts	18%	15%	120%
<b>2. Quality of Loan Portfolio</b>			
a) Portfolio-At-Risk > 30 Days	2.0%	1.9%	106%
b) Loan Write-off Ratio	1.0%	0.7%	147%
c) Loan Restructuring Ratio <sup>23</sup>	0.0%	0.0%	100%
<b>3. Institutional Efficiency</b>			
a) Administrative Cost Ratio	14%	27%	52%
b) Active Loan Client per CSR	258	190	74%
c) Loan Portfolio per CSR	\$18,181	\$14,237	78%
d) Centers per CSR	9	9	97%
e) Savers per Center	30	26	86%
f) Operating Cost Ratio	20%	39%	51%
g) Yield on Portfolio	33%	32%	97%
<b>4. Financial Performance</b>			
a) Cost of Funds (US\$)	\$131,134	\$102,608	78%
b) Administrative Cost (US\$)	\$227,775	\$240,153	105%
c) Operational Self-Sufficiency (OSS)	104%	80%	77%
d) Full Financial Self-Sufficiency (FFS)	79%	64%	81%
<b>5. Impact on Poverty</b>			
a) Significant Reduction of Poverty	75%	75%	
b) No Longer Poor	25%	0%	

While CFTS may be an extreme case in the sense that most MFIs may not have to rely so heavily on quasi-equity, it shows that it is a feasible approach. Small MFIs with the vision to reach large numbers of the poorest households, regardless of their approach, can be scaled-up, with the part of their deficits prior to break-even that cannot be financed conventionally being financed by quasi-equity.

### How CFTS was Financed

Essential to the idea of rapid scaling up, or fast-track, is the need to secure upfront the funds to cover operating deficits to break-even. CFTS was started with about US\$35,000 in investment from CASHPOR Technical Services Ltd (Malaysia), which is an associated company of CASHPOR Inc., the regional Network of GB-type MFIs in Asia. The Grameen Trust of Bangladesh committed to provide US\$682,000 over four

<sup>22</sup> The exchange rate used is 48.7 rupees per USD.

<sup>23</sup> Only one loan has been restructured since the start of CFTS's operations.

years to finance the operating deficits and a portion of the onlending fund requirements for the 6-branch model that was to break-even within 4 years, by providing financial services to about 20,000 poor, rural households. The funds for deficit financing were provided as zero interest, eight-year term loans, with a grace period of 5 years. The onlending funds carried an interest of 2% pa, and were also for eight years, with a grace period of 6. Both loans were designed to be repaid out of profits, after institutional financial break-even.

In reality, the Trust was able to provide only half (\$344,000) of the committed amount. As a result, and in light of the need at the time to establish more than the planned six branches, it allowed CFTS to use the entire amount for deficit financing. Grameen Trust also agreed to re-schedule the loans to a term of 12 years, with a nine-year grace period, and to legally-subordinate them to any other loans that CFTS would raise in India. **This turned out to be an important break-through in funding for CFTS.**

It enabled CFTS to attract onlending funds (about US\$970,000) from: i) the Small Industries Development Bank of India (SIDBI), at a near market rate of 11% p.a.; ii) later from Friends of Women's World Banking India (FWWB), approximately US\$350,000 at a market rate of 14% p.a.; iii) from the National Bank for Agriculture and Rural Development (NABARD), approximately US\$225,000, at 9% p.a.; and iv) finally from an Indian Commercial Bank, ICICI Bank, approximately US\$250,000 at 14% p.a., with a 50% guarantee from Deutsche Bank Micro Credit Development Fund of New York. In total, about US\$1.8 million in onlending funds were borrowed by CFTS at near market and market rates, from Indian development banks, an Indian wholesaler to MFIs and an Indian commercial bank.

This funding from Indian banks and a wholesaler was possible because the funders accepted that operating deficits were being funded with quasi-equity from the Grameen Trust and the Calvert Social Development Foundation. None of the funders insisted on conventional collateral from CFTS. They accepted 10% security deposits, or hypothecation of our book debt and moveable assets as sufficient collateral<sup>24</sup>.

