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Comparative Analysis of Financial Sustainability Indicators in Microfinance Institutions: Across Selected Asian and African Countries

Abstract

This study conducts a comparative analysis of the financial sustainability of microfinance institutions (MFIs) across selected Asian and African countries. The research evaluates key financial sustainability indicators, including Return on Assets (ROA), Return on Equity (ROE), Portfolio at Risk (PAR >30 days), Operational Self-Sufficiency (OSS), and Financial Self-Sufficiency (FSS). Data sources include academic articles (Google Scholar), World Bank reports, MIX Market data, and MFI annual reports. The analysis reveals that Asian MFIs (particularly in South Asia) generally outperform African MFIs in terms of ROA and OSS, demonstrating stronger financial sustainability. African MFIs, however, tend to operate with lower profitability and many barely break even. This discrepancy is mainly attributed to higher operational costs, limited economies of scale, and, in some cases, inadequate interest rates. Nonetheless, both regions maintain strong portfolio quality, as indicated by low delinquency rates. The findings suggest that economies of scale, efficiency, and revenue structures significantly influence the financial sustainability of MFIs. Asian MFIs benefit from larger operational scales, leading to higher operational margins, whereas African MFIs often struggle with funding constraints and higher cost structures. These insights can contribute to the development of effective policies and strategies aimed at enhancing the financial sustainability of MFIs.

Keywords: Microfinance institutions, financial sustainability, return on assets (ROA), return on equity (ROE), operational self-sufficiency (OSS)

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Mikromaliyyə institutlarında maliyyə dayanıqlılığı göstəricilərinin müqayisəli təhlili: seçilmiş Asiya və Afrika ölkələri

Xülasə

Bu məqalə, Asiya və Afrika ölkələrində fəaliyyət göstərən mikromaliyyə institutlarının (MMĬ) maliyyə dayanıqlılığını müqayisəli şəkildə təhlil edir. Araşdırma əsas maliyyə dayanıqlılığı göstəricilərinə – Aktivlərin Gəlirliliyi (ROA), Kapitalın Gəlirliliyi (ROE), Risk Altında Portfel (PAR >30 gün), Əməliyyat Özünüödəmə (OSS) və Maliyyə Özünüödəmə (FSS) – əsaslanır. Məlumat mənbələri akademik məqalələr (Google Scholar), Dünya Bankı hesabatları, MIX Market məlumatları və Mİ-lərin illik hesabatlarından ibarətdir. Təhlil göstərir ki, Asiya Mİ-ləri (xüsusilə Cənubi Asiya) adətən Afrika Mİ-lərindən daha yüksək ROA və OSS nümayiş etdirir, bu isə onların maliyyə cəhətdən daha davamlı olduğunu göstərir. Afrika Mİ-ləri isə daha aşağı gəlirlilik səviyyəsinə malikdir və çoxu yalnız minimal mənfəət əldə edə bilir. Lakin, hər iki bölgədə portfel keyfiyyəti yüksəkdir və borc ödənişlərinin gecikməsi nisbətən aşağı səviyyədədir. Nəticələr göstərir ki, ölçü iqtisadiyyatı, səmərəlilik və gəlir strukturu MMİ-lərin maliyyə dayanıqlılığında əsas rol oynayır. Asiya Mİ-ləri

böyük miqyasda fəaliyyət göstərdiyi üçün daha yüksək əməliyyat gəlirliliyinə malikdir, Afrika Mİləri isə əsasən maliyyələşmə problemləri ilə üzləşir. Bu nəticələr MMİ-lərin maliyyə dayanıqlığını artırmaq üçün uyğun siyasətlərin və strategiyaların formalaşdırılmasına kömək edə bilər.

Açar sözlər: Mikromaliyyə institutları, maliyyə dayanıqlılığı, aktivlərin gəlirliliyi (ROA), kapitalın gəlirliliyi (ROE), əməliyyat özünüödəmə (OSS)

Introduction

Ensuring their **financial sustainability** is crucial for long-term impact, which requires strong profitability, high portfolio quality, and the ability to cover costs without subsidies. Key performance indicators commonly used to evaluate MFI sustainability include **Return on Assets (ROA) and Return on Equity (ROE) (profitability measures), Portfolio at Risk (PAR) (loan portfolio quality), and Operational Self-Sufficiency (OSS) as well as Financial Self-Sufficiency (FSS) (measures of ability to cover costs) (Lafourcade, Isern, Mwangi, Brown, 2005; MIX Market, 2019; World Bank, 2006). ROA gauges how effectively an MFI's assets generate profit, while ROE indicates returns for equity investors (Akangbe et al., 2022). PAR**, typically measured as loans overdue >30 days, reflects portfolio quality and credit risk (MIX Market, 2019). **OSS** measures whether operating income covers operating expenses, and **FSS** extends this to include financing costs and any subsidies (Bogan, 2008; Harmincová & Janda, 2014). In essence, OSS >100% signifies an MFI can sustain operations without subsidy, and FSS >100% signals true financial independence (covering all costs at market rates) (Cull, Demirgüç-Kunt, & Morduch, 2006).

Research

This study conducts a comparative analysis of these sustainability indicators for MFIs across a broad selection of Asian and African countries, drawing on academic studies, World Bank and MIX Market data, and MFI annual reports. The goal is to discern regional performance patterns — for instance, whether Asian MFIs outperform African MFIs in profitability, how portfolio quality differs, and to what extent each region's institutions achieve self-sufficiency. We structure the analysis following academic norms: outlining our methodology and data sources, then presenting comparative findings with both tabular and graphical representations, followed by a conclusion. By examining diverse countries in Asia and Africa, we aim to provide a nuanced, "humanized" perspective that avoids generic conclusions, instead rooting the discussion in documented evidence and examples from the field.

Methodology

I adopted a mixed-method approach, combining quantitative data from industry reports with qualitative insights from academic literature. Key sources included peer-reviewed articles retrieved via Google Scholar (e.g., studies on MFI performance in South Asia and sub-Saharan Africa), World Bank publications and MIX Market benchmarking reports, as well as annual reports of prominent MFIs. For instance, a World Bank-supported survey of African MFIs by Lafourcade et al. provided aggregate performance metrics for dozens of institutions (Lafourcade, Isern, Mwangi, Brown, 2005), while a PLOS ONE academic study furnished recent regional averages for SSA MFIs (Akangbe et al., 2022). From Asia, country-specific case studies (such as an Institute of Microfinance report on Bangladesh) delivered detailed financial ratios for leading MFIs (Institute of Microfinance, 2010), and a panel dataset of South Asian MFIs gave regional average indicators (Memon et al., 2021). I ensured the selection covers a wide range of countries – e.g., Bangladesh, India, Cambodia, and Pakistan in Asia; Kenya, Ghana, Nigeria, and Tanzania in Africa – either through direct data or via regional aggregates that encompass them.

In analyzing the data, I applied standard definitions for each indicator. *ROA* is defined as net operating income divided by average assets, reflecting the MFI's ability to generate profit from its asset base (Harmincová & Janda, 2014). *ROE* is net income divided by equity, indicating the return on the owners' capital (Akangbe et al., 2022). *PAR*(>30 days) is the percentage of the loan portfolio with payments overdue by more than 30 days – a higher PAR means more delinquent loans and lower portfolio quality (MIX Market, 2019). *OSS* is calculated as operating revenues divided by operating expenses, showing if an MFI can cover costs with earned income (Bogan, 2008). *FSS* goes further,

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accounting for not only operating costs but also financial expenses (e.g., interest on borrowed funds) and imputed costs of subsidies; it measures if the MFI could cover all costs at market rates (Cull, Demirgüç-Kunt, & Morduch, 2006). An OSS or FSS value ≥100% indicates self-sufficiency, though some experts argue a 110% OSS is a more robust benchmark for sustainable MFIs (Bogan, 2008).

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Analytical approach: Using the assembled data, we first tabulated the indicators by region and by notable country cases. We computed simple averages or cited reported averages for groups of countries (e.g., mean ROA for South Asian MFIs vs. African MFIs) to facilitate comparison. Where available, we also included individual institutional examples (such as Bangladesh's large MFIs, and a few African MFIs) to illustrate the range of performance. Comparative analysis was then conducted in two dimensions: (1) Asia vs. Africa regional performance – identifying broad trends and differences in median or mean ROA, ROE, PAR, OSS, and FSS; and (2) Country-specific insights – highlighting any outlier cases or exemplary performers that shed light on why such differences exist (for example, how regulatory environments or operational models might drive higher OSS in one country versus another). We complemented the table with an alternative presentation (a bar chart of average ROA and OSS by region) to visualize the gap between Asian and African MFIs. Additionally, academic findings were integrated to explain the observed patterns – for instance, literature on cost structures, funding sources, or portfolio composition in each region that influence sustainability metrics (Lafourcade, Isern, Mwangi, Brown, 2005; Akangbe et al., 2022).

Comparative Findings

Return on Assets (ROA): Striking regional differences are evident in MFIs' profitability. Asian MFIs, on average, report significantly higher ROA than their African counterparts. For instance, a comprehensive study of 409 South Asian MFIs (1999–2017) found an average ROA of about 3.4% (Memon et al., 2021). This indicates that South Asian MFIs, as a whole, earn approximately \$3.40 of profit per \$100 of assets – a modest but solid positive return. Country-level data underscore this strength: during the 2000s, leading MFIs in **Bangladesh** consistently posted positive ROA. ASA, one of Bangladesh's largest MFIs, had an exceptionally high ROA of 9.05% in 2002, which gradually moderated to 3.02% by 2008 as the institution expanded (Institute of Microfinance, 2010). Even after this decline, ASA's 3.02% ROA in 2008 far outstripped the contemporaneous performance of most African MFIs. Similarly, BRAC (Bangladesh) recorded ROA around 5–7% in the mid-2000s before a drop to 1.47% in 2007 (Institute of Microfinance, 2010) (attributed to a large expansion financed by costly debt). These figures illustrate that many Asian MFIs have historically achieved and sustained profitability levels that would be considered strong even for commercial banks.

In sharp contrast, **African MFIs** tend to have much lower ROA. Regional analyses repeatedly show near-zero or negative average ROA in Africa. A recent analysis of 300+ MFIs across 33 sub-Saharan African countries reported a mean ROA of -0.3% (Akangbe et al., 2022) – essentially a break-even level where institutions barely cover costs and earn no surplus. Earlier studies echo this pattern: as far back as 2003, African MFIs on average were struggling to generate profits, with "average return on assets negative overall" in a World Bank sample (Cull, Demirgüç-Kunt, & Morduch, 2006). It was noted that less than half (only ~47%) of African MFIs in a 2005 CGAP survey had positive unadjusted returns on assets (Lafourcade, Isern, Mwangi, Brown, 2005), meaning the majority operated at a loss or at zero profit. The stark difference implies that Asian MFIs have generally been more financially viable, likely due to factors explored later (such as larger scale, greater efficiency, and higher portfolio yields in Asia). Table 2 (below) quantifies this profitability gap, showing South Asia's ROA averaging around 3%–4% versus roughly 0% in Africa.

Return on Equity (ROE): The ROE pattern mirrors ROA, though the gap is somewhat narrower after accounting for leverage. Asian MFIs often deliver decent returns on equity, frequently in the double digits for mature institutions. For example, BRAC in Bangladesh recorded an ROE of 23.8% in 2006 (Institute of Microfinance, 2010) during a peak performance year (meaning nearly 24 cents of profit per \$1 of equity), though its ROE fell to about 6% in 2007 amid rising costs (Institute of Microfinance, 2010). Industry-wide, South Asian MFIs have tended to maintain ROE levels above 10% in many cases, rewarding investors and supporting reinvestment.

In Africa, by contrast, the average ROE is extremely low – a recent dataset put the mean ROE for sub-Saharan African MFIs at only +1.2% (Akangbe et al., 2022). Such a thin ROE indicates that, on average, an equity investor in an African MFI sees almost no return (essentially just breaking even, aside from any social return). Even the **best** African performers historically lag Asian peers: a study covering African MFIs up to the mid-2000s found that regulated African MFIs (e.g., microfinance banks) achieved the highest ROEs in the region, on the order of 10–15% (Lafourcade, Isern, Mwangi, Brown, 2005), while unregulated NGOs had negative equity returns. But few approached the 20%+ ROEs seen in Asia.

Table 1. Financial sustainability indicators for MFIs in Asia and Africa

Indicator	Asia (South Asia focus)	Africa (Sub-Saharan focus)
ROA	~3–4% on average in South Asia; major MFIs often higher (e.g., ASA Bangladesh 3.0% in 2008)	~0% on average (slightly negative in SSA: – 0.3%); many MFIs break-even at best
ROE	Often 10–15%+ for sustainable MFIs (BRAC ~24% in 2006)	Low single digits on average (SSA ~1.2%); top performers ~10–15% ROE in few cases
Portfolio at Risk >30	Typically 2–5% (healthy). E.g., Bangladesh PAR ~1%–5%.	Typically 3–5% (healthy). Regional avg ~4.0% similar to Asia.
oss	>110% for most mature MFIs (South Asia avg ~129%). Many far exceed 100% (ASA 143% in 2008).	~100–110% for many. SSA avg ~106% – just above break-even (some MFIs still <100%).
FSS	Achieved by a majority of large MFIs (ASA ~114%; BRAC 106%). Generally above 100% if OSS is well above 100%.	Many remain below 100% FSS without subsidized funds. Some leading African MFIs reach ~100–110%, but smaller ones rely on cheap funding to sustain operations.

One somewhat surprising finding comes from an international comparison by Harmincová and Janda: they report that the **median** ROE in Africa was about 20% and among the highest globally (Harmincová & Janda, 2014), implying that a subset of African MFIs – likely the larger, more commercialized ones – do attain high equity returns. This highlights diversity within Africa: for example, Kenya's Equity Bank (originally a microfinance provider turned mainstream bank) or microfinance banks in Nigeria have achieved profitable scale, driving up the region's upper-end ROE. However, the **typical** African MFI still has a much lower ROE than the **typical** Asian MFI.

Overall, the profitability indicators paint a clear picture: **Asian MFIs have historically been more profitable**, on average, than **African MFIs**, with higher ROA and ROE enabling them to accumulate capital and attract investment for growth (Lafourcade, Isern, Mwangi, Brown, 2005; Akangbe et al., 2022). African MFIs, in aggregate, only marginally cover their costs, resulting in minimal returns. The next sections explore whether this comes at the expense of portfolio quality or is linked to differing cost structures and revenue models.

Conclusion

This comparative study examined MFIs across a broad set of Asian and African countries, focusing on ROA, ROE, PAR, OSS, and FSS as key indicators of financial sustainability. The analysis was grounded in data from academic research, World Bank/MIX Market surveys, and institutional reports, and structured in line with academic standards. Several clear patterns emerged. **Asian MFIs, on average, exhibit stronger financial sustainability than African MFIs**. They enjoy higher returns on assets and equity – for example, South Asian MFIs average a few percent ROA, whereas African MFIs barely break even – and consequently more often attain robust self-sufficiency (OSS and FSS comfortably above 100%). In contrast, African MFIs, while improving over time, often

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operate on thin margins with OSS just over 100% and sometimes remain dependent on concessional support to fully cover costs.

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Notwithstanding these differences, **both regions have demonstrated that high portfolio quality is attainable**; MFIs in Asia and Africa alike keep PAR levels around 3–5% on average, a testament to effective borrower engagement and credit methodologies across diverse cultural contexts. The findings suggest that the primary differentiators are not client risk profiles, but operational efficiency and scale. Asian MFIs typically leverage larger scale and more efficient cost structures to convert their high repayment rates into profits, whereas African MFIs face cost and revenue challenges that dilute their gains.

From a policy and practice perspective, the implications are twofold. For African MFIs and their supporters, the focus should be on **driving down costs and boosting revenues per unit cost** – through technology (e.g., mobile money integration, which is already spreading in Africa), through prudent expansion to achieve economies of scale, and through setting interest rates at sustainable (yet responsible) levels. As seen, even a small improvement (a few percentage points increase in yield or efficiency) could elevate many African MFIs from marginal OSS ~105% to a healthier 115%+. Donors and governments can aid this transition by investing in capacity building and infrastructure that lower operating costs (for instance, digital field applications to reduce the cost of serving rural clients).

For Asian MFIs, the challenge is **maintaining prudent portfolio quality amid growth**. The data on Bangladesh's giants showed profitability slipping when expansion outpaced institutional capacity. Thus, strong governance and risk management must accompany scale-up to preserve both OSS and social mission. Additionally, as more Asian MFIs become regulated and tap deposit funding, ensuring they meet prudential standards will be key to sustaining their financial gains.

In conclusion, while Asian and African MFIs operate in very different environments, the core tenets of financial sustainability apply universally. High repayment rates, efficient operations, and sound financial management are the pillars of sustainable microfinance. Asian MFIs' success in achieving high OSS/FSS provides a blueprint – *but not an unattainable one* – for African MFIs. Encouragingly, the gap has been narrowing as African MFIs adopt best practices and as the industry globalizes knowledge via networks like MIX Market and forums like the Microfinance Barometer. Continued cross-pollination of ideas between Asia and Africa's microfinance sectors will help more MFIs reach the level where they can both stay financially afloat and fulfill their social mission. Ultimately, the comparative lens of this study highlights not just differences, but also the shared progress: in both Asia and Africa, microfinance institutions are proving that they can be financially self-sustaining while serving the poor – a dual objective that lies at the heart of microfinance's promise.

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