Microfinance and Savings Outreach: What are we measuring?

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In this paper, we estimate the number of empty savings accounts at MFIs and banks in Bolivia, Nicaragua, and Pakistan, as well as in cooperatives among a mix of countries worldwide. We find that 50-75% of savings accounts are empty, while balances of non-empty accounts are at least double the average reported size. Rather than reaching a broad base of traditional microfinance clients, many MFIs are reaching a substantially smaller number of families in the lower middle class and above.

We would like to thank Kurt Koenigsfest, General Manager of Bolivia’s BancoSol and Dr. Joachim Bald, Frankfurt School of Finance and Management, for sharing their thoughts and experience, and a special thank you to Dr. Hans Dieter Seibel, whose feedback has been invaluable to this research.

The information and views set out in this paper are those of the authors and do not necessarily reflect the opinion of the European Microfinance Platform (e-MFP) or its members.
Preface

For years, credit was the driving force behind microfinance. But times have changed. Instead of credit, we now speak of financial inclusion, and expanding access to savings now stands as one of the topmost objectives for the sector. That is certainly the goal of many of e-MFP’s members.

We also live in the age of metrics, where success depends on demonstrating that objectives have been met. So how do we know if we are succeeding in expanding access to savings? For most of us, the chief metric is the number of savers or savings accounts reported by one or more microfinance institutions (MFIs). This is often coupled with the average account balance as a proxy for depth of outreach – the smaller the average balance, the poorer the client. Or so we assume.

Metrics are meant to be an accurate reflection of reality, yet in the case of measuring savings, these metrics are like shadows cast by an evening light – gross distortions of the reality they are supposed to represent. That is the unfortunate finding of our research, which suggests that half or more of the savings accounts reported by MFIs are empty. The majority of savings clients are but illusions whose long shadows obscure the real savers. We are thus doubly tricked – led to believe that more clients are saving than is the case, and that the clients who save are poorer than they really are. And this is not a matter of a few outliers – it is more often the rule than the exception.

Empty savings accounts are not necessarily a problem in itself. They reflect the complex reality of financial services for the poor, as much on the part of the clients as of the financial institutions who serve them. Clients may use accounts as a means to receive payments rather than as vehicles for saving – an important financial service in its own right. In other cases, such accounts may facilitate transactions between the institution and the client. We certainly do not advocate closing empty accounts as a matter of course.

Rather, our aim is to highlight the serious problems with how savings outreach is measured. Distortions in reporting are not inevitable – with proper attention, a clear system of savings reporting is a realistic goal. We hope that this paper will bring focus to the issue, and help change how savings accounts are reported.

It is time we abandon the shadows and face the full complexity of real savings outreach.

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European Microfinance Platform (e-MFP)

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Introduction
In 2011, 906 microfinance institutions reporting savings to MIX Market reached 79 million depositors, with an average savings balance of USD 896 – figures that are roughly similar to those measuring loan outreach. For a sector whose roots are in credit rather than savings, this is an impressive achievement. It is also deeply misleading.

In this paper, we look at how MFIs and banks in Bolivia, Nicaragua, and Pakistan, as well as cooperatives among a mix of countries worldwide report their savings data. We find that 50-75% of savings accounts are effectively empty, while balances of actual savings accounts are at least double the average reported size. Rather than reaching a broad base of traditional microfinance clients, many MFIs are in fact reaching a substantially smaller number of families in the lower middle class and above.

As a tool for tracking financial inclusion achieved by microfinance institutions, the current system for reporting of deposits is woefully inadequate. If we as a sector are to reach the objectives we set out for financial inclusion, we must substantially change how deposits are reported.

Savings and financial inclusion
There are several ways of looking at savings outreach. The most common approach parallels the methodology used for loans: MFIs report total deposits outstanding, and the number of active deposit accounts. From there, it’s basic arithmetic to derive the average outstanding amount per depositor, which may be further adjusted for the country’s average income (e.g. per capita gross national income, GNI). This is also the primary means one can use MIX Market data to evaluate savings outreach.

Figure 1. Over half of bank accounts are not used for saving

Source: Global Findex, 2011. Note: transaction figures reported by Findex do not sum to 100% (right chart).

Another option is to shift perspectives and look at deposits activity as reported by clients. An excellent source for the client perspective is the Global Financial Inclusion Database (Findex), whose most commonly reported indicator probably is the proportion of population that report having an account with a financial institution (45% in low and middle income countries versus 90% in high income countries). This is often used as a measure of financial inclusion for savings, however, as Elizabeth Rhyne put it succinctly: “while possession of a bank account may be a step toward financial inclusion, it should not be confused with genuine inclusion”. Indeed, actual savings outreach is less
than half as large: for those same low and middle income countries, only 20% report saving at a financial institution, while for those who own an account, the level of transaction activity varies greatly (see Figure 1).

**Dormant versus empty accounts**

The gap between account ownership and savings activity is telling. Notably, the Findex data is self-reported – individuals responding that they have an account are by definition aware that they have one, even if they barely use it. There are of course those who don’t even know they have an account. That can happen for long-unused accounts, but it can even be for recently opened ones as well: one study found that 14% of poor rural residents in India who had opened a no-frills account with a banking correspondent in the prior 12 months were unaware of having such an account.\(^2\)

An account that goes unused for a long period of time can often be classified as dormant.\(^4\) Nearly always, these accounts are empty or nearly empty, as people rarely forget where they’ve deposited sums that are significant to them.

Dormant accounts are a well-recognized phenomenon. In 2011, the Reserve Bank of India reported the apparently positive results of its 2009 financial inclusion targets for the banks under its supervision. The number of villages covered had doubled, while the number of bank accounts had grown by 60%.\(^3\) And yet, three separate studies ([MicroSave](#), [CMF](#), [Skoch](#)) showed that 80-90% of these accounts were inactive\(^4\) – hardly a sign of success. Likewise, during a presentation at the European Microfinance Week 2013, Ian Radcliffe of the World Savings Bank Institute highlighted that the issue of *number of savings accounts might be misleading* due to a high number of accounts going dormant soon after opening and that the same situation applies to mobile money accounts.\(^5\)

Of course, not all empty accounts are dormant. Accounts may be perfectly active and still empty. Consider clients who use an account to receive remittances, government payments, and other deposits, which they then withdraw in full. Such accounts stay empty most of the time, yet they clearly serve a useful role in expanding financial inclusion by allowing clients to receive payments cheaply and reliably. This was found to be a widespread practice in a study of rural Indian bank clients.\(^6\)

**Deposit accounts: vehicles for savings or transactions?**

Empty accounts thus represent two separate issues, both of which cloud our understanding of actual outreach: truly dormant accounts (which are both empty and unused) are false indicators of outreach and cannot be regarded as being useful contributors to financial inclusion. Meanwhile, accounts that are used purely for transactions represent an important part of financial inclusion, even if they cannot be regarded as vehicles for savings. Despite this difference, both types of accounts deeply skew the outreach figures commonly reported by MFIs.

The immediate problem is that empty accounts overstate the number of savers being served – a problem that is especially acute for dormant accounts. However, a related issue is that the presence of a large number of empty accounts lowers the average balance per account: the reality is that not only are fewer people saving, they are also maintaining substantially higher balances than what reported figures show.

The magnitude of these distortions can be great. Consider the case of Bolivia, which is often regarded as one of the *most mature* microfinance markets.\(^7\) In 2008, Bolivian MFIs reported having 1.4 million

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\(^1\) The precise definition ranges from some months to several years, according to the country regulation and/or the bank internal procedures.

\(^2\) Economist Intelligence Unit (EIU) Microscope 2013 ranked Bolivia second most favorable microfinance business environment.
current savings accounts, with an average balance of USD 309. Our analysis shows that 75% of these accounts are empty, while the rest have an average balance of USD 1,225 – four times larger than the headline figure. These are two vastly different levels of financial inclusion, yet the figure that gets reported is the one skewed by empty accounts.

Methodology for estimating empty accounts
We derive these estimates using data stratified by different balance ranges, a form of reporting published from time to time by researchers and some regulatory bodies. For example, consider the stratification reported by the Bolivia Financial Supervision Authority in 2008 (Table 1).

<table>
<thead>
<tr>
<th>Range ($)</th>
<th>Amt ($ M)</th>
<th># Accounts</th>
<th>Avg ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-500</td>
<td>40.5</td>
<td>1,332,029</td>
<td>30</td>
</tr>
<tr>
<td>501-1,000</td>
<td>28.1</td>
<td>40,268</td>
<td>697</td>
</tr>
<tr>
<td>1,000-5,000</td>
<td>131.1</td>
<td>61,201</td>
<td>2,142</td>
</tr>
<tr>
<td>5,000-10,000</td>
<td>70.2</td>
<td>10,365</td>
<td>6,770</td>
</tr>
<tr>
<td>10,001-15,000</td>
<td>38.5</td>
<td>3,257</td>
<td>11,821</td>
</tr>
<tr>
<td>15,001-20,000</td>
<td>22.3</td>
<td>1,318</td>
<td>16,882</td>
</tr>
<tr>
<td>20,001-30,000</td>
<td>27.2</td>
<td>1,162</td>
<td>23,378</td>
</tr>
<tr>
<td>30,001-50,000</td>
<td>26.0</td>
<td>699</td>
<td>37,264</td>
</tr>
</tbody>
</table>