Inevitably CFTS ran up against a capital adequacy barrier, however. This happened as a result of an independent rating commissioned by SIDBI, our lead funder, in early 2001. The rating agency gave CFTS alpha for overall management and alpha for

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<sup>24</sup> Even though CFTS had negotiated from banks the funding they needed to break-even, actually getting the funds in a timely manner was another major hurdle. Few banks in India will follow an agreed-upon disbursement schedule with MFIs. Late arrival of on-lending funds caused serious problems for CFTS on the ground. New clients got tired of waiting and dropped out, wasting the resources that were spent on their group formation. We had to slow the pace of new group formation so that there would not be too many frustrated new clients. Rumors spread that CFTS had run out of money and might not be able to offer subsequent loans to clients who repaid their existing loans on time. Some clients protected their liquidity by stopping repayment. Portfolio at risk began to rise again. Payment schedules should be contingent upon reasonable achievement of Business Plan targets (at least 80%), but they should be implemented in a timely manner once the conditions have been met. And new conditions should not be imposed except in connection with new loans.

our systems, but it gave only beta for capital adequacy. Furthermore, it stated explicitly that, SIDBI or any other funders should not lend any more to CFTS until it had increased its equity accordingly. This was the moment of truth for CFTS. It needed to borrow about another Rs.3 crore (about US\$1.5 million) to attain the volume of loans outstanding that were needed for institutional financial break-even. As CFTS was still loss-making, there was no hope of attracting private investments. Even donors were wary of putting grants into a possibly bottomless pit. CFTS could not raise enough additional conventional equity to meet the likely requirements of the rating agency.

The rating agency refused to include quasi-equity into its calculation of capital adequacy. CFTS appealed to SIDBI, and it eventually applied its own formula, which gave enough weight to the quasi-equity so that it could continue lending to CFTS.

Only a total of US\$325,000 was borrowed from abroad: \$50,000 from the Calvert Social Development Foundation (for working capital) and \$275,000 from the Grameen Foundation USA (for on-lending).

The practical difficulties notwithstanding, CFTS was able to finance its deficits prior to break-even largely from quasi-equity; and it was able to obtain most of its on-lending funds from Indian development banks at near commercial rates (9 to 11%pa). So the suggested new financing strategy has been tested. If it has been done in India, it can probably be done anywhere.

The funding of CFTS' institutionalization and its outreach to 23,000 poor, rural women in Mirzapur District eastern UP India **shows the value of quasi-equity in covering operational deficits prior to institutional financial break-even, and in attracting near-commercial and commercial funding from financial institutions for on-lending.** That the financial institutions were willing to lend to CFTS for on-lending to the poor, despite the lack of conventional capital adequacy on the part of CFTS, provides the empirical basis for suggesting some revisions in the computation of capital adequacy for MFIs working with the poor.

### **Taking the Strategy One Step Further**

As has been seen above, there were potentially serious consequences for CFTS in its almost exclusive reliance upon quasi-equity as a source of financing. Looking at CFTS's audited Balance Sheet, one is immediately struck by the fact that liabilities are greater than assets. The result, a negative equity and negative capital adequacy. In conventional accounting terms, this would imply technical insolvency. Such a conclusion, however, would be very misleading, as it would ignore the nature of CFTS's liabilities as well as its strong underlying operations and high quality asset base.

CFTS has been very strategic in the type of borrowings it has undertaken. Quasi-equity financing has been designed so that terms are long, and the interest rate low, so that CFTS can repay out of profits after break-even. Such a commitment by funders is much more equity-like than debt-like. Moreover, CFTS was able to borrow at below

market rates, which in India would be almost 15%, by accessing funds from SIBDI and NABARD, as highlighted above. As we have seen in Section 3 above, there is an implicit grant element in such below-market rate funds.

