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The Goldilocks Conundrum

Are MFI Returns in Cambodia Too High, Too Low or About Right?

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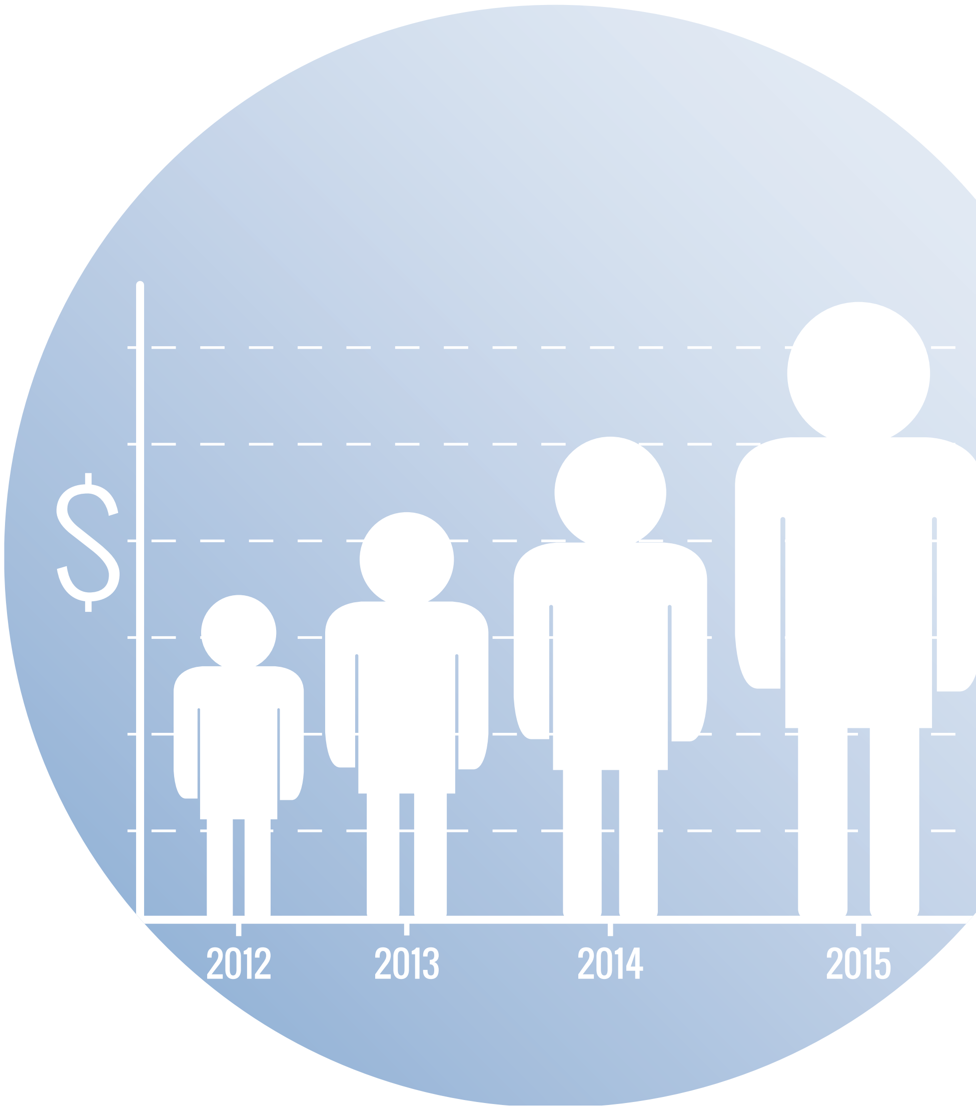


The Goldilocks Conundrum

Are MFI Returns in Cambodia Too High, Too Low or About Right?

Key Points

- Cambodia's MFI sector is one of the best performing globally, with high ROE, strong growth, high transparency, and a pro-poor approach.
- MFI interest rates are fair and reasonable, and at the low end globally.
- Credit losses are well below the global average, contributing to the high ROE.
- The top eight account for 90% of the sector. PRASAC is the standout performer financially with an ROE of nearly 40%, followed by TPC.
- We believe a key factor in the success of the best performing MFIs is having a combination of shareholders from both the NGO and Development Finance Institution sector as well as from the Private Sector.

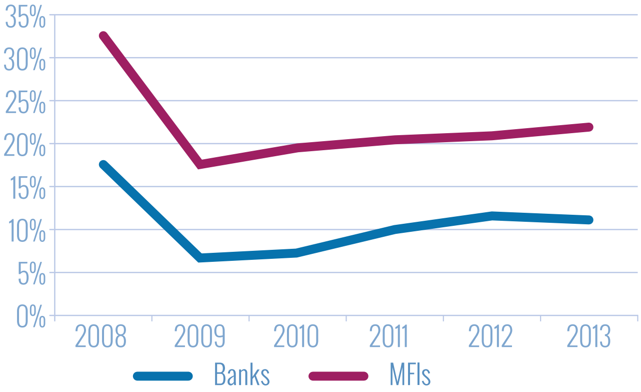
Are ROEs being achieved by Cambodian MFIs too high, too low, or about right?

The MFI sector in Cambodia is one of the best performing MFI sectors globally, delivering high returns (22% ROE) and high growth (48% loan growth) in 2013. It has significantly outperformed the bank sector in Cambodia in terms of growth and returns. It has achieved this while charging interest rates that are towards the low end of the spectrum for MFIs globally, with a level of transparency and a pro-poor approach that is amongst the best in the world[1]. It has significantly increased financial inclusion, and nearly 90% of MFI lending is <u>outside</u> of Phnom Penh.

The performance of the top eight MFIs is even more impressive, with an average ROE of 26.5%, with the remainder of the MFIs delivering an ROE of just 6.2%. The top eight MFIs account for 90% of the industry, with the other 27 MFIs sharing the remaining 10%.

While the Cambodian bank sector typically gets more attention than the MFI sector, the top eight MFIs each generate more revenue than any of the bottom 30 banks, and we believe PRASAC will be the fourth largest financial institution in the country once 2014 accounts are released.

Return on Equity



Source: MSP Analysis

This performance has been driven by:

- Sensible, pro-market, pro-competition regulation by the NBC.
- Quality management, supported by active involvement from shareholders with deep expertise in the area, and other development stakeholders.
- Sufficient scale amongst the large MFIs, scalable IT systems, and strong distribution networks.

- High cultural willingness to repay in Cambodia, reflected in low loss rates that are around 1.6% below the global average[2]. These lower than average loss rates add around 6% to sector ROE.
- A high growth economy that has underpinned substantial credit growth.
- A strong community development focus since inception that has helped establish the MFIs as trusted brands.

Can the industry ROE of 22% be justified? Is this level of ROE too high for a segment of the market that is ostensibly to help the poor, is it too low to help properly fund the expansion of financial services to the poor, or is it about right?

The Argument for a High ROE

For some, the idea that MFIs should be driven by a profit motive and aim for high ROEs is incongruous with their mission to help the poor. This would be understandable if the interest rates being charged were egregiously high, or if shareholders were simply withdrawing those profits as dividends.

However in a high growth market like Cambodia, decent returns are essential to help fund the ongoing growth of the sector, as the following example of two equal size MFIs demonstrates.

	MFI A	MFI B
Loan Portfolio	$500	$500
Equity*	$100	$100
Profit	$40	$10
ROE	40%	10%
Additional loan capacity if profits retained in business	$200	$50

* Assumes 20% Capital Adequacy Ratio

By earning a higher ROE and retaining profits in the business, MFI A is able to grow in the following year at four times the rate of MFI B, all things being equal. In terms of expanding access to finance for the poor, this is clearly a far better outcome.

While it would be possible for shareholders to contribute additional capital themselves to make up for a low ROE, this would be money that they can't then use on other deserving causes (or to expand access to finance even further).

To illustrate this with a local example, take the case of VisionFund Cambodia. While still earning a healthy return of 15% pa (above most banks in the market), this is well below the market leader PRASAC (nearly 40% ROE). Over the last few years, we estimate that VisionFund's parent has had to inject an additional $6m in equity into the business to support lending growth.

If VisionFund achieved a higher ROE to support its lending growth, some or all of that $6m could have been used in other ways to more directly support the poor in Cambodia or elsewhere, or through greater financial outreach. To be clear, we are not saying VisionFund isn't doing a great job – it is. However if it earned a higher ROE, it could be achieving even more for the poor.

In case anyone thinks that it would be better to accept reduced access to finance, but with much lower customer interest rates and therefore lower ROEs, the following from a recent IMF study gets to the heart of the issue:

> "The poor generally consider ongoing **access to credit more important than its cost**, as the alternatives (including moneylenders, local saving circles, etc.) are usually more expensive."[3]

The alternatives to MFIs in Cambodia are dramatically more expensive – a 2011

"The poor generally consider ongoing access to credit more important than its cost, as the alternatives (including moneylenders, local saving circles, etc.) are usually more expensive."

study by Cambodia Institute of Development Study found that the average interest rate paid by non-MFI borrowers was 6.3% per month, or an effective rate of 108% pa[4].

The key takeaway here is that a decent ROE is preferable, provided the interest rates being charged are fair and reasonable.

Are Interest Rates in Cambodia "Fair and Reasonable"?

For some, the idea of charging the poor an interest rate of 30% or more has the appearance of profiteering at their expense, and this can't be fair and reasonable. As a consequence, they call for misguided policies to drive interest rates lower (such as interest rate caps) that result in reduced access to credit for large segments of the population, not only leaving them worse off, but more broadly resulting in losses in economic efficiency.

From the **demand** side, why would anyone borrow at rates of 2%-3% per month or more?

A study earlier this year by ResponsAbility noted:

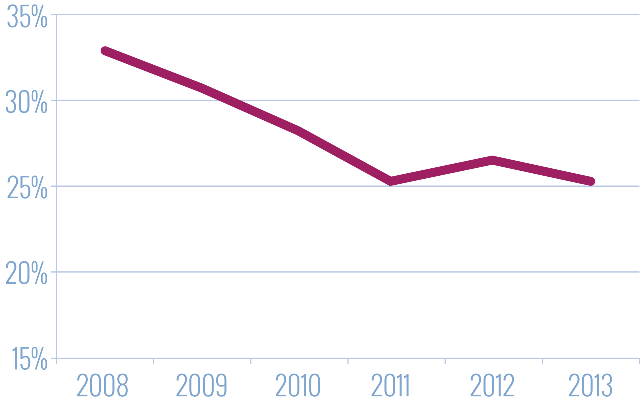
> "In the discourse about microfinance interest rates it is often forgotten that the client is an entrepreneur with limited access to capital. If the entrepreneur decides to address this scarcity with a microloan, it can be assumed that he or she has made this decision rationally and expects to generate a return that will cover the costs of borrowing. Data from Bangladesh suggests that annual returns from petty trading, a common business for microfinance clients, can average an annual return of 200% or more. Data from Léon, Mexico, suggests that micro-entrepreneurs working in the same sector can generate returns of around 360% per year on an investment of USD 150. When compared with potential annual returns of 200% or more, borrowing rates of 30% certainly make sense to a micro-entrepreneur."[5]

Quite simply, borrowers are making a rational judgment that the returns or benefits they generate from the borrowed funds will exceed the borrowing costs.

From the **supply** side, why are MFI's in Cambodia pricing loans as 'high' as they are?

The first thing to note is that MFI lending rates have fallen significantly since 2008, with a drop of around 800 basis points between 2008 and 2011. If not for MFI's becoming more efficient, this would have almost completely wiped out industry profitability.

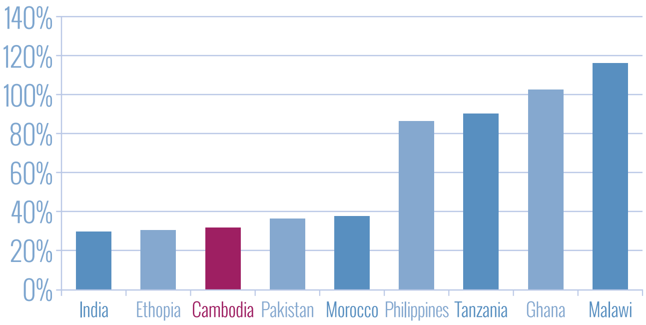
Average MFI Lending Rates in Cambodia



Source: MSP Analysis

Not only have MFI interest rates in Cambodia fallen significantly, they are actually amongst the lowest globally. Cambodians are getting a much better deal than MFI customers in most other countries.

MFI Interest Rates – Cambodia at the Low End



Source: mftransparency.org

Within Cambodia itself, there are also big differences between what various MFI's charge, with average rates at some MFIs as low as 22%, yet well over 30% at others. This difference can be almost entirely explained by the different segments of the market that each MFI is targeting.

The chart to the right looks at the average interest rate charged by the big eight MFIs based on their average loan size. We have also included the average operating costs for each one (which does not include funding costs).

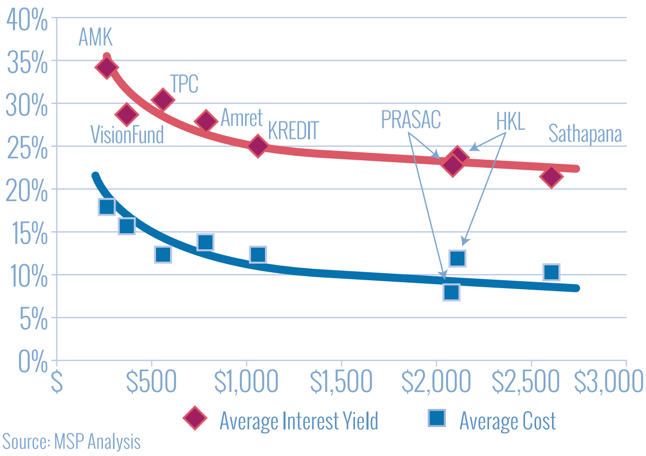
While Sathapana has the lowest portfolio yield at just 22% (an approximation of their average interest rate), they also have by far the largest average loan size of $2600. As a result of larger average loans, they also have lower costs, at just 10% of their loan portfolio (a $20,000 loan will not cost as much to service as a portfolio of 20 x $1,000 loans).

