



Islamic Microfinance and Grassroots Economic Resilience in Indonesia A Longitudinal Analysis of Koperasi Syariah Benteng Mikro Indonesia

Mohammad Fahreza, Shofwan Azhar

Universitas Koperasi Indonesia
mfahreza@ikopin.ac.id, shofwanas125@gmail.com

ABSTRAK

Penelitian ini mengkaji bagaimana koperasi mikro syariah dapat mempertahankan ketahanan ekonomi akar rumput selama masa pemulihan pascapandemi dan normalisasi selanjutnya di Indonesia. Analisis ini berfokus pada Koperasi Syariah Benteng Mikro Indonesia (Kopsyah BMI), sebuah koperasi berbasis komunitas yang layanannya sangat erat kaitannya dengan kebutuhan keuangan sehari-hari usaha mikro dan rumah tangga berpenghasilan rendah. Dengan menggunakan desain deskriptif-analitis longitudinal, penelitian ini merekonstruksi rangkaian data akhir tahun yang terstandarisasi untuk periode 2021-2025 dari laporan kinerja resmi Kopsyah BMI bulan Desember dan menginterpretasikan lintasan kelembagaan dalam konteks makroekonomi Indonesia. Bukti yang diperoleh menunjukkan pola non-linear, bukan sekadar kisah ekspansi sederhana. Antara tahun 2021 dan 2025, tabungan anggota meningkat sebesar 58,01%, desa yang dilayani sebesar 58,00%, jumlah anggota sebesar 24,54%, dan distribusi pembiayaan kumulatif sebesar 66,80%. Selama periode yang sama, aset hanya meningkat sebesar 4,62% setelah mencapai puncaknya pada tahun 2024, modal menurun sebesar 6,12%, pembiayaan efektif turun sebesar 1,10%, dan pinjaman pihak ketiga berkurang sebesar 44,07%. Titik balik menjadi lebih jelas pada tahun 2025, ketika aset menurun sebesar 16,33%, pembiayaan efektif sebesar 11,89%, jumlah karyawan sebesar 10,95%, dan Laba Bersih Setelah Pajak (SHU) sebesar 29,85%, meskipun simpanan meningkat sebesar 8,06% dan jumlah desa yang dilayani meningkat sebesar 8,66%.

Kata Kunci: ketahanan ekonomi; inklusi keuangan; keuangan mikro syariah.

ABSTRACT

This study examines how an Islamic microfinance cooperative can sustain grassroots economic resilience during Indonesia's post-pandemic recovery and subsequent normalization. The analysis focuses on Koperasi Syariah Benteng Mikro Indonesia (Kopsyah BMI), a community-based cooperative whose services are closely connected to the everyday financial needs of microenterprises and lower-income households. Using a longitudinal descriptive-analytical design, the study reconstructs a standardized year-end series for 2021-2025 from Kopsyah BMI's official December performance reports and interprets the institutional trajectory within Indonesia's macroeconomic context. The evidence reveals a non-linear pattern rather than a simple expansion story. Between 2021 and 2025, member savings increased by 58.01%, villages served by 58.00%, members by 24.54%, and cumulative financing distribution by 66.80%. Over the same period, assets increased by only 4.62% after peaking in 2024, capital decreased by 6.12%, effective financing declined by 1.10%, and third-party borrowings decreased by 44.07%. The turning point became more visible in 2025, when assets declined by 16.33%, effective financing by 11.89%, employees by 10.95%, and SHU after tax by 29.85%, even as savings rose by 8.06% and villages served by 8.66%.

Keywords: economic resilience; financial inclusion; Islamic microfinance.

INTRODUCTION

Indonesia's recovery between 2021 and 2025 can be read through improving macroeconomic indicators, but those indicators do not tell the whole story of how recovery was experienced at the grassroots level. National economic growth rose from 3.70% in 2021 to 5.31% in 2022, before stabilizing at 5.05% in 2023, 5.03% in 2024, and 5.11% in 2025. This trajectory reflects a resilient economy. Yet behind the national aggregates were microenterprises and lower-income households that still had to manage uneven cash flows, limited financing access, and the continuing pressure of daily business uncertainty (BPS-Statistics Indonesia, 2022a, 2023a, 2024a, 2025a, 2026a; International Monetary Fund, 2026).

The experience of inflation makes this contrast more visible. December year-on-year inflation increased from 1.87% in 2021 to 5.51% in 2022, moderated to 2.61% in 2023 and 1.57% in 2024, and then rose again to 2.92% in December 2025. For households and microentrepreneurs, these movements were not abstract statistical changes. They influenced the affordability of food and basic needs, the cost of business inputs, the ability to maintain working capital, and the capacity to meet financing obligations. For microfinance institutions, the same pressures could reshape financing demand and portfolio quality (BPS-Statistics Indonesia, 2022b, 2023b, 2024b, 2025b, 2026b).

Against this background, the strategic question should be framed carefully. The issue is not whether a single cooperative causes national economic growth, because such a claim would require a much broader identification strategy. The more meaningful question is how a community-based institution translates macroeconomic resilience into services that can be reached and used by people: savings that strengthen household buffers, financing that supports business continuity, and institutional relationships that help members navigate changing economic conditions. This framing is consistent with the financial-intermediation perspective and with contemporary research on microfinance sustainability (Diamond, 1984; Hermes & Lensink, 2011; Abu Wadi et al., 2022; Lwesya & Mwakalobo, 2023).

Kopsyah BMI offers a relevant lens through which to examine this process. The cooperative combines sharia-compliant savings and financing with a broad grassroots service footprint and a social-finance orientation. Its institutional website describes a community cooperative focused on microenterprise services and sharia-based savings, loans, and financing, alongside the management of zakat, infaq or sadaqah, and waqf-related activities (Koperasi Syariah Benteng Mikro Indonesia, n.d.-a). This configuration positions Kopsyah BMI not only as a financial intermediary, but also as an institution whose performance is closely connected to trust, proximity, and the social realities of the communities it serves.

The relevance of this institutional role becomes clearer when viewed alongside Indonesia's financial-inclusion gap. OJK and BPS reported that the national financial-inclusion index reached 75.02% in 2024, whereas sharia financial inclusion remained at only 12.88%. The difference suggests that the formal availability of Islamic financial products has not yet translated into equally broad and meaningful use. In this context, institutions such as Kopsyah BMI matter not simply because of their balance-sheet size, but because they can reduce practical barriers through local presence, member relationships, financial literacy, and community-based service arrangements (OJK & BPS-Statistics Indonesia, 2024; Ali et al., 2020; Saifurrahman & Kassim, 2024).

This manuscript follows that grounded perspective by examining Kopsyah BMI across the full 2021-2025 period. It reconstructs a transparent five-year series from official year-end reports, reads expansion and contraction as parts of an integrated institutional trajectory, and connects financial indicators with the human realities implied by outreach, service capacity, and member trust. The study then develops a forward-looking agenda informed by recent literature on outreach-sustainability trade-offs, FinTech adoption, financial literacy, integrated Islamic social finance, maqasid-oriented value creation, and digital safeguards for ultra-micro borrowers.

To elucidate the role of Kopsyah BMI, economic resilience must initially be conceptualized as extending beyond the mere capacity to resume growth following a shock. Resilience denotes the capability of an economy and its constituent institutions to absorb disruptions, adapt to evolving conditions, and sustain essential functions. At the macroeconomic level, this capacity is determined by policy credibility, financial sector stability, structural reforms, and the availability of fiscal or monetary buffers. At the institutional level, it is manifested through liquidity, funding diversification, capital adequacy, governance quality, risk management, and the sustained ability to provide services to members amidst deteriorating conditions (International Monetary Fund, 2026; World Bank, 2022, 2025).

This institutional perspective holds particular salience for financial intermediaries. Their contribution extends beyond the mere transfer of funds between savers and borrowers. They actively mobilize savings, meticulously screen financing applications, strategically allocate capital, and diligently monitor financing relationships over time. Within a cooperative framework, however, intermediation additionally encompasses a relational dimension. Proximity, localized knowledge, collective discipline, and member trust can collectively mitigate transaction costs and broaden access for households and microenterprises that may not readily align with standardized financial products (Diamond, 1984; Cull et al., 2009; Hermes & Lensink, 2011).

Within the framework of Islamic finance, access is similarly conditioned by factors beyond mere product availability. Ali et al. (2020) delineate the demand-side and supply-side determinants of Islamic financial inclusion, while Saifurrahman and Kassim (2021, 2023, 2024) demonstrate that financial literacy, institutional support, regulatory frameworks, and service quality dictate the extent to which Indonesian MSMEs can utilize Islamic financial services effectively. Such insights necessitate a shift in the evaluation of cooperatives, moving beyond an exclusive focus on asset growth. It is imperative to consider whether members possess the capacity to comprehend, access, and employ these services in a manner that substantively enhances their economic capabilities.

For grassroots institutions, this capability-oriented perspective is fundamental. Savings enable households to establish modest yet significant buffers against uncertainty, while productive financing facilitates working capital and business continuity. However, expanded access does not inherently equate to empowerment. When outreach escalates in the absence of rigorous portfolio discipline, financial literacy, and consumer protection, such expansion may exert undue pressure on both members and the institution. Consequently, financial inclusion and prudence should be conceptualized as mutually reinforcing objectives rather than competing priorities (Pandey et al., 2022; Lusardi & Messy, 2023).

This equilibrium directly engenders a core tension within microfinance: the interplay between outreach and sustainability. The expansion into additional villages, the formation of more member

groups, and the diversification of financial services can yield significant social value. Concurrently, an expanded operational footprint intensifies organizational complexity, liquidity pressures, and monitoring exigencies. Abu Wadi et al. (2022) underscore the imperative of conjointly evaluating outreach and sustainability, whereas Lwesya and Mwakalobo (2023) delineate inclusion, institutional sustainability, entrepreneurship development, and poverty alleviation as intrinsically linked themes in contemporary microfinance research.

The tension is particularly salient for Kopsyah BMI, as its five-year trajectory reflects a dual evolution of an expanding service footprint and a shifting balance sheet structure. No solitary indicator suffices to encapsulate this development; rather, a comprehensive assessment necessitates an integrated analysis of assets, capital, savings, borrowings, financing, receivables, membership, staffing, and post-tax surplus (SHU). Each metric elucidates a distinct facet of a unified institutional narrative: the endeavor to maintain accessibility while safeguarding operational capacity. Digital transformation emerges within this discourse as both a strategic opportunity and an institutional responsibility. When meticulously designed, digital instruments can enhance outreach, alleviate administrative burdens, refine record-keeping, and facilitate more responsive service delivery. Shaikh (2021) examines FinTech as a mechanism for scaling Islamic microfinance, while Ascarya and Sakti (2022) formulate micro-FinTech models specifically for Indonesian Islamic microfinance institutions. Furthermore, Dorfleitner et al. (2022) and Offiong et al. (2024) demonstrate that digitalization transcends technical upgrades, representing an organizational transformation that reconfigures processes, competencies, internal controls, and client relationships.

The advantages of digitalization, however, cannot be presupposed. Ozili (2020), Tay et al. (2022), and Demir et al. (2022) underscore the critical importance of affordability, digital capability, distributional consequences, and consumer protection. Regarding ultra-micro borrowers, Wulandari and Kassim (2026) identify significant practical barriers related to informal reporting, income volatility, social dynamics, accessibility, and institutional trust. Consequently, a human-centered digital strategy must preserve the relational strengths inherent in cooperatives while simultaneously enhancing operational efficiency. Assisted onboarding, financial literacy initiatives, robust data governance, and accessible offline support do not constitute peripheral features; rather, they are requisite conditions for inclusive digitalization. This concern for member welfare extends beyond commercial intermediation. Islamic microfinance facilitates the creation of incremental value when financial services are conscientiously integrated with Islamic social-finance instruments. Ascarya (2022), Ascarya and Masrifah (2023), and Ascarya et al. (2023) delineate models that synthesize commercial and social activities while maintaining institutional sustainability. Furthermore, Widiastuti et al. (2021) demonstrate the role of technology in bolstering zakat governance. Collectively, these studies suggest that social finance yields the greatest utility when governed transparently and aligned with clearly defined socio-economic needs. Recent literature further elaborates on this sustainability perspective. Mohamed and Otake (2025) associate Islamic FinTech with digital financial inclusion and sustainable development, while Mubarok and Kurnia (2025) align maqasid syariah with the Sustainable Development Goals within Islamic microfinance institutions. For Kopsyah BMI, the practical implication is that social-finance integration must be underpinned by explicit eligibility criteria, ring-fenced accounting practices, transparent governance frameworks, and outcome indicators that accurately reflect improvements in member resilience, enterprise continuity, sanitation access, housing support, and educational capability.

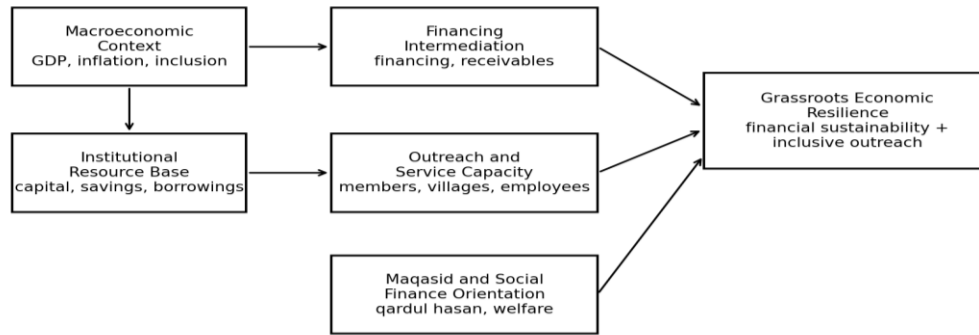


Figure 1. Maqasid-Based Grassroots Economic Resilience Model (M-GERM)
 Source: Author model development based on financial intermediation, outreach-sustainability, institutional resilience, and maqasid al-shariah literature.

Table 1. Operationalization of the M-GERM Research Model

Construct	Observable indicators	Diagnostic role	Analytical treatment
Macroeconomic context	GDP growth, December inflation, national and sharia financial inclusion	Conditions the environment in which the cooperative expands or consolidates	Contextual interpretation; not treated as a causal variable in the five-point annual model
Institutional resource base	Assets, capital, member savings, third-party borrowings, savings/assets, capital/assets	Indicates internal funding trust, loss-absorbing capacity, and external funding dependence	Trend analysis, ratio analysis, CAGR, normalized pillar score
Financing intermediation	Current financing distribution, cumulative financing, effective receivables	Shows whether the cooperative converts resources into member-serving financing	Trend analysis, financing-to-assets diagnostics, disclosure-gap analysis
Outreach and service capacity	Branches, villages served, rebug pusat, members, employees, members per employee	Shows breadth of grassroots coverage and potential operating-capacity pressure	Growth analysis, workload diagnostics, normalized pillar score
Maqasid and social-finance orientation	Qardul hasan, Islamic social-finance activities, member welfare indicators, financial literacy support	Connects cooperative performance with welfare, fairness, protection of wealth, and member empowerment	Narrative evidence now; measurable sub-index when standardized data become available
Grassroots economic resilience	Composite assessment of funding, intermediation, outreach capacity, financial sustainability, and maqasid value	Represents the main outcome of the research model	Composite diagnostic index with transparent normalization and weight renormalization

Source: Author formulation for the 2021-2025 longitudinal manuscript.

METHOD

To examine this institutional trajectory with appropriate caution, the study uses a longitudinal descriptive-analytical case-study design. The empirical period covers the December year-end position from 2021 to 2025, with Kopsyah BMI as the unit of analysis. A longitudinal approach is important because the cooperative's development cannot be understood through a single snapshot. The five-year window makes it possible to observe how expansion, normalization, contraction, and balance-sheet rebalancing unfolded over time.

The empirical reconstruction draws on Kopsyah BMI's official December performance reports for 2021, 2022, 2023, 2024, and 2025. These institutional reports are interpreted alongside official BPS-Statistics Indonesia releases on economic growth and inflation, as well as the joint OJK and BPS SNLIK 2024 release on financial inclusion. The institutional website is used only to describe Kopsyah BMI's service orientation and sharia-compliant activity scope. Table 2 summarizes this source architecture and clarifies the role of each data domain in the analysis.

Table 2. Data Sources

Data domain	Official source	Period	Use in analysis
Institutional performance	Kopsyah BMI December reports	2021-2025	Capital, assets, financing, receivables, savings, borrowings, outreach, employees, SHU
Macroeconomic growth	BPS-Statistics Indonesia	2021-2025	Annual GDP growth
Inflation	BPS-Statistics Indonesia	2021-2025	December year-on-year inflation
Financial inclusