

Working-Capital-Related Financial Management and Institutional Performance: Evidence from A Call to Business Savings and Loans Limited, Sierra Leone

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Abstract

This study examines working-capital-related financial management at A Call to Business Savings and Loans Limited (ACTB), a Sierra Leonean intermediary serving micro, small and medium-sized enterprises, and describes the observable relationship between balance-sheet structure and institutional performance across publicly documented observations. By treating a deposit-taking lender as the unit of analysis, the study contributes to finance research on banking and financial innovation in frontier markets, where balance-sheet choices shape both credit access and institutional resilience. The study adopts a quantitative single-institution case-study approach to publicly documented observations, principally December 2013 and June 2018, with later observations used as context. Analysis uses financial-ratio calculations, nominal percentage-change calculations, percentage-point comparisons and descriptive balance-sheet analysis. The loan portfolio increased by 346.37 per cent, total assets by 398.36 per cent, savings by 882.49 per cent, equity by 553.38 per cent, and borrowers by 157.29 per cent. Loan-portfolio intensity declined from 67.01 per cent to 60.02 per cent, while savings intensity rose from 7.18 per cent to 14.15 per cent. PAR30 rose from 7.18 per cent to 8.85 per cent, following a 2014 crisis peak of 26 per cent. The study reconstructs publicly reported ACTB observations transparently and adapts working-capital analysis to a deposit-taking lender in a fragile-state setting. The paper thereby offers a replicable diagnostic framework for financial institutions operating where audited multi-year data are scarce, a setting of direct relevance to JMR's finance and economics readership.

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Introduction

Working capital management is about managing capital to meet short-term demands and debts. If the cash conversion cycle is taken into account (along with cash, inventories, receivables and payables), research is usually conducted on non-financial companies. These decisions are liquidity and return decisions, where too much liquidity of low return can reduce profitability, and too little liquidity can lead to disruption and to an increase in financing pressure (Deloof,

2003; García-Teruel & Martínez-Solano, 2007). Empirical evidence showed that there was a negative association between the cash conversion cycle and profitability, that is, aggressive working-capital policy is found to be associated with higher profitability (Singh, Kumar & Colombage, 2017; Liana, Putra, Yuliusman & Olinas, 2026). This relationship has also been found to be moderated by firm size, sector characteristics and economy (Nyangeri, Yugi & Ngala, 2025). A deposit-taking financial intermediary is different from a manufacturer or trader, however. For a finance readership, this distinction reframes working-capital analysis around deposit stability, loan repayment and liquidity timing rather than inventory and trade credit, while also raising marketing questions about savings-product design and client trust. The decisions it makes pertain to the mobilisation of funds from customers, the deployment of funds in the form of loans, the liquidity required to meet withdrawals and obligations and the quality of the loan portfolio, as well as to the composition of the financing of assets (liabilities and equity). Days of inventory and days of trade payment are thus not suitable main indicators of a savings and loans institution for this reason. In this study, the working-capital concept is adjusted to the financial intermediation functions which can be studied based on the public record available. The literature on microfinance institutions has long acknowledged that the financial intermediation role is different when it takes deposits and that the impact of deposits on financial performance is determined by the financial institution type and the legal environment (Tang, Quayes & Joseph, 2020). Deposit products are not uniform and mandatory and voluntary deposits are linked to financial sustainability and outreach in different ways (Grigoryan, Khachatryan, Hartarska & Mersland, 2025). As of 31 December 2013, the ACTB had 6,769 active borrowers, a loan portfolio totaling Le 7.199 billion and total assets of Le 10.743 billion (A Call to Business, 2014). At the end of June 2018, there were 17416 active borrowers, gross loan portfolio was Le 32.133 billion, total savings of Le 7.573 billion, total assets of Le 53.540 billion and equity of Le 16.478 billion with PAR30 of 8.85 per cent (Sierra Leone Economic and Microfinance Overview, 2019). The following publications report on further growth of ACTB's borrowers and its lending activities (International Finance Corporation, 2024; Dutch Good Growth Fund, 2023). Observations made later are not assumed to be an annual financial series.

While financial resource management is crucial to microfinance institutions and SME lenders, little empirical literature has investigated the relationship between ACTB's balance-sheet structure and the financial performance of the institution. It is not just that there is a lack of financial information. Information is disseminated in project documents, in sector reports and disclosures by the development finance institutions, and there are variations in accounting periods and differences in information presented between the sources. Profitability and liabilities are reported in the source 2013 and assets, equity, loan portfolio, savings and PAR30 are reported in the sector matrix 2018; net income and revenue is not reported in the matrix. This presents a methodological challenge as the absence of a financial snapshot at the institution level may be misunderstood as the annual financial snapshot. A strict case study observation should differentiate between numbers reported and ratios, and should not make assumptions of profitability, liquidity or causality conclusions that are not supported by the underlying financial statements. The aim of the study is to describe the working-capital related financial management and the observable relationship to institutional performance at ACTB based on comparable public financial snapshots. A secondary aim is to demonstrate how dispersed public disclosures can be used rigorously when audited statements are unavailable, a methodological contribution relevant to market and finance researchers working in data-constrained emerging markets. Specific objectives are to measure the ACTB's funding indicators, evaluate the evidence on ACTB's financial outcomes and performance, compare the intensity of the funding of the loan portfolio and the quality of the loan portfolio at comparable points in time, and assess changes in ACTB's funding structure and balance-sheet composition for the period. The following research questions are formulated from these objectives: How did the indicators of savings-related funding change between the reported observations? How did loan-portfolio intensity and portfolio quality change from December 2013 to June 2018? What are the changes in the funding structure and the balance-sheet composition for the reported data? The study presents an unambiguous

choice of the financial observations made by the public and applies the working-capital analysis to a deposit-taking lender. Its usefulness is to differentiate between scale growth and asset allocation and fund mix and credit risk changes. It is descriptive and it covers the institutional level. The most similar financial reports are those from December 2013 and June 2018. Subsequent borrower and portfolio data has been provided as context only when source and dates could be identified. No causal relationships are asserted between working-capital management and profitability, nor are any relationships between the performance of individual borrower firms. This manuscript bridges banking and financial innovation, financial risk management, capital structure and economic development in emerging markets. It offers a transparent, replicable case study of a deposit-taking microfinance institution in Sierra Leone, a context underrepresented in mainstream finance and marketing research, and speaks simultaneously to marketers interested in savings behaviour and client trust, to finance scholars interested in portfolio risk and funding mix, and to economists interested in financial deepening and post-crisis recovery.

Literature Review

In the working-capital literature, there are compromises between liquidity and profitability. In deposit-taking institutions these trade-offs are compounded by regulatory liquidity requirements and social mission, extending the debate into banking, risk management and development finance. Deloof (2003) has found a positive relationship between working-capital management and profitability for the Belgian non-financial enterprises, and García-Teruel and Martínez-Solano (2007) have studied working-capital policies and SME profitability. The results based on the meta-analytic evidence confirm that working capital management has a negative relationship with profitability, working capital policy which is aggressive is correlated with higher profitability and cash conversion cycle has a negative relationship with profitability on subgroup basis (Singh, Kumar & Colombage, 2017). A more recent systematic review of 26 studies included in Scopus index shows that the most dominant indicators of working-capital management are cash conversion cycle and its components, the most frequent profitability proxy is return on assets, and the relationship between working-capital management and profitability is moderated by sector characteristics, firm size, and liquidity conditions and economic crisis situations (Liana, Putra, Yuliusman & Olimsar, 2026). The moderating effect of firm size has also been investigated directly within the context of the microfinance industry, and it was found that the performance of financial institutions in the licensed microfinance sector in Kenya is partly moderated by the size of the financial institution (Nyangeri, Yugi & Ngala, 2025). Although the studies offer a justification for considering the link between short-term resource management and financial results, the measures used in them are not easily transferable mechanically to a deposit taking institution whose main earning asset is loans, and whose funding comes from customers' deposits. The core of liquidity management for a financial intermediary will be the timing and predictability of deposits' remuneration along with their maturity, credit risk and repayment. Funding might be expanded by having a larger base of deposits, but there are also repayment requirements for the deposits. As such, savings as a percentage of assets is a funding-composition indicator and not, in and of itself, a measure of liquid assets or a compliance measure of a regulatory liquidity requirement. Consistent definition of the measure is required by direct liquidity analysis, either as liquid assets divided by deposit liabilities or as the ratio specified by the regulators. This separation is crucial as the empirical findings of deposit-taking in microfinance reveal that the financial consequence of deposits is not guaranteed and is influenced by the cost management and the revenues generation (Tang, Quayes & Joseph, 2020). One of microfinance institutions' most important earning assets are their loan portfolios, however larger loan portfolios do not necessarily lead to better performance. The increase in growth can lead to an increase in interest income and outreach opportunities, but also to an increase in the risk of arrears, credit losses, operating costs and funding costs. A portfolio-quality indicator that should be used in conjunction with loan-book size is the proportion of gross loan portfolio that is at risk for more than 30 days (PAR30). Any change in the reported ratio between two snapshots is a change in PAR30, but does not necessarily indicate the cause of the change. In the case of

microfinance institutions, it is found that the regulated ones are more likely to be affected by the economic cycle and institutional factors than by macroeconomic variables such as inflation and interest rates; that operating efficiency and the number of loan officers are positive and significant on credit risk, whereas growth of gross domestic product and the number of active borrowers are negative and significant on credit risk (Abusharbeh, 2023). The literature on the subject of microfinance also notes the importance of financial sustainability and outreach. Cull, Demirgüç-Kunt and Morduch (2007) look at the linkage between financial performance and outreach, and Hermes, Lensink and Meesters (2011) explore outreach and efficiency. This literature argues that the nominal size of the loan book is not enough to judge institutional performance and should be complemented with other dimensions. For MFI's, financing for women and group credit, portfolio quality, client monitoring, appropriate active and passive interest rates, and control of operating costs were found to be important profitability drivers; and for borrowers, training in small business management, access to microcredit, monitoring by MFI, and investment-focused credit are found to be important drivers of profitability (Fonseca, Moreira & Mota, 2024). The twenty-five years systematic review on financial sustainability in microfinance found that governance and institutional quality, outreach and social performance, capital structure, risk management, technology usage, gender considerations and macroeconomic context all influence the degree of financial sustainability, while there are ongoing trade-offs between financial and social goals (Maeenuddin, Yusrini, Nor & Bhatti, 2026).

The relationship between commercialisation and outreach has been examined directly in the African context. Using panel data on 878 microfinance institutions across 38 countries between 1999 and 2023, Karuitha, Cheruiyot, Simbanegavi and Adewunmi (2026) found clear trade-offs between financial and social objectives: commercialisation increases loan sizes but reduces female outreach, signalling mission drift, while rural outreach remains resilient. This finding is directly relevant to an institution such as ACTB that has shifted toward larger-ticket MSME lending while maintaining a predominantly female client base. Financial intermediaries finance assets through deposits, institutional borrowing and equity. Equity can absorb losses, while liabilities may support asset expansion but create repayment obligations and funding costs. The balance between liabilities and equity is consequently relevant to solvency and financial resilience. In this study, the 2013 liability amount is reported directly; the June 2018 liability value is not separately reported in the sector matrix. Any 2018 liabilities-to-assets ratio inferred from assets minus equity must therefore be labelled as derived and interpreted cautiously, because it relies on the accounting identity that total assets equal total liabilities plus equity and assumes the reported asset and equity figures are comparable. External governance mechanisms, including rating, audit quality and supervision, have also been shown to affect the financial and social performance of microfinance institutions, although the effects vary by mechanism (Gadedjisso-Tossou, Kouevi & Gueyie, 2023). Risk management practices, including liquidity, operational, credit and market risk management, have been found to bear a positive and significant relationship with the financial performance of microfinance institutions (Jerono & Olweny, 2023). The literature establishes that liquidity, working-capital policy, portfolio quality and funding structure can matter for financial performance. However, the conventional working-capital ratios used for trading and manufacturing firms do not capture the core resource-allocation decisions of a deposit-taking lender. A context-specific description of ACTB's loan deployment, savings funding, capital structure and portfolio quality is therefore useful. The empirical gap is also constrained by data: the available public record does not contain a consistent multi-year series of profitability and financial-management variables. The study addresses this gap through transparent descriptive calculations rather than through an unsupported causal model. The analytical framework treats savings-to-assets intensity as a funding-composition indicator, loan-portfolio-to-assets intensity as a measure of the share of assets deployed in lending, the liabilities-to-assets ratio as a leverage indicator, and snapshot ROA and ROE as period-end profitability proxies where the required figures exist. PAR30 is used as a portfolio-quality measure. These indicators are compared across the two primary snapshots without interpreting the comparisons as statistical causal effects.

Hypothesis Development

The literature on working-capital management and microfinance performance suggests several relationships that can be examined descriptively in the ACTB case. Although the available data do not permit formal statistical estimation, directional expectations can be stated and evaluated against the reported observations. The first relationship concerns savings mobilisation and funding composition. The empirical evidence on deposit-taking in microfinance indicates that deposits are an important determinant of financial viability but that the relationship depends on institutional type, the legal environment and cost management (Tang, Quayes & Joseph, 2020). Deposit products are not homogeneous, and mandatory and voluntary deposits are associated differently with financial sustainability and outreach (Grigoryan, Khachatryan, Hartarska & Mersland, 2025). For a deposit-taking institution such as ACTB, the transition from credit-only to savings and loans operations would be expected to increase the share of savings in the funding base. Therefore, the following hypothesis has been developed:

H1. *Savings-related funding indicators increased as a share of total assets across the reported observations.*

The second relationship concerns loan-portfolio intensity. The working-capital literature establishes that the allocation of resources between current and non-current uses affects profitability and that the cash conversion cycle is negatively associated with profitability (Deloof, 2003; Singh, Kumar & Colombage, 2017). For a deposit-taking lender, the equivalent allocation decision is the share of assets deployed as loans. Evidence from microfinance institutions suggests that current-asset management and financial performance depend partly on institutional scale (Nyangeri, Yugi & Ngala, 2025). A growing institution that mobilises deposits may hold a larger non-loan asset base to support withdrawals and operations. Therefore, the following hypothesis has been developed:

H2. *Loan-portfolio intensity declined as total assets grew faster than the loan portfolio.*

The third relationship concerns portfolio quality. Evidence from regulated microfinance institutions shows that portfolio at risk is sensitive to institutional factors and the economic cycle, and that operating efficiency and loan-officer capacity affect credit risk (Abusharbeh, 2023). The literature also recognises that portfolio expansion does not necessarily indicate stronger performance and that portfolio quality should be read alongside loan-book size (Cull, Demirgüç-Kunt & Morduch, 2007; Hermes, Lensink & Meesters, 2011). Therefore, the following hypothesis has been developed:

H3. *Portfolio quality deteriorated in the reported PAR30 ratio between the two comparable snapshots.*

The fourth relationship concerns the funding structure. The literature on microfinance sustainability identifies capital structure as one of the factors shaping financial sustainability (Maeenuddin, Yusrini, Nor & Bhatti, 2026) and shows that external governance mechanisms affect financial performance (Gadedjisso-Tossou, Kouevi & Gueyie, 2023). Equity can absorb losses while liabilities create repayment obligations. An institution transitioning to deposit-taking would be expected to change the balance between liabilities and equity. Therefore, the following hypothesis has been developed:

H4. *The reported equity share of total assets increased between the two comparable snapshots.*

The fifth relationship concerns outreach. Evidence from African microfinance institutions shows that commercialisation increases loan sizes but reduces female outreach, signalling mission drift, while rural outreach remains resilient (Karuitha, Cheruiyot, Simbanegavi & Adewunmi, 2026). The profitability literature identifies financing for women and group credit as factors that stand out for microfinance institutions (Fonseca, Moreira & Mota, 2024). An institution moving into larger-ticket MSME lending would be expected to experience slower growth in the number of borrowers than in the size of the loan book. Therefore, the following hypothesis has been developed:

H5. Outreach growth decelerated as the institution shifted toward larger-ticket MSME lending.

Methodology

The study uses a quantitative, longitudinal single-institution case-study design based on secondary documentary data. ACTB is the unit of analysis, and each dated institutional observation is a snapshot rather than a respondent or a continuous annual time-series observation. No questionnaire or human-participant sample is used. The method combines source verification, financial-ratio analysis, nominal percentage-change calculations and descriptive comparison of balance-sheet and portfolio indicators. The principal observations are drawn from the ACTB project proposal containing 31 December 2013 information and the Sierra Leone microfinance competition matrix reporting ACTB figures for June 2018. Publications from the Dutch Good Growth Fund, the International Finance Corporation and the FMO are used for contextual information on institutional development and borrower scale, not to fill missing financial variables. A value is retained only where the cited material identifies ACTB and provides a sufficiently clear date or context. The figures are reported in the units used by their source. The later US-dollar loan-portfolio figure is not combined with Leone-denominated snapshots to calculate growth because the reporting dates, units and contexts are not equivalent. The calculations use the same source-reported units for numerator and denominator. Percentages are rounded to two decimal places in the results tables. Loan-portfolio intensity is calculated as gross loan portfolio divided by total assets, multiplied by one hundred. Savings intensity is calculated as customer savings divided by total assets, multiplied by one hundred. Liabilities-to-assets leverage is calculated as total liabilities divided by total assets, multiplied by one hundred. When liabilities are not directly reported, they are derived from the accounting identity that total assets equal total liabilities plus equity, and the resulting leverage ratio is labelled derived leverage. Snapshot return on assets is calculated as net income divided by period-end total assets, multiplied by one hundred, and snapshot return on equity is calculated as net income divided by period-end total equity, multiplied by one hundred. These are explicitly described as snapshot ratios because opening balances are not available to calculate average assets or average equity. Nominal percentage change between two reported observations is calculated as the difference between the later and earlier values divided by the earlier value, multiplied by one hundred. Percentage-point change for a ratio is the difference between the later and earlier ratio values. Absolute change is the difference between the later and earlier values.

The study applies deterministic descriptive estimators to the available observations. No inferential regression, correlation coefficient, p-value or hypothesis test is estimated. Although a general linear model might be written as $\text{Performance} = \beta_0 + \beta_1\text{SI} + \beta_2\text{LPI} + \beta_3\text{LEV} + \varepsilon$, estimating this model would require a sufficiently large and consistent set of observations for the dependent and explanatory variables. The available data contain only one usable net-income observation and non-comparable, intermittent snapshots, so the model is not estimable in a defensible way. The equation is presented only to clarify the type of relationship that future data could support, not as an estimated model in this study. The same limitation applies to standard errors, t-statistics, confidence intervals and significance tests: these are not reported because a valid sampling and error model and adequate observations are unavailable. The calculations performed are the ratio, nominal change and percentage-point estimators defined above. This is a methodological restriction, not a reason to invent values or treat missing observations as zero. No missing ACTB financial observation is interpolated, forecast, imputed or borrowed from another institution. "Not reported" means the cited source does not provide a value for that variable and period; "not calculable" means a required numerator or denominator is unavailable. Later institutional-scale figures are not used to manufacture profitability ratios. Source-reported values are distinguished from derived calculations, and derived figures are identified in tables and discussion. The principal limitations are the small number of comparable observations, the absence of a consistent profitability series, differences in reporting dates and contexts, reliance on public documents rather than audited statements collected directly from ACTB, and the absence of SME-level outcome data. These constraints prevent causal inference and limit

generalisation. The study is consequently descriptive and exploratory. Two appendices support the analysis. Appendix A reproduces the verified ACTB data schedule, with blank cells indicating values not reported in the cited sources. Appendix B lists the replication formulas applied to those values and indicates which estimators were calculated directly, which were derived and which were not estimated because of insufficient consistent observations. Together, the appendices allow the calculations reported in Tables 2, 3 and 7 to be reproduced from the source values.

Results and Discussion

The reported observations are summarised in Table 1, which presents the financial and outreach information retained from the identified sources. Blank or unavailable values are not treated as zero. The 2018 observations are labelled June 2018 because that is the period identified by the sector matrix.

Table 1: Reported observations by period and indicator

Indicator	December 2013	June 2018	2022 context	December 2023 context
Loan portfolio	Le 7.199 billion	Le 32.133 billion	US\$6.1 million reported in DGGF case context	Not comparable / not reported
Savings balance	Le 0.771 billion	Le 7.573 billion	Not reported	Not reported
Total assets	Le 10.743 billion	Le 53.540 billion	Not reported	Not reported
Total liabilities	Le 8.221 billion	Not separately reported	Not reported	Not reported
Total equity	Le 2.522 billion	Le 16.478 billion	Not reported	Not reported
Net income	Le 32.073 million	Not reported	Not reported	Not reported
Active borrowers	6,769	17,416	Approximately 22,068	Over 23,000
PAR30	7.18%	8.85%	Not reported	Not reported

Source: A Call to Business (2014); Sierra Leone Economic and Microfinance Overview (2019); Dutch Good Growth Fund (2023); International Finance Corporation (2024). Later contextual observations are not treated as a continuous series.

The calculations in Table 2 apply the formulas described in the methodology to the reported figures. For 2013, loan-portfolio intensity is 7,198,649,678 divided by 10,743,193,241, multiplied by one hundred, which equals 67.01 per cent. For June 2018, it is 32,132,730,000 divided by 53,539,802,000, multiplied by one hundred, which equals 60.02 per cent. Savings intensity is calculated in the same way. The 2018 leverage estimate uses total assets minus equity because liabilities are not separately reported.

Table 2: Financial ratios calculated from reported figures

Indicator	Formula / basis	December 2013	June 2018	Interpretation
Loan portfolio assets /	Loan portfolio ÷ total assets × 100	67.01%	60.02%	The loan portfolio grew in nominal value but represented a smaller share of total assets
Savings assets /	Savings ÷ total assets × 100	7.18%	14.15%	Savings represented a larger share of the reported asset base; this is not a direct liquidity ratio
Liabilities assets /	Liabilities ÷ assets × 100; 2018 derived from assets minus equity	76.53%	69.22%*	The estimated liability share declined; the 2018 value is derived
Snapshot ROA	Net income ÷ period-end assets × 100	0.30%	Not calculable	2018 net income is not reported
Snapshot ROE	Net income ÷ period-end equity × 100	1.27%	Not calculable	2018 net income is not reported

PAR30	Source-reported portfolio-quality ratio	7.18%	8.85%	The reported ratio was 1.67 percentage points higher in June 2018
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*2018 leverage is derived as (total assets minus total equity) divided by total assets, multiplied by one hundred. It is not presented as directly reported liabilities.

Nominal percentage changes are calculated using the difference between the June 2018 and December 2013 values, divided by the December 2013 value, multiplied by one hundred. For example, the loan-portfolio change is the difference between 32.133 and 7.199, divided by 7.199, multiplied by one hundred, which equals approximately 346.37 per cent using the rounded billion-Leone values; the calculation from the underlying source values is subject to rounding. The results are presented in Table 3.

Table 3: Nominal change between December 2013 and June 2018

Indicator	December 2013	June 2018	Nominal change
Loan portfolio	Le 7.199 billion	Le 32.133 billion	346.37% increase
Savings	Le 0.771 billion	Le 7.573 billion	882.49% increase
Total assets	Le 10.743 billion	Le 53.540 billion	398.36% increase
Total equity	Le 2.522 billion	Le 16.478 billion	553.38% increase
Active borrowers	6,769	17,416	157.29% increase

Source: Author calculations from the source-reported observations. Changes are nominal comparisons between two snapshots; they are neither annualised nor inflation-adjusted.

The first objective concerns savings-related funding and available performance evidence. Savings intensity increased from 7.18 per cent to 14.15 per cent, a rise of 6.97 percentage points. This indicates that reported savings became more prominent relative to total assets. It does not establish that ACTB held more liquid assets or that liquidity risk declined, because a savings balance is a funding liability and no comparable liquid-assets measure is available. The only calculable profitability observations are the 2013 snapshot ROA of 0.30 per cent and snapshot ROE of 1.27 per cent; the data do not permit a comparison of profitability between 2013 and 2018. This finding is consistent with the argument that deposit mobilisation is a funding-composition change rather than a direct liquidity improvement, and that the financial impact of deposits depends on cost management and revenue generation (Tang, Quayes & Joseph, 2020). The second objective concerns loan-portfolio intensity and portfolio quality. The nominal loan portfolio increased by 346.37 per cent, while loan-portfolio intensity declined from 67.01 per cent to 60.02 per cent, a decrease of 6.99 percentage points. This pattern is consistent with total assets growing faster than the loan portfolio over the two reported snapshots. PAR30 rose from 7.18 per cent to 8.85 per cent, an increase of 1.67 percentage points. Read against the 2014 crisis peak of 26 per cent, the 2018 ratio signals recovery rather than unqualified deterioration, illustrating the value of crisis-adjusted benchmarks in financial risk analysis. Portfolio expansion therefore coincided with a higher reported PAR30 ratio. With only two snapshots and no controls for economic conditions, underwriting changes or portfolio composition, this is a descriptive comparison and cannot establish why PAR30 changed. The evidence on portfolio at risk in regulated microfinance institutions suggests that institutional factors and the economic cycle are more important than macroeconomic variables, and that operating efficiency and loan-officer capacity affect credit risk (Abusharbeh, 2023). The third objective concerns funding structure and balance-sheet composition. Total equity increased from Le 2.522 billion to Le 16.478 billion, a nominal increase of 553.38 per cent. The derived liabilities-to-assets ratio decreased from 76.53 per cent to approximately 69.22 per cent. Because June 2018 liabilities are inferred as assets minus equity, this ratio depends on the comparability and accuracy of those two reported values. The figures indicate a substantial expansion in the reported equity base, but they do not reveal the separate costs of deposits, borrowing, equity or operating expenses, and cannot establish the effect of funding structure on profitability. This is consistent with the systematic review evidence that capital structure, governance and risk management shape financial sustainability but that the relationships are multidimensional (Maeenuddin, Yusrini, Nor & Bhatti, 2026). Taken together, the observations show substantial institutional expansion between December 2013 and June

2018. Savings and equity grew faster in nominal terms than the loan portfolio, while loan-portfolio intensity declined and savings intensity increased. At the same time, PAR30 increased. The evidence thus presents a mixed picture of expansion, changing funding composition and a higher reported portfolio-risk ratio. Because the data do not provide comparable income observations, the study cannot determine whether this expansion improved financial returns. The portfolio-quality finding requires contextual interpretation. Table 4 presents the PAR30 trajectory alongside the 2014 Ebola crisis observations, which provide the context needed to interpret the 2018 ratio correctly.

Table 4: Portfolio quality and the 2014 Ebola shock

Period	PAR30	Context
December 2013	7.18%	Pre-crisis baseline
2014 (lower bound)	5.00%	Reported starting point during crisis period
2014 (upper bound)	26.00%	Reported peak after two-month deterioration
June 2018	8.85%	Post-crisis, post-deposit-licence

Source: A Call to Business (2014); Dutch Good Growth Fund (2023); Sierra Leone Economic and Microfinance Overview (2019).

Notes: The 2014 figures are case-study reported ranges, not audited annual statements. The two-month deterioration period is not precisely dated. No causal claim is made. PAR30 = portfolio at risk over 30 days.

The derived resilience indicators show that the crisis peak PAR30 was 26.00 per cent, the recovery from peak was 65.96 per cent, and the residual above the 2013 baseline was 1.67 percentage points. The 2014 disbursement decline was 36.00 per cent year-on-year. The June 2018 PAR30 of 8.85 per cent should therefore not be read as simple deterioration from the 2013 baseline of 7.18 per cent. Read against the 2014 crisis peak of 26 per cent, it represents substantial recovery. The institution absorbed a severe portfolio-quality shock and returned to within 1.67 percentage points of its pre-crisis baseline. The outreach trajectory in Table 5 shows how borrower growth evolved across the reported observations and how the phases correspond to institutional events.

Table 5: Outreach trajectory and growth phases

Period	Borrowers/clients	Sub-period	CAGR	Phase
December 2013	6,769	—	—	Baseline
September 2016	~10,000	2013–2016 (2.75 years)	~15.3%	Ebola recovery
June 2018	17,416	2016–2018 (1.75 years)	~37.6%	Post-deposit-licence expansion
July 2022	22,068	2018–2022 (4.08 years)	~6.0%	MSME pivot
December 2023	>23,000	2022–2023 (1.42 years)	~3.0%	Mature scaling

Source: A Call to Business (2014); Awoko (2016); Sierra Leone Economic and Microfinance Overview (2019); Dutch Good Growth Fund (2023); International Finance Corporation (2024).

Notes: CAGR = $[(\text{end}/\text{start})^{(1/\text{years})} - 1] \times 100$, using decimal years. The September 2016 figure is a lower-bound proxy from a news interview. The July 2022 figure reports "clients," not "active borrowers." The December 2023 figure is a lower-bound proxy ("over 23,000"). Sub-period CAGRs are not chained into a single 2013–2023 rate because definitions and units are not fully consistent.

Outreach growth accelerated sharply after the 2017 deposit-taking licence, then decelerated as the institution shifted toward larger-ticket MSME lending from 2018 onward. This pattern is consistent with the evidence from African microfinance institutions that commercialisation increases loan sizes but reduces outreach breadth, signalling mission drift, while rural outreach remains resilient (Karuitha, Cheruiyot, Simbanegavi & Adewunmi, 2026). It is also consistent with the profitability literature, which identifies financing for women and group credit as factors that stand out for microfinance institutions (Fonseca, Moreira & Mota, 2024). The product mix and loan-size structure in Table 6 documents the composition of the loan book in July 2022 and tests the internal consistency of the reported figures.

Table 6: Product mix and loan-size structure, July 2022

Product line	Share of loan book	Average loan size (USD)	Loan-size band (USD)	Typical tenor
Microfinance	51%	281 (individual)	Up to 3,000 (maximum)	6–12 months
SME	49%	7,400	4,000–50,000	Not stated
MSME (combined)	100%	3,600 (average outstanding)	—	—

Source: Dutch Good Growth Fund (2023).

The implied borrower distribution shows that the SME segment accounts for an implied loan-book value of 2,989,000 US dollars with an average loan of 7,400 US dollars and approximately 404 implied borrowers, while the microfinance segment accounts for an implied loan-book value of 3,111,000 US dollars with an average loan of 281 US dollars and approximately 11,068 implied borrowers. The total implied borrower count is approximately 11,472, against a reported total client count of 22,068, giving a discrepancy of approximately 10,596. The reported product mix is internally coherent, but the implied borrower count is roughly half the reported client count, indicating that "clients" in the 2022 source likely includes depositors or savers, or that average loan sizes are not simple arithmetic means. This is a data-integrity observation, not an analytical error. The data-integrity checks in Table 7 validate the reliability of the source figures before the analysis is interpreted.

Table 7: Data integrity and internal consistency checks

Check	Reported values	Calculation	Result
Balance-sheet identity (2013)	Assets SLL 10,743,193,241; Liabilities SLL 8,221,293,877; Equity SLL 2,521,899,364	$8,221,293,877 + 2,521,899,364$	Equals 10,743,193,241
Average loan balance (2018)	Loan portfolio SLL 32,132,730,000; borrowers 17,416; reported average SLL 1,845,000	$32,132,730,000 \div 17,416$	Equals SLL 1,845,013
Snapshot ROE cross-check (2013)	Net income SLL 32,073,395; equity SLL 2,521,899,364; reported ROE 1.27%	$32,073,395 \div 2,521,899,364 \times 100$	Equals 1.27%
DuPont decomposition (2013)	Net margin 2.55%; asset turnover 11.71%; equity multiplier 4.26	$2.55 \times 11.71 \times 4.26$	Equals 1.27% (matches ROE)
Depositor-to-borrower ratio (2018)	Depositors 10,104; borrowers 17,416	$10,104 \div 17,416$	0.58 (plausible)
Implied borrowers vs. reported clients (2022)	See Table 6	~11,472 implied vs. 22,068 reported	Discrepancy
Branch count	IFC (2024): 14 branches; ACTB website (2026): 12 branches	—	Unresolved date/definition difference
Website transaction figure	"90 Bn Total Transaction"	Unit, currency and period not stated	Not usable for analysis

Source: Author calculations from A Call to Business (2014); Sierra Leone Economic and Microfinance Overview (2019); Dutch Good Growth Fund (2023); International Finance Corporation (2024); ACTB website (accessed 2026).

Four independent internal consistency checks passed, supporting the reliability of the core 2013 and 2018 figures. The 2022 client and borrower discrepancy suggests that "clients" includes depositors or that product definitions overlap. The branch and website discrepancies are flagged as limitations. The hypothesis evaluations follow from the results. H1 proposed that savings-related funding indicators increased as a share of total assets. This is supported: savings intensity rose from 7.18 per cent to 14.15 per cent, a rise of 6.97 percentage points, and the depositor-to-borrower ratio reached 0.58 by June 2018. H2 proposed that loan-portfolio intensity declined as total assets grew faster than the loan portfolio. This is supported: loan-portfolio intensity fell from 67.01 per cent to 60.02 per cent, a decrease of 6.99 percentage points, while total assets grew by 398.36 per cent and the loan portfolio grew by 346.37 per cent. H3 proposed that portfolio quality deteriorated in the reported PAR30 ratio between the two comparable snapshots. This is supported at face value: PAR30 rose from 7.18 per cent to 8.85 per cent, an increase of 1.67

percentage points. However, the 2014 crisis data reframe this finding, showing that the 2018 ratio represents a 65.96 per cent recovery from a crisis peak of 26 per cent and a residual of only 1.67 percentage points above the pre-crisis baseline. H4 proposed that the reported equity share of total assets increased between the two comparable snapshots. This is supported: the equity-to-assets ratio rose from 23.47 per cent to 30.78 per cent, an increase of 7.31 percentage points, and the derived leverage ratio fell from 76.53 per cent to approximately 69.22 per cent. H5 proposed that outreach growth decelerated as the institution shifted toward larger-ticket MSME lending. This is supported: the CAGR fell from approximately 37.6 per cent in 2016 to 2018 to approximately 6.0 per cent in 2018 to 2022 and approximately 3.0 per cent in 2022 to 2023, coinciding with the MSME pivot documented in Table 6.

Applications

Practical Applications

The results have a number of practical applications both for ACTB and for similar DT-MFIs in fragile state contexts. Managers can use the ratio framework as a balanced scorecard tracking funding composition, asset allocation and portfolio quality, while regulators can use it to identify reporting gaps and design prudential requirements. As shown in Table 2, there was an increase in the proportion of savings intensity, from 7.18 per cent to 14.15 per cent, which means that the savings portion of the context of the balance-sheet increased in importance relative to the funding context. It applies to an intermediary engaged in deposit taking, but should not be referred to as proof of enhanced liquidity. While savings are a liability that can be removed, liquidity assessment calls for information on available liquid assets, the maturity structure of liabilities and the timing of cash flows. Studies on the deposit taking in Microfinance indicate that it does not guarantee any financial effect and is therefore contingent upon cost management and revenue generation (Tang, Quayes & Joseph, 2020). Instead, managers ought to rely on the ACTB's verified regulatory liquidity measure, or a consistently reported liquid-assets-to-deposit-liabilities ratio, and not just on savings intensity. The reported loan portfolio grew significantly in absolute numbers, but decreased as a percent of assets and increased PAR30. These shifts illustrate the need to look at the quality of the loan in addition to the volume of loans. Monitoring of portfolios, credit screening, collections, loan provisioning and composition can be important, but the data do not pinpoint their individual impacts. Based on the evidence provided by the regulated microfinance institutions, their operating efficiency and number of loan officers have positive and significant influence on the credit risk, whereas their growth in gross domestic product and number of active borrowers have negative and significant influence on credit risk (Abusharbeh, 2023). Which indicates that portfolio quality management must be combined with the operating efficiency and client development rather than a stand alone concern. Therefore, the increase in PAR30 should not be viewed as an indicator of a specific cause, but as a warning indicator in the reported snapshots, and loan portfolio growth needs to be tracked in conjunction with the growth of PAR30, the level of loan-loss provisions, write-offs, the performance of repayment and the composition of the loan portfolio. The reported rise in equity indicates a higher nominal capital base. The leverage ratio is also derived, which indicates that equity's ratio to assets has increased from 2013 to June 2018. Without full audited financial statements, however, it is not possible to conclude whether the change was due to the effects of retained earnings, the effects of new capital or another change on the balance sheet, such as valuation changes. Nor does it measure the impact on profitability of funding costs. The findings of the systematic review shows that the financial sustainability factors consist of capital structure, other factors include governance, risk management and macroeconomic context as identified by Maeenuddin, Yusrini, Nor & Bhatti (2026). The analysis of funding should therefore be done independently from the analysis of customer deposits, institutional borrowing and equity (if applicable in the financial statements), and should include the costs of funding as well as the balance-sheet shares. Growth of borrowers and loan portfolio is important for ACTB in terms of financial intermediation service to MSMEs. However, this study is not concerned with the sales, working capital, employment, profitability or loan utilisation of SMEs. Growth of the institutions must not therefore be equated with the performance of SMEs they finance. The findings on commercialisation in the African microfinance

context suggest that commercialisation pushes up loan size, but also brings down the outreach to women, indicating the tendency of mission drift, and that the outreach to rural borrowers is more sustainable (Karuitha, Cheruiyot, Simbanegavi & Adewunmi, 2026). An assessment of the outcomes of the SMEs would necessitate borrower-level information and appropriate research design. The profitability literature shows that factors that impact borrower profitability, such as training in small business management and access to microcredit and monitoring by the microfinance institution, do not endanger the scope and depth of operations (Fonseca, Moreira & Mota, 2024). Product design and client monitoring should, therefore, be viewed as tools for the manager to help meet institutional and borrower goals. Risk management practices have a direct impact on the actual performance. According to the figures from the microfinance institutions in Kiambu county, Kenya, liquidity risk management, operational risk management and credit risk management is positively and significantly related to the financial performance of the institutions while market risk management is not statistically significant (Jerono & Olweny, 2023). Financial and social performance are further influenced by external governance mechanisms such as rating, audit quality and supervision, but the impact differs with the type of governance mechanism (Gadedjisso-Tossou, Kouevi & Gueyie, 2023). ACTB shall therefore continue to produce a consistent series of monthly or quarterly data on the following items: total assets; total liabilities; total equity; total customer deposits; liquid assets; gross loan portfolio; PAR30; other portfolio quality measures; income; expenses and net profit; and enhance those aspects of its governance and risk-management capabilities over which it has control.

Theoretical Applications

The study can be used to take a step forward in the theoretical understanding of working-capital management in deposit-taking financial intermediaries. By adapting working-capital constructs to a lender's balance sheet, the study bridges corporate-finance theory and microfinance research, offering a parsimonious framework of savings intensity, loan intensity, leverage and PAR30. The traditional definition of working capital, which was designed for manufacturing and trading businesses, is concerned with the cash conversion cycle and its corresponding elements: the collection of receivables period, the inventory turnover period and the trade debt payment period (Deloof, 2003; García-Teruel & Martínez-Solano, 2007). The findings of this study are consistent with the results of other studies that have been conducted on working-capital management and cash conversion cycle. Meta-analytic evidence confirms that working-capital management is negatively related to profitability across subgroups, and cash conversion cycle is negatively related to profitability across subgroups (Singh, Kumar & Colombage, 2017). The latest systematic literature review showed that the cash conversion cycle and its components are the most influential indicators of working-capital management, the most commonly used substitutes for profitability are return on assets, and that the relationship between working-capital management and profitability is moderated by sector characteristics, firm size, liquidity conditions, and economic crisis situations (Liana et al. 2026). These measures cannot be simply applied to a deposit taking institution whose main assets are on loan and whose liabilities are the deposits of customers. In the present study, the working-capital concept is adapted by incorporating the intensity of the savings-to-assets ratio as a measure of funding composition, loan-portfolio-to-assets ratio as a measure of the portion of the assets used to finance loans, liabilities-to-assets ratio as a measure of leverage, and snapshot ROA as a proxy for period-end profitability and snapshot ROE as a measure of period-end profitability when these figures are available. This adaptation follows the fact that deposit taking influences financial performance differently depending on the institutional type, and the legal environment (Tang, Quayes & Joseph, 2020). It is also in line with the evidence that deposit products are not homogeneous and that mandatory and voluntary deposits are correlated differently with financial sustainability and outreach (Grigoryan, Khachatryan, Hartarska & Mersland, 2025). The study also enhances the theoretical understanding of the performance of the institution in the field of microfinance. Financial sustainability and outreach are recognised in the literature as a pair (Cull, Demirgüç-Kunt & Morduch, 2007; Hermes, Lensink & Meesters, 2011). There are clear trade-offs in commercialisation of the MFIs in Africa, in that mission drift is seen in the increasing size of loans

at the expense of female beneficiaries, while outreach to rural areas is sustained (Karuitha, Cheruiyot, Simbanegavi & Adewunmi, 2026). In the present study, this trade-off is reflected in the slowdown in outreach as the institution moved toward higher value MSME loans. It is interesting that the increase in saving intensity occurred alongside a decline in loan-portfolio intensity, which fits an argument that deposits affect changes in the composition of the balance sheet and asset deployment. The analysis of portfolio quality in the study helps to advance the theoretical knowledge of credit risk in microfinance. The regulated microfinance institutions' evidence reveals that portfolio at risk is more responsive to institutional factors than to macroeconomic factors like inflation and interest rates (Abusharbeh, 2023). This study's results that PAR30 increased from 7.18 per cent in 2013 to 8.85 per cent in 2018, yet dropped to its lowest point in 2014 at 26 per cent, lines up with the argument that trends are not the only drivers of portfolio quality; that institutional and cyclical factors also play a role. The finding also reinforces the notion that reported differences in the ratio between two snapshots is not proof of the reason for the difference in the ratio, but rather is a sign of the difference in the ratio. The study's treatment of the funding structure is a step towards the theoretical understanding of capital structure in microfinance. Based on the evidence from the systematic review, financial sustainability in microfinance institutions is influenced by governance and institutional quality, outreach and social performance, capital structure, risk management, technological adoption, gender dynamics and macroeconomic context and that there are ongoing trade-offs between financial and social goals (Maeenuddin, Yusrini, Nor & Bhatti, 2026). In the context of the argument that capital structure is a relevant dimension of financial sustainability, the present study findings that the equity share of total assets rose from 23.47 per cent to 30.78 per cent is consistent. We see that the leverage ratio derived has decreased from 76.53 per cent to around 69.22 per cent, which supports the notion that equity can absorb losses, while liabilities bring repayment requirements.

Policy Applications

The results have some policy implications for the regulation and supervision of microfinance in Sierra Leone and other fragile state settings. The use of publicly documented observations, found throughout project documentation, sector reports and development finance institution disclosures, exposes an area of policy challenge – data availability. Regulators and researchers would have a more reliable way to track the performance of institutions if they were required to report monthly or quarterly on total assets, liabilities, equity, customer deposits, liquid assets, gross loan portfolio, PAR30 and other portfolio quality measures, income, expenses and net profit. The findings of the external governance mechanisms reviews indicate that rating, audit quality and supervision have a significant impact on the financial and social performance of the MFIs, but the impacts differ across external governance mechanisms (Gadedjisso-Tossou, Kouevi & Gueyie, 2023). Policy needs to therefore provide for uniform, comparable and timely reporting throughout the sector. Policy implications of the difference between savings mobilisation and liquidity also apply. The savings rate represented as a portion of assets is a measure of funding composition and not a measure of the level of liquid assets or the fulfillment of a regulatory liquidity requirement. Direct liquidity analysis involves the use of a consistent definition of liquidity, like liquid assets compared to deposit liabilities or the regulatory liquidity ratio itself. The evidence on deposit-taking in microfinance reveals that the financial return from deposits is not guaranteed, and is subject to cost management and revenue generation (Tang, Quayes & Joseph, 2020). Therefore, policy should call for the reporting of a measure of liquidity which is directly comparable across institutions and periods rather than on savings balances as a proxy for liquidity. Another issue that needs to be addressed by policies is portfolio quality. The results of the regulated microfinance institutions demonstrate that the underlying factors behind the institutions are more significant than the macro factors in affecting the portfolio at risk, and that operating efficiency and the number of loan officers have a significant impact on credit risk (Abusharbeh, 2023). Therefore, policy should support the monitoring of PAR30, as well as loan-loss provisions, write-offs, loan repayment performance and portfolio composition, and should encourage institutions to make credit-risk management part of operating efficiency and client growth. The findings on the practices of each risk management in MFIs demonstrate that the

practices of liquidity risk management, operational risk management, credit risk management and market risk management have positive and significant relationship with financial performance (Jerono & Olweny, 2023). Policy needs to therefore promote the use of full risk-management frameworks. Commercialisation and outreach evidence is also relevant to policy. There is a shift in mission focus in the sense that the outreach of women has contracted with an increase in loan size (commercialisation) and rural outreach persists (Karuitha, Cheruiyot, Simbanegavi & Adewunmi, 2026). Policy should thus track social performance of microfinance institutions as well as their financial performance, and examine whether the trend towards larger ticket lending is compatible with the social mandate. Financing for women and group credit are factors that stand apart for microfinance institutions (MFIs) (Profits literature). Policy should therefore facilitate and encourage fundings for women and group credit and the institutions to track the composition of their loan portfolio and customer base over time.

Conclusion

The study employed institutional observations to describe the financial management in ACTB that is related to working capital as reported in public documents. The nominal loan portfolio, savings, assets, and the number of active borrowers all grew from December 2013 through June 2018. Loan portfolio intensity fell by 6.99 percentage points while savings intensity rose by 6.97 percentage points. PAR30 rose from 7.18 per cent to 8.85 per cent but after reaching a crisis level in 2014 of 26 per cent, it is a recovery of 65.96 per cent from that high point. From available observations, only the 2013 data allow for the calculation of snapshot ROA of 0.30 per cent and snapshot ROE of 1.27 per cent; similar profitability ratios for 2018 are not available. The results lend credence to the argument that the ACTB expanded and its balance-sheet structure shifted. They do not prove an increase in profitability, an improvement in liquidity nor that individual small and medium sized enterprises (SMEs) did better because of working-capital-related financial management. Lack of data is the limiting factor for statistical estimation, and data are often scarce and inconsistent. It is therefore sensible to use descriptive ratio and change calculations as a level of analysis for the current evidence. The study provides a clear quantification of financial observations made by the public at the time of the bank in the case of ACTB, and extends the concept of working capital analysis to a deposit-taking institution. Its practical utility is to differentiate out the contribution from the scale and asset allocation, funding mix and credit risk. Its theoretical relevance is due to its ability to adapt the working-capital approach to a financial intermediary whose main assets are loans and whose funding is provided by customer deposits. It is distinguishing the constraint of data availability and the difference between mobilization of savings and liquidity that is its policy contribution. The results are in line with literature on deposit-taking in microfinance, which reveals that the financial consequence of deposits is related to cost management and revenue generation (Tang, Quayes & Joseph, 2020) and literature on commercialisation in African microfinance, revealing that commercialisation positively affects loan sizes, but negatively affects female outreach (Karuitha, Cheruiyot, Simbanegavi & Adewunmi, 2026).

Limitations and Future Research Directions

The first constraint is the limited number of observations comparable. Two main financial snapshots are used in the study in December 2013 and June 2018, and other observations are only used as context. This avoids statistical estimation, and restricts the power of the descriptive comparisons. One of the corresponding future research directions is to be able to obtain audited financial statements and clearly dated regulatory returns over a consistent multi-year series with which to estimate panel or time-series models once the assumptions appropriate to the selected estimator have been checked. The second restriction is that there is no consistent profit series. Comparable profitability ratios cannot be calculated for June 2018 or other periods due to net income and operating revenue only being reported for December 2013. A related future research opportunity would be to have income-statement data for the same periods as the balance-sheet data, so that average-balance ROA and ROE could be calculated and the profitability of the reported observations compared. The third is the variation in reporting dates, units and contexts

between sources. Data for 2013 are in Leone, data for 2014 and 2022 are in US dollars, and data for 2018 are in Leone thousands. The US-dollar loan-portfolio figure is not added to Leone-denominated snapshots in the calculation of growth because the data were gathered at different times. One possible future direction of research is to get a series that is currency consistent, or to have a consistently defined conversion method with proper disclosure of the assumptions, so that comparable growth rates can be determined over time. The fourth restriction is using public documents instead of audited statements that are gathered directly from ACTB. This has resulted in reported figures as secondary sources and some variables not reported on the same dates. A related future research effort would be to get audited financial statements and regulatory returns from the institution itself and verify the numbers reported on these documents, thereby minimizing the use of secondary sources. The fifth limitation is that the outcome data are unavailable at the SME level. The study notes the institutional level of expansion but does not determine if ACTB financing resulted in better performance of ACTB financed SMEs. A related ongoing research path forward is to gather well protected borrower-level data on sales, profitability, working capital, employment, loan use, and other factors that can be evaluated to determine whether institutional growth positively impacts borrower performance. The sixth restriction is that the leverage ratio is derived in 2018. June 2018 liabilities are calculated as assets less equity, so derived leverage ratio will differ if the values for assets or equity are not comparable or accurate, and if there are any off-balance-sheet items. A related research avenue is to get directly reported liabilities for the same period of time as the leverage ratio, that will be the year of June 2018 and after, so that the accounting identity can be avoided.

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Appendix A: Verified ACTB Data Schedule

Period	Loan portfolio (Le)	Savings (Le)	Assets (Le)	Liabilities (Le)	Equity (Le)	Net income (Le)	Borrowers	PAR30
December 2013	7,198,649,678	770,826,119	10,743,193,241	8,221,293,877	2,521,899,364	32,073,395	6,769	7.18%
June 2018	32,132,730,000	7,573,316,000	53,539,802,000	Not reported	16,477,596,000	Not reported	17,416	8.85%
2022 context	US\$6.1 million	Not reported	Not reported	Not reported	Not reported	Not reported	Approximately 22,068	Not reported
December 2023 context	Not reported	Not reported	Not reported	Not reported	Not reported	Not reported	Over 23,000	Not reported

Source: A Call to Business (2014); Sierra Leone Economic and Microfinance Overview (2019); Dutch Good Growth Fund (2023); International Finance Corporation (2024). Figures from different dates and currencies are not mechanically combined.

Note: The values reproduce the data schedule used for calculations. Blank cells indicate that a value was not available in the cited source; they are not zeros.

Appendix B: Replication Formulas

Indicator	Formula	Applied?
Loan-portfolio intensity	Loan portfolio / total assets × 100	Yes: 2013 and June 2018
Savings intensity	Savings / total assets × 100	Yes: 2013 and June 2018
Leverage	Liabilities / assets × 100	Yes: 2013 directly; June 2018 derived as assets minus equity
Snapshot ROA	Net income / period-end assets × 100	Yes: 2013 only
Snapshot ROE	Net income / period-end equity × 100	Yes: 2013 only
Nominal percentage change	(Later value – earlier value) / earlier value × 100	Yes: comparable 2013–June 2018 indicators
Percentage-point change	Later ratio (%) – earlier ratio (%)	Yes: intensity and PAR30 comparisons
Regression / causal estimation	Performance = $\beta_0 + \beta_1 SI + \beta_2 LPI + \beta_3 LEV + \varepsilon$	Not estimated: insufficient consistent observations

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