Notice that the average account balance is slightly below the mid-point for each range – except in the case of the lowest range (USD 0-500), where the average balance is far below the midpoint. This implies that within each range, the number of accounts in the lower half of that range is greater than in the upper half, and this difference is especially pronounced in the lowest range.

To get an estimate of empty accounts, we developed an algorithm that relies on the data from the lowest two ranges (in this case, USD 0-500 and USD 501-1000) to find the most plausible distribution, ensuring that the estimate meets two requirements: 1) the number of accounts and total balance both equal the values reported in the stratified data, and 2) the distribution is continuous between the ranges (for a detailed explanation, consult the Excel file available for download). When applied, the results for Bolivia look like this:

![Figure 2. Estimated distribution of deposits accounts, Bolivian MFIs 2008](image)

Notice how the distribution features a massive jump from less than 23,000 accounts with a balance between USD 0 and 20, to 1.1 million accounts that are empty. Our estimate is just one of many solutions that meet the two criteria described above. However there is no plausible solution that does not include a very large share of empty accounts.
Empty accounts: four case studies

Having developed a working algorithm to estimate the number of empty accounts, we sought out examples of deposit reporting that was stratified by account size. Though such reporting proved rather rare, we were nevertheless able to find four diverse datasets covering different regions and institution types.

Bolivia

Bolivia is often seen as among the most mature microfinance markets. It is certainly among the oldest. Thus, it is fortunate that Bolivia financial regulator, Autoridad de Supervisión del Sistema Financiero (ASFI), published stratified deposits data in its 2008 Annual Report, covering different types of institutions: banks, MFIs, and savings and credit cooperatives.

According to the report, MFIs in Bolivia have the largest number of deposit accounts (1.45 million), followed by banks (944,000) and cooperatives (507,000). However, we estimate that 75% of accounts at MFIs and cooperatives are empty (Figure 3), while the issue is significantly smaller for banks, where 46% of accounts are empty. Thus, despite a reported outreach of half million fewer accounts, Bolivian banks actually have significantly more active accounts (507,000) than MFIs (366,000).

The result of such a large number of empty accounts greatly affects outreach. Given their explicit mission to serve the poor, one would typically expect MFIs to have the majority of its accounts in the small-balance category. And at face value, the stratified data appears to support this, with accounts below USD 500 comprising 92% of all accounts at MFIs and 93% at cooperatives. Here again, empty accounts turn out to greatly skew the conclusions. The share of small accounts is in fact far smaller at both, with small accounts at MFIs dropping down to 68% of total outreach (Figure 4).
Figure 4: Empty accounts exaggerate outreach to the poor

<table>
<thead>
<tr>
<th></th>
<th>ASFI Annual report</th>
<th>Without empty accounts (est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOPs</td>
<td>93%</td>
<td>73%</td>
</tr>
<tr>
<td>MFIs</td>
<td>92%</td>
<td>68%</td>
</tr>
<tr>
<td>BANKS</td>
<td>74%</td>
<td>52%</td>
</tr>
</tbody>
</table>


According to Kurt Koenigsfest, General Manager of Bolivia’s BancoSol, many accounts are both empty and dormant – a result of regulations in Bolivia that prohibit closing accounts without client consent. Other empty accounts are not dormant at all, but are actively used to receive remittances and government payments, as in the case with Indian clients mentioned earlier. Surely, this type of usage is more common among the poor than wealthier clients, who are less constrained by day-to-day spending needs and thus are more likely to maintain an ongoing balance in their accounts. That might partly explain why the share of empty accounts at MFIs and cooperatives is higher than for banks.

**Nicaragua**

Nicaragua presents a very different market from Bolivia, reflecting generally a much lower level of financial sector development and where MFIs are not allowed to take deposits. However, the supervising authority, Superintendencia de Bancos y de Otras Instituciones Financieras, regularly reports deposit data stratified by balance, allowing us to compare the outreach of specific institutions. The presence of ProCredit in Nicaragua – a bank with a specific mission “to provide simple savings for ordinary people” – allows us to compare its figures with those of banks without such a mission.