To better analyze its financial strength, on a 6-monthly basis, CFTS marks its debt to market, adjusts its financial statements for the effect of inflation and subsidies and then recalculates capital adequacy according to international norms. This complete analysis and the adjusted statements for September 30, 2002, appear below:

**MARKING DEBT TO MARKET: CFTS CASE STUDY**  
**As of September 30, 2001**

**Step 1: Discounting Cash Flows**

<b>SUMMARY MARKET VALUE DEBT ANALYSIS</b>				
<b>Market Rate Used in Discounting</b>		<b>15%</b>		
	<b>Actual Interest Rate</b>	<b>Book Value of Debt</b>	<b>Market Value of Debt</b>	<b>Subsidy Element (New Equity)</b>
<b>Grameen Trust</b>				
Tranche 1	2.0%	8,536,280	3,866,645	4,669,635
Tranche 2	0.0%	5,690,853	2,585,919	3,104,934
<b>GF USA</b>				
Tranche 1	2.0%	10,456,615	6,243,598	4,213,017
<b>SIDBI</b>				
Tranche 1	11.0%	4,166,668	4,088,341	78,327
Tranche 2	11.0%	9,343,750	8,796,035	547,715
Tranche 3	11.0%	5,930,000	5,514,471	415,529
Tranche 4	6.0%	<u>1,950,000</u>	<u>240,224</u>	<u>1,709,776</u>
<b>TOTAL</b>		<b>46,074,166</b>	<b>31,335,233</b>	<b>14,738,933</b>

**Step 2: Making Adjustments for Inflation & Subsidized Expenses**

(6 months from April 1 to Sept 30, 2001)

**1) Cost of Equity - Inflation Adjustment**

Since fixed assets are greater than adjusted equity, no inflation adjustment has been made.

**2) Subsidized Cost of Funds**

Average Debt Outstanding	61,902,933
Market Rate Cost of Funds	4,642,720
Actual Interest Expense Paid	2,236,212
Adjustment for Subsidy	2,406,508

**3) In Kind Subsidies**

The Executive Trustee is not currently drawing a salary, so an adjustment of 50,000 rupees per month has been added.

The combined impact of the above adjustments to the adjusted Balance Sheet are:

- Step 1: To reduce the value of debt reported on the balance sheet to the market value and to increase equity by the same amount. The balance sheet remains in balance.**
- Step 2: To increase expenses by the amount of the cost of funds adjustment, thereby reducing equity and reducing cash on hand. The balance sheet remains in balance.**

THE RESULTING ADJUSTED BALANCE SHEET IS USED TO CALCULATE CAPITAL ADEQUACY.

**Step 3: Calculating a More Meaningful Capital Adequacy**

<b>Before Adjustment</b>		<b>After Adjustment</b>	
Tier 1 Capital	(9,510,723)	Tier 1 Capital	2,521,702
Tier 2 Capital*	0	Tier 2 Capital*	<u>2,521,702</u>
Total Equity	(9,510,723)	Total Equity	5,043,403
Risk Adjusted Assets	51,039,384	Risk Adjusted Assets	50,498,082
<b>CFTS Capital Adequacy Ratio</b>	<b>-18.6%</b>	<b>CFTS Capital Adequacy Ratio</b>	<b>10.0%</b>

\* Tier 2 Capital is limited to 50% of Tier 1 capital. In the before adjustment scenario, since equity is negative, no Tier 2 Capital is reported. In the after adjustment scenario, Tier 2 capital is limited by the amount of Tier 1 Capital.