In comparison, AMK has the highest average interest rate of the majors, however this reflects an average loan size of under $300 as it targets the lowest end of the socio-economic pyramid, which means it also costs them more to service that portfolio.

While the gap between the average interest rate and average operating costs seems large, that gap has to absorb funding costs averaging 8-10%, plus loan losses and taxes.

A reduction in interest rates of just 2%, or less than 0.2% of monthly interest rates, would reduce sector ROE to 15% which we consider the minimum sustainable rate for the industry. Returns below 15% do not provide a sufficient buffer to absorb a downturn, or to attract the capital (both debt and equity) to allow the business to reach its potential. A reduction in interest rates of around 6% pa, or 0.5% per month, would be enough to wipe out industry profits.

Return on Equity



Source: MSP Analysis

On this basis, interest rates charged by MFIs in Cambodia seem "fair and reasonable".

Conclusion

Cambodia's MFI sector has achieved a "goldilocks" scenario. It is achieving ROE's that are "about right" for Cambodia's stage of development and level of growth, while charging interest rates that compare well on a global basis. As noted on the following pages, the level of over-indebtedness is reasonable, risks are being sensibly managed, and social outcomes through greater financial inclusion appear compelling.

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What About Over-Indebtedness?

A question that often arises regarding Cambodia's MFI industry is whether it has reached saturation point and whether over-indebtedness has become a major issue. A recent article in the Cambodia Daily stated "in a 2013 report by the Cambodia Institute of Development Study that analyzed the level of indebtedness in the MFI sector, 51 percent of borrowers surveyed said they had struggled to repay their loans on time".[6]

The Centre for Financial Inclusion also referred to this report in a recent article suggesting that growth in Cambodia's MFI sector was coming from over-indebtedness rather than greater financial inclusion.[7]

With a purported 51% of borrowers stating they had struggled to repay their loans on time the alarm seems well founded.

However these reports seem to have missed the actual purpose of the study, which was to look at what caused borrowers to become over-indebted. It was not to look at how widespread over-indebtedness is in Cambodia. To find sufficient examples of over-indebtedness, they chose the 44 most debt-saturated villages – **just 0.3%** of the total villages in Cambodia. In fact, the study found that over two-thirds of villages had only moderate levels of financial saturation, or none at all.

We are familiar with one MFI who comprehensively monitors the level of multiple loans using Credit Bureau data and where growth comes from in terms of saturation levels in individual villages, and we would be surprised if this was not common practice amongst the major MFIs. Indeed, the implementation of the Credit Bureau has provided a very useful tool for MFIs to monitor the extent of multiple loans, both in terms of new applications and for existing portfolios.

In the absence of the Credit Bureau, it would be possible (to a limited extent) for indebted clients to take out ever larger loans to repay existing loans that they can't repay from normal sources. We believe this scenario is now very difficult since the inception of the Credit Bureau, with all missed repayments reported monthly or fortnightly to the Bureau, in turn making it very difficult for these customers to obtain a new loan.

We also note that when the major MFIs are providing loans, they do in fact review the repayment capacity of the borrowers, so for a customer to become over-indebted, either they have misrepresented their circumstances, or their circumstances have materially changed. For over-indebtedness to occur on a large scale, it would mean that either deception has occurred on a very large scale, or that circumstances have materially changed in a short space of time for very many people (such as the 2011 floods).

Taking a counter-factual approach, if over-indebtedness in Cambodia was a major problem, would Cambodian MFIs have one of the lowest loss rates globally? Even allowing for cultural factors that assist this low loss rate, the answer to that question is clearly no.

The implementation of the Credit Bureau has provided a very useful tool for MFIs to monitor the extent of multiple loans, both in terms of new applications and for existing portfolios.

So What are the Risks?

Credit Risk

For any financial institution that provides loans, credit risk is ever present. While credit losses are currently very low for Cambodian MFIs, this does not mean the risk has disappeared.

Loss rates spiked in 2009 to just under 2.5%, due to the sharp economic slowdown in Cambodia that happened as a result of the GFC, before quickly falling away again.

Loans are often unsecured, and even where security is taken, the cost of enforcing security on a $300 loan would be prohibitive. However as noted earlier, there is a very high willingness to repay in Cambodia, which means the default rate is very low except for extreme events such as the GFC.

In contrast, commercial banks in Cambodia rely heavily on tangible security, although banks can experience large single name losses, with some customer loans being 10% or more of the bank's capital.

MFIs have very different portfolios. Given their very low average loan size and distribution networks across the country, they have diversified portfolios that largely reflect the economic make-up of rural Cambodia, which tends to have lower economic volatility.

In addition to this, the large MFIs have benefited from the technical assistance of shareholders/lenders and board members with MFI experience to implement prudent and sensible credit policies.

As a result, we do not expect the major MFIs to have material credit problems in the medium term, absent a major economic contraction for Cambodia itself.

Funding Risk

The other key risk for MFIs in Cambodia relates to their funding position. Cambodian MFIs have traditionally relied heavily on offshore USD wholesale funding, which has principally come from specialist MFI lenders and government backed Development lenders (such as FMO and DEG).

As we saw during the GFC, a heavy reliance on wholesale funding can prove fatal for financial institutions if liquidity dries up.

However unlike many banks pre-GFC that borrowed short-term wholesale to fund long-dated loans, Cambodian MFIs typically borrow at terms beyond 12 months (from a diversified group of lenders) while their loan portfolios typically have an average duration below 12 months.

What this means is that in the event of a crisis where wholesale lending dries up, an MFI's customers will be repaying their loans quickly enough to fund repayments of the MFI's wholesale borrowings, without causing insolvency. Of course, this also means that the MFI won't be making new loans and will in fact be shrinking, which management and shareholders will be trying to avoid.

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Are They Achieving Their Social Goals?

Beyond the economic returns, the expansion of the MFI sector in Cambodia has also generated highly beneficial social returns.

In the last 2.5 years more than 700,000 people have opened deposit accounts with an MFI, while the number of loan customers has grown by more than 550,000. This does not include figures for Acleda, which also has extensive MFI activities.

This extraordinary increase of financial inclusion in Cambodia, which represents around 10% of the adult population entering the formal financial system in less than three years just through MFI savings accounts, has driven positive developmental outcomes.

Importantly, this change in financial inclusion has been heavily weighted towards rural Cambodia. Approximately 89% of all MFI lending by value (94% by number of customers) occurs <u>outside</u> of Phnom Penh, along with nearly 90% of all MFI deposit accounts[8] (although only 45% by value, reflecting the concentration of wealth in Phnom Penh).

Looking at this another way, as of September 2014 the MFI sector has provided $1.6 billion in loans to rural Cambodia, and taken in $350 million in deposits, which means that MFIs are very effectively channeling capital from Phnom Penh and internationally to rural areas. This demonstrates the MFI sector's significant success in outreach and promoting financial inclusion for Cambodia's rural population.

Currently, women represent 81% of MFI customers in Cambodia. This has a very positive developmental effect, as research has shown that women are more likely to invest additional earnings into priority areas such as health and education, further benefiting the overall wellbeing of the family unit.

Making regulated financial services available, on an ongoing reliable basis to poor and low income house-holds in rural areas, provides them with a safe place to store household savings, as well as an additional option other than obtaining finance from informal money lenders, whose interest rate charges typically far exceed those of the regulated MFI sector. Without external finance, poor households would not have the means to realize their economic potential.[9]

The MFI sector has achieved strong development outcomes while also operating in a commercial manner, and not relying on tax exemptions. In 2013, the MFI sector paid income taxes of $13.3m to the government, along with substantial payroll taxes. In 2014, we estimate that income tax paid will exceed $20m.

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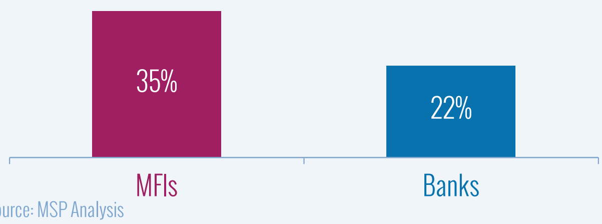
The Performance of Individual MFIs

The MFI sector has significantly outperformed the Bank sector in recent years, with average revenue growth of 35% pa compared to a still healthy 22% for the banks.

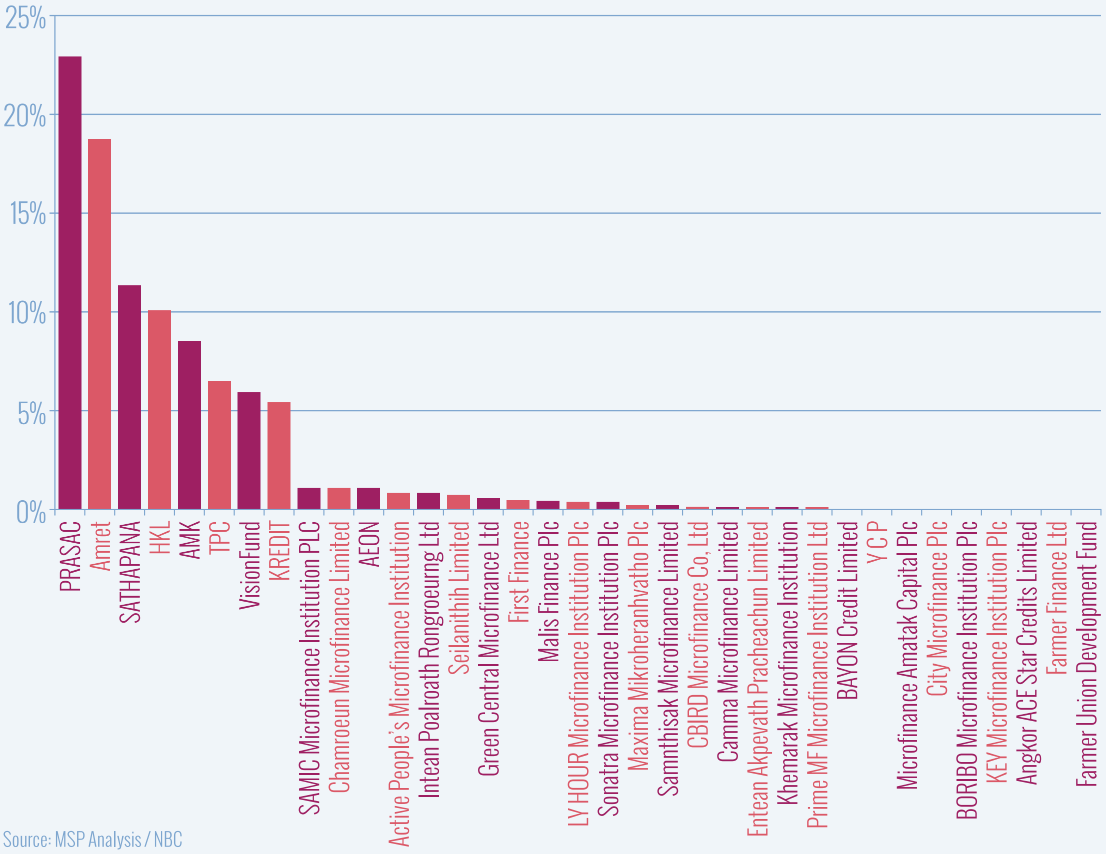
This revenue growth has been captured almost entirely by the top eight MFIs, which together have 90% of the market.

Average Annual Revenue Growth (2007-2013)



Source: MSP Analysis

MFI Revenue Distribution



Source: MSP Analysis / NBC

In assessing the MFIs, we have devised a very simple measure that captures both their success in promoting financial inclusion and their financial performance (which is essential to their sustainability). We have only included the top eight MFIs in this analysis, as the other MFIs are too small to consider. Note that a number of MFIs have started to report 2014 results, which indicate a material uplift from their 2013 results. For example we estimate that HKL have significantly improved their ROE from 18% to around 27% in 2014.

As a simple measure of financial inclusion, we have used customer numbers as a proxy. This is a simple, easily verifiable number, and if the goal of MFIs is to enhance financial inclusion, the number of customers is a key indicator of that in a market like Cambodia.

To measure financial performance, we have used ROE. An MFI that is performing well financially will have a high ROE, delivering for shareholders and creating the capacity for future growth (in turn leading to greater financial inclusion).

We have then taken the highest number for each indicator, and then divided the other MFIs by that number. We then take the average across the two indicators to come up with a score out of 100% for each MFI.

As can be seen in the table to the right, AMK has the highest number of customers, and therefore scores 100% on that measure. However it has less than half of PRASAC's ROE, scoring 46% on that measure. On a blended basis, its score is 73%.

The leading MFI overall, incorporating both financial performance and outreach, was PRASAC, closely followed by Amret which has a lower ROE than PRASAC, but many more customers.

It would be possible to develop a more sophisticated, more comprehensive measure of MFI performance, or even to argue about whether the two indicators should have equal weighting, however we believe this simple approach captures the key issues of financial sustainability and customer outreach.

	CUSTOMERS	ROE	OUTREACH	ROE	BLENDED
PRASAC	238,389	39%	73%	100%	86%
Amret	304,448	28%	93%	72%	83%
AMK	327,588	18%	100%	46%	73%
TPC	177,787	31%	54%	81%	68%
VisionFund	219,252	15%	67%	39%	53%
KREDIT	91,015	23%	28%	60%	44%
SATHAPANA	88,604	23%	27%	60%	44%
HKL	96,047	18%	29%	47%	38%

The leading MFI overall, incorporating both financial performance and outreach, was PRASAC, closely followed by Amret which has a lower ROE than PRASAC, but many more customers.

Why Have Cambodian MFIs Performed So Well?

When looking at the performance of the MFI sector, we are focused on the performance of the top eight MFIs, which dominate the sector, although some factors such as the regulatory environment apply to all players.

Community development focus

- The top eight MFIs in Cambodia share a common theme in that they were established first and foremost as institutions focused on poverty reduction and community development, rather than an exclusive profit motive.
- This helped established a high level of trust in their brand, and allowed them to also grow distribution that at the time may not have appeared ‘economic’.
- As they developed they transitioned on to a more sustainable platform by increasing their focus on profitability, which permits them to expand their financial outreach further, without having to rely upon donor funding.

Very good regulatory environment

- The Economist Intelligence Unit’s inaugural 2009 report on the Global MFI industry found that Cambodia’s regulatory framework was the best in the world (along with the Philippines).[10]
- We concur that the NBC has been an effective regulator of the MFI sector.
- It has not implemented interest rate caps on loans or interest rate floors on deposits.
- It has not specified maximum loan amounts.
- It has sensible minimum capital ratios (15%).
- It has encouraged a sensible level of competition in the MFI sector.

Quality management and governance

- In general, we rate the management of the major MFIs quite highly.
- Local management has been supported by active involvement from shareholders with deep expertise in the area, and other development stakeholders.
- The MFIs have effective governance structures, and high levels of transparency.

Sufficient scale amongst the large MFIs, scalable IT systems, and strong distribution networks

- The large MFIs have extensive distribution networks across Cambodia, and sufficient scale to invest in scalable, robust IT systems, along with strong management and processes.
- With the exception of Aeon, which is really a consumer finance company rather than an MFI in the traditional sense and relies heavily on an agent distribution model, we do not believe that other MFIs have sufficient scale to compete with the eight majors.

Low loan loss rates

- MFIs in Cambodia have loss rates that are around 1.6% below the global average.[11]
- These lower than average loss rates add around 6% to sector ROE. That is, average ROE in Cambodia would fall from 22% to around 16% if loss rates were at the global average.

The top eight MFIs in Cambodia share a common theme in that they were established first and foremost as institutions focused on poverty reduction and community development, rather than an exclusive profit motive.

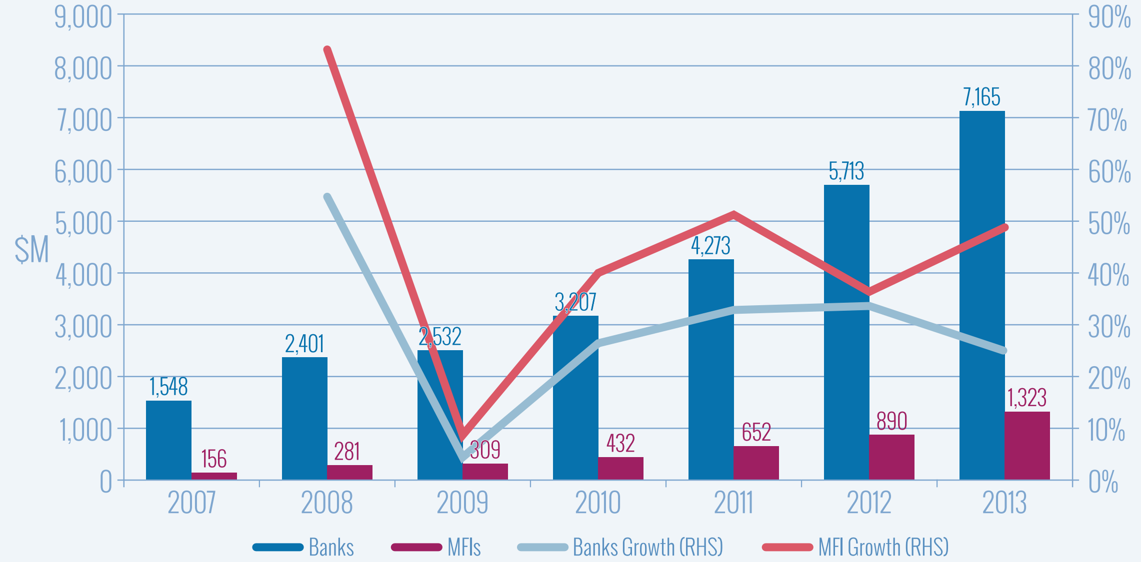
The Economist Intelligence Unit’s inaugural 2009 report on the Global MFI industry found that Cambodia’s regulatory framework was the best in the world (along with the Philippines).

- Cultural factors are a key factor in this, with a remarkably high "willingness to repay", particularly in rural areas where MFIs generate most of their loans.
- MFIs also have relative conservative underwriting standards, and actively use the Credit Bureau to protect loan quality.

A high growth economy that has underpinned substantial credit growth

- Cambodia's high level of economic growth has helped drive credit growth averaging ~43% for the MFI sector since 2007.
- For the banking sector, the equivalent growth rate was 29%.

Loans



Source: MSP Analysis

Why is the MFI Sector Performing Better than the Bank Sector?

The MFI sector generates a return to shareholders of 22%, around double that of the bank sector at 11%. There are two key drivers of this outperformance.

First is the level of interest rates charged by the MFI sector, with an average yield on their loan portfolio of 25.4% compared to 11.1% for the banks. This is not surprising given their different models.

This difference is amplified by the fact that banks have lent out just 55% of their assets, compared to 83% for MFIs. If banks were able to deploy their assets into income generating instruments this would not be a problem, however they generally earn close to zero on these non-lending assets.

As a result, MFIs are earning Interest Income of 21.1% on their total assets, compared to just 6.0% for Banks, which more than offsets the higher funding and operational costs faced by MFIs, leading to the higher ROE.

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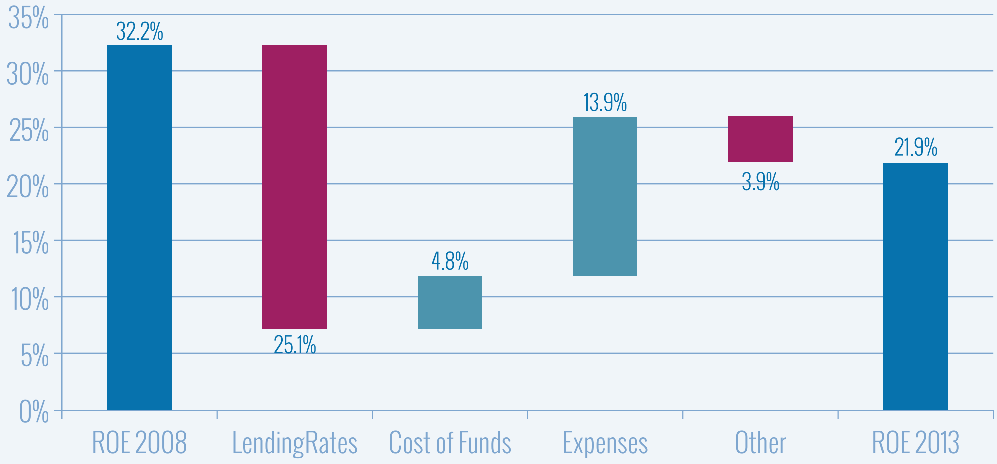
Source: MSP Analysis

Cambodia MFIs Were Even More Profitable in 2008

While the overall ROE for the MFI sector is a healthy 21.9%, this is well down on the very healthy 32.2% that the sector achieved just prior to the GFC.

Why ROEs Fell Since 2008



Source: MSP Analysis

The main cause of the decline was a sharp reduction in lending rates, which fell dramatically between 2008 to 2011. While they have remained stable since then, it reduced sector ROEs by 25%.

A modest reduction in their cost of funds added 4.8% to ROEs, however it was the improved efficiency of the sector that was the primary factor offsetting the decline in lending rates. The Costs to Assets ratio fell from 13.3% in 2008 to 9.9% in 2013.

Endnotes

[1] http://www.mftransparency.org/microfinance-pricing/

[2] http://www.cgap.org/sites/default/files/Forum-Microcredit%20Interest%20Rates%20and%20Their%20Determinants-June-2013.pdf

[3] IMF Working Paper, "The Impact of the Global Financial Crisis on Microfinance and Policy Implications" July 2011

[4] http://cma-network.org/drupal/download/impact%20survey/Impact%20Survey%20Final%20Book.pdf

[5] http://www.fgda.org/dati/ContentManager/files/Documenti_microfinanza/rA-Research-Insight-Efficiency-is-the-key-to-lower-interest-rates-in-microfinance.pdf

[6] https://www.cambodiadaily.com/business/mfi-sector-up-51-percent-in-9-months-72629/

[7] http://cfi-blog.org/2014/11/21/cambodian-microfinance-market-records-big-growth-but-is-it-healthy/#more-16678

[8] http://cma-network.org/drupal/InformationExchange

[9] http://www.ruralfinance.org

[10] http://graphics.eiu.com/upload/eb/Microfinance_ENG_WEB_Sept%2025.pdf

[11] Source: CGAP: http://www.cgap.org/sites/default/files/Forum-Microcredit%20Interest%20Rates%20and%20Their%20Determinants-June-2013.pdf

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