Nicaraguan banks show a similar rate of empty accounts as Bolivian banks (47%): out of a total of 465,474 accounts, around 217,000 are estimated to be empty. However, ProCredit Nicaragua shows a completely different trend with only 15% of accounts being empty, among the lowest of the cases studied in the present paper. Notably, it is also a substantial departure from ProCredit Bolivia, whose share of empty accounts (78%) is similar to that of other MFIs in Bolivia. The strict rules governing closing of accounts in Bolivia may be one of the reasons for this difference, however this is an area that needs further study.

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†EIU Microscope ranks Nicaragua’s microfinance business environment on position 14 in the Global Microscope 2013.
World Council of Credit Unions (WOCCU)

In 2002, the World Council of Credit Unions (WOCCU) collected savings deposit data from eighty-five cooperatives in Guatemala, Ecuador, Bolivia, Romania and the Philippines as part of a study looking at how to sustainably mobilize small deposits.

Combined, these institutions reported 2.4 million accounts, with the vast majority (2.3 million) having a balance below USD 300. However, our analysis shows that 57% of these accounts were empty accounts – a figure lower than that of Bolivian MFIs and cooperatives, but still higher than both Bolivian and Nicaraguan banks.

The result also changes the average balance of these cooperative accounts. Instead of the USD 33 average cited by the study, the average balance of non-empty accounts was USD 83.
Pakistan banks

Among the four case studies in this paper, the banking sector in Pakistan is the only one that avoids the pattern seen elsewhere. The data comes from the Statistical Supplement of the Annual Report 2012 of the State Bank of Pakistan. Notably, this sample includes all types of deposits, and not just savings accounts as in the previous samples. However, the presence of other accounts does not change the ability of our algorithm to estimate the number of empty accounts.

Banks in Pakistan show essentially no empty accounts at all – out of almost 32 million accounts reported, fewer than 3000 accounts are estimated to be empty. This is a negligible rate of 0.01%, and is far below the accuracy threshold of our estimation algorithm.

There are several reasons why this should be the case. One plausible argument is that the combination of regulatory mandates to close dormant accounts and existing minimum balance requirements would serve to keep empty accounts essentially off the books. However, this question needs further research.

Conclusion

The four cases studies in this document show that empty savings accounts are present in very different countries, often accounting for half or more of accounts served by financial institutions, especially in MFIs and cooperatives that normally target poor and financially excluded populations.

The explanations for the existence of these accounts are many: these accounts may reflect client usage patterns that favor full withdrawal of payments or they may be actually dormant accounts, closing which may in some cases require significant administrative obstacles, as is the case in Bolivia. It’s also worth noting that institutions with a mission to serve the poor may not have an incentive to close empty accounts: on the one hand, they can be used to maintain contact with the client and, on the other, they help show better outreach figures. By contrast, most commercial banks wouldn’t normally see the same benefits for keeping these accounts open as they don’t have (or need to measure) the financial inclusion objectives of many MFIs.

Way Forward

The issue of empty accounts is not a problem per se. There are many legitimate reasons, both in terms of client service and institutional advantage, for keeping such accounts open. We are not suggesting that empty or even dormant accounts must necessarily be closed – that decision is best left up to the individual institutions and financial regulators. However, because these accounts greatly skew the metrics used for evaluating savings outreach, the current reporting methodology for savings is woefully inadequate.

As an initial recommendation, we suggest that savings metrics should include the following:

- Reporting of stratified balances, including explicit separation of empty and nearly empty accounts (e.g. <USD 1 or <0.001 GNI per capita).
- Reporting of accounts stratified by transaction frequency. This should include essentially inactive accounts (for example, 0 transactions over past 6 months), as well as a few levels of stratification by level of activity (<1 transaction, 1-2 transactions, 3+ transactions per month).
- Reporting of number of total transactions per period (month or quarter) stratified by transaction size (<USD 10, USD 10-50, etc.).

This additional reporting may incur marginally higher costs and administrative burdens, but given the level of emphasis the sector places on financial inclusion via savings, improving the quality of reporting is essential.
Citations

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The European Microfinance Platform [e-MFP] was founded formally in 2006. e-MFP is a growing network of about 130 organisations and individuals active in the area of microfinance. Its principal objective is to promote co-operation amongst European microfinance bodies working in developing countries, by facilitating communication and the exchange of information. It is a multi-stakeholder organisation representative of the European microfinance community. e-MFP members include banks, financial institutions, government agencies, NGOs, consultancy firms, researchers and universities.

e-MFP’s vision is to become the microfinance focal point in Europe linking with the South through its members.

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