**CASHPOR Financial & Technical Services Ltd**  
**Adjusted Financial Statements**

As On

**Balance Sheet**

**September 30, 2001**

	AUDITED Financial Performance	Adjustments	ADJUSTED Financial Performance
<b>ASSETS</b>			
<i>Current Assets</i>			
Cash & Non-Interest Bearing Accounts	11,808	0	11,808
Deposits at Bank	1,865,480	0	1,865,480
Fixed Deposits	4,800,000	(2,706,508)	2,093,492
Total Loan Outstanding	39,019,032	0	39,019,032
(Loan Loss Reserve)	<u>(556,500)</u>	<u>0</u>	<u>(556,500)</u>
Net Loan Outstanding	<b>38,462,532</b>	0	<b>38,462,532</b>
Other Advances	2,054,095	0	2,054,095
Grants Receivable	0	0	0
Workshop Fee Recoverable	0	0	0
<b>Total Current Assets</b>	<b>47,193,915</b>	0	<b>44,487,407</b>
<i>Long-Term Assets</i>			
Deferred Revenue Expenditure	7,873,882	0	7,873,882
Fixed Assets	3,369,874	0	3,369,874
(Accumulated Depreciation)	<u>0</u>	<u>0</u>	<u>0</u>
Net Fixed Assets	<b>3,369,874</b>	0	<b>3,369,874</b>
<b>Total Long-Term Assets</b>	<b>11,243,756</b>	0	<b>11,243,756</b>
<b>TOTAL ASSETS</b>	<b>58,437,671</b>	0	<b>55,731,163</b>
<b>LIABILITIES</b>			
<i>Current Liabilities</i>			
Accounts Payable	415,932	0	415,932
Collective Responsibility Fund	0	0	0
Provisions	0	0	0
Other Current Liabilities	<u>1,232,136</u>	<u>0</u>	<u>1,232,136</u>
<b>Total Current Liabilities</b>	<b>1,648,068</b>	0	<b>1,648,068</b>
<i>Long-Term Liabilities</i>			
Savings	0	0	0
Sr. Secured Loans	37,211,578	-2,751,347	34,460,231
Sr. Unsecured Loans	14,861,615	-4,213,017	10,648,598
Subordinated Loans	<u>14,227,133</u>	<u>-7,774,569</u>	<u>6,452,564</u>
<b>Total Long-Term Liabilities</b>	<b>66,300,326</b>	<b>-14,738,933</b>	<b>51,561,393</b>
<b>TOTAL LIABILITIES</b>	<b>67,948,394</b>	0	<b>53,209,461</b>
<b>EQUITY</b>			
Paid-Up Capital	1,530,000	0	1,530,000
Grant Component of Debt Financing	0	14,738,933	14,738,933
Current Year Donations	0	0	0
Accumulated Donations	0	0	0
Inflation Adjustment	0	0	0
Operating Profit/(Loss) - Current Year	(1,912,181)	-2,706,508	(4,618,689)
Accumulated Consolidated Profit/(Loss)	<u>(9,128,542)</u>	<u>0</u>	<u>(9,128,542)</u>
<b>TOTAL EQUITY</b>	<b>(9,510,723)</b>	0	<b>2,521,702</b>
<b>TOTAL LIABILITIES + EQUITY</b>	<b>58,437,671</b>		<b>55,731,163</b>

**CASHPOR Financial & Technical Services Ltd**  
**Adjusted Financial Statements**

**As On**  
**September 30, 2001**

**Income Statement**

	<b>AUDITED Financial Performance</b>	<b>Adjustments</b>	<b>ADJUSTED Financial Performance</b>
<b>Financial Income</b>			
Income on Loans to Poor Women	5,299,380	0	5,299,380
Other Income	393,892	0	393,892
Participants/Workshop Fee	<u>0</u>	0	<u>0</u>
Total Operating Income	5,693,272	0	5,693,272
<b>Financial Costs</b>			
Interest on Borrowing	2,236,212	2,406,508	<b>4,642,720</b>
Other Interest	0	0	<b>0</b>
Bank Charges	<u>69,443</u>	0	<b><u>69,443</u></b>
Total Financial Costs	2,305,655	0	4,712,163
<b>Loan Loss Provision</b>			
	183,765	0	183,765
<b>Administrative Expenses</b>			
Personnel	3,510,865	300,000	3,810,865
Travel	949,049	0	949,049
Rent	196,480	0	196,480
Supplies	305,633	0	305,633
Communication	50,300	0	50,300
Professional Charges (including audits)	209,014	0	209,014
Training/Workshop	174,890	0	174,890
Miscellaneous	185,984	0	185,984
Depreciation	129,361	0	129,361
Other Provisions	<u>(593,544)</u>	0	<u>(593,544)</u>
Total Administrative Expense	5,118,032	300,000	5,418,032
<b>OPERATING PROFIT/(LOSS)</b>	<b>(1,914,180)</b>	<b>2,706,508</b>	<b>(4,620,688)</b>
Non-Operating Income (Grants & Donations)	1,999	0	1,999
Non-Operating Expenses	<u>0</u>	<u>0</u>	<u>0</u>
<b>NON-OPERATING PROFIT/(LOSS)</b>	<b>1,999</b>	<b>0</b>	<b>1,999</b>
<b>TOTAL PROFIT/(LOSS)</b>	<b>(1,912,181)</b>	<b>2,706,508</b>	<b>(4,618,689)</b>

**These calculations allows for a clearer and fairer representation of CFTS's financial health, resulting in a capital adequacy of 10%.**

**Financing Scaling-up**

CFTS intends to expand its outreach to the poor District-wise in modules of ten branches, possibly with different legal identities, and to finance its deficits, when necessary, by quasi-equity marked to market.

## VI. INSTITUTING THE NEW FINANCING PARADIGM

### Sources of Quasi-Equity

From where would the quasi-equity come? One thinks immediately of bi-lateral and multi-lateral donors interested in financing poverty reduction. However, bilateral donors are not used to extending loans; they prefer to give grants, as it is simpler. While grants, if carefully structured like those of CGAP to selected MFIs, can increase capital adequacy and improve an MFI's ability to leverage funds from commercial financial markets, there are not enough of them available to meet a significant proportion of the demand. Moreover, quasi-equity marked to market would give donor funds more impact, as they would increase Tier II capital as well as Tier I.

As the amount of soft loans (quasi-equity) required to finance MFIs to reach the remaining 81 million poorest women in the world would be huge, however, it would be best to have Micro Credit Funds at the national or regional-level<sup>25</sup> as well, especially in the poorer countries/regions, which could be financed by grants from bi-lateral donors and/or by very soft loans from multi-lateral lenders. At least three national-level micro credit funds are performing well in Asia: PKSF in Bangladesh, PCFC in the Philippines and RMDC in Nepal. Perhaps significantly, each has a multi-lateral development bank behind it, the World Bank in the case of PKSF and the Asian Development Bank in the case of PCFC and RMDC.

### *A Leadership Role for CGAP*

CGAP, if it agrees with this analysis and on the potential importance of quasi-equity, could play a critical role in building the institutional capacity of additional national and regional-level Micro Credit Funds, in encouraging its member donors to finance them with grants, and in monitoring and evaluating the performance of the Funds. CGAP has experience itself in identifying and scaling-up promising MFIs. It could transfer these skills and the lessons of its experience to national and regional micro finance funds.

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<sup>25</sup> CASHPOR, the Asia regional network of GB-type microfinance institutions for the poor, has played the role, on a limited scale, of a regional provider of operating funds for scaling-up, on behalf of UNDP and the Government of Finland. And we have just signed a contract with AusAID to provide 'package' funding against achievement of business Plan targets for selected MFIs in Indonesia. We are prepared to do more in this regard, including the wholesaling of quasi-equity on behalf of donors. The Philippine national network of GBRs, PHILNET, could be further strengthened to do the same in the Philippines, as could INDNET in India. These networks are in a good position to know which of their member institutions need what kind of funding, and to monitor and report on the use of such funds. The achievements of PKSF in this regard in Bangladesh, of PCFC in the Philippines and RMDC in Nepal are evidence of the significant role that national networks can play in scaling-up the outreach of micro finance, if adequately funded themselves.

### ***Multilateral Banks***

Multi-lateral agencies like the World Bank, IFAD and the Asian Development Bank are used to dealing with loans. In addition to providing funds for national-level microcredit funds, they could be a major source of quasi-equity for large MFIs that want to rapidly expand.

### ***Social Investors & Development Foundations***

Development oriented foundations like the Grameen Foundation USA, the Calvert Social Development Foundation<sup>26</sup>, HIVOS, Ford Foundation, CRS, and the Grameen Trust (as it did in the case of CFTS), could also adopt quasi-equity as one of their main instruments for financing micro finance for the poor. National-level development banks could also play a role in the provision of quasi-equity to MFIs.

### ***Development & Commercial Banks***

It is from domestic development and commercial banks that most of the on-lending funds will have to come. MFIs that want to reach large numbers of poor households will have to build the capacity to pay market rates, of 12 to 18%, for these funds. They will also have to establish track record with these banks, starting with relatively small loans. Although the banks will not be very interested initially, several years of repayment in full, on time, adequate quasi-equity to cover losses prior to break-even, and steady progress toward it should build the confidence of the banks to offer larger amounts and more leverage over time.

### ***Guarantee Funds***

Guarantee funds can play a critical and timely role in enabling well-managed MFIs, with little or no conventional equity, to secure their first loans from commercial banks. Although this would mean relatively high interest rates, because the cost of the guarantee funds are added to the market rate for the loan funds, it would be worthwhile for MFIs to pay them, in order to have the chance of establishing a track record with the banks (the cost of getting the proverbial foot in the door).

### **Other Forms of Financing to Overcome the Equity Hurdle**

In reply to the circulation of an earlier version of this paper, the authors received several creative suggestions for other forms of funding that could help to narrow the operating deficit financing gap. One interesting suggestion was that if investment by private individuals and entities in MFIs working with the poorest were 100% tax deductible, and the dividends were tax free up to a return of say 10% per annum annually,

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<sup>26</sup> Shari Berenbach, Executive Director of Calvert, suggested one way to make quasi-equity financing attractive to social investors might be to include a layer of credit enhancements in an investment vehicle so that investors are confident of remaining whole.

compounded from the date of the original investment, huge amounts of private investment would be made available to micro finance.<sup>27</sup> Counter guarantees and escrow cover by governments to attract investments in micro finance, are another interesting idea.<sup>28</sup> These may be ways of getting the private sector involved in providing capital for micro finance.<sup>29</sup> It was pointed out that many actors in micro finance are non-stock, non-profit NGOS. A financing instrument that would be suitable for them is the equity equivalent (or EQ2). This is a community development debenture that legally permits "equity-like" investments in not-for-profits. Like a near equity investment but different from a simple subordinated debt, EQ2 is a general obligation of the issuer that is not covered by any of its assets. It is fully subordinated to all other debts, is designed to raise cash for the issuer, has a rolling term and therefore an indeterminate term, but does not confer voting rights.<sup>30</sup> And of course, the creative use of SDRs for financing the expansion of micro finance for the poor, as is being suggested by George Soros, should be given further serious consideration. It is clear, therefore, that there are plenty of good "blue sky" ideas on financing of microfinance for poverty reduction.

### **Putting the Pieces Together**

Of course not all funders are going to agree with nor play the roles identified for them above. CGAP, however, could maximize the number that do, by working with its member donors to include funding for quasi-equity, either directly or indirectly, as an important part of their assistance to MFIs working with the poor.

CGAP and others leading the drive for microfinance standards, such as the MicroBanking Bulletin and international and regional networks, should also carefully consider and move forward with some of the "out-of-the-box" thinking that this paper has generated – in particular marking soft loans to market and rethinking capital adequacy so that they are more appropriate for the microfinance industry.

Taken together, as CFTS illustrates, efforts to massify microfinance could become a reality.

24 June, 2002

David S. Gibbons

Jennifer W. Meehan

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<sup>27</sup> We are grateful to Ramesh Bellamkonda, Project Director of Bharta Swamukthi Samsthe (BSS) of Bangalore India for this suggestion which certainly merits further consideration. He can be reached at <swamukti@blr.vsnl.net.in>

<sup>28</sup> Dushyant Kapoor contributed this, and pointed out that governments are using such means to attract investment in other important sectors. Why not in microfinance for poverty-reduction?

<sup>29</sup> Horacio Navarrete of Monsanto Corp. has suggested that we consider addressing the issue of a possible role for the private sector as a source of quasi-equity.

<sup>30</sup> Benjie Montemayor, of Opportunity International contributed this interesting idea. He can be reached at [BMontemayor@opportunity.org](mailto:BMontemayor@opportunity.org).

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## **Glossary**

### **Loan**

**(Borrowings):** Funds provided to an MFI that it promises to repay on terms and conditions agreed to between the MFI and the Lender.

**Capital:** This term is used very widely in the world of finance and means different things to different people. Two primary definitions are provided below.

a) In the microfinance community, the term capital is often used to refer generally to all sources of financing available to microfinance institutions, including liabilities (savings and borrowings), quasi-equity and equity. This is how it is used in the capacity vs. capital debate.

b) In the banking industry, capital is used more specifically to refer to the financial strength of the organization, which is the sum of Tier I and Tier II capital.

### **Callable**

**Loan:** A loan where the Lender retains the right to request or “call” the money back before maturity. This is normally subject to certain conditions. With respect to MFIs, this right is often retained in international lending given the foreign exchange exposure, and therefore added credit risk, of such loans. Soft loans which are callable cannot be marked to market.

### **Capital**

**Adequacy:** A ratio which measures the minimum amount of total capital (see definition b) to risk-adjusted assets an MFI must have. International standards require a minimum of 8%, where total capital is equal to the sum of Tier I and Tier II capital. Risk adjustment of each asset class is also undertaken.

### **Convertible**

**Debt:** A loan that can be converted to equity based upon pre-negotiated conditions between the Borrower (the MFI) and the Lender. This is classified as quasi-equity, or Tier 2 capital.

### **Operating**

**Deficits:** Occurs in the early years of start-up or during rapid expansion when costs incurred to operate a MFI’s business, including administrative expenses, interest expense, are greater than operating income, leading to losses or deficits. Onlending requirements are not considered in this calculation.

### **Retained**

**Earnings:** Profits (or losses), after any distributions such as dividends, that are plowed back into and used in the MFI’s business. These profits/losses are

accumulated on the balance sheet as part of total equity. This is classified as core equity, or Tier 1 capital.

**Paid-Up or  
Paid-In  
Capital:**

Generally speaking, this refers to ownership positions held in an MFI; since NGO's cannot have ownership, paid-up capital or investment is only available as a source of financing to companies, financial institutions and other profit-making entities with an appropriate legal status. These "owners" in the MFI own a share in the success or failure of the business. This is classified as core equity, or Tier 1 capital.

**Preferred  
Stock:**

Stock that pays a fixed dividend and has a claim to assets of a corporation ahead of common (paid up) stockholders in the event of liquidation. This is classified as quasi-equity, or Tier 2 capital.

**Senior  
Loans:**

Debt that has priority of claim ahead of all other obligations of an MFI. Senior debt securities have claim to assets of an organization before subordinated debt in the event of a liquidation. This is not included in capital (see definition b above), as it is a liability.

**Special Drawing**

**Rights (SDRs):** Created in 1969 and issued by the International Monetary Fund (IMF), these are monetary reserve assets that serve as a unit of account and as a means of payment among IMF members, itself and others. SDRs constitute a part of a country's official foreign exchange reserves. The value is determined by a basket of four major currencies – US\$, euro, yen and pound sterling.

**Stock:** Interest in a corporation, representing a claim of ownership.

**Subordinated**

**Loans:** Loans having a claim against the borrower's assets that is lower ranking, or junior to, senior loans and is therefore paid after claims to senior lenders are satisfied. This is classified as quasi-equity, or Tier 2 capital.

**Quasi-Equity:** An investment that combines the characteristics of equity and loans. This includes subordinated debt, convertible debt and preferred stock, among other financial instruments.

**Tier I  
Capital:**

Also referred to as core capital, and includes paid-up capital (common stock) and retained earnings. In the case of MFIs, this would also include cumulative grants.

**Tier II  
Capital:**

Secondary source of equity-like financing that can be included in total equity for purposes of calculating quasi-equity. This includes subordinated debt, convertible securities, and a portion of loan loss reserves.

**Traditional  
Equity:**

In this paper, used to describe the way most MFIs have historically covered operating deficits; this includes grants, investment, and where relevant, profits after break-even. This is classified as core equity, or Tier 1 capital.

**Uncallable  
Loan:**

A loan where the Lender is unable to request the money back prior to maturity, unless the Borrower does not meet pre-agreed terms and conditions and/or defaults. Uncallable soft loans can be marked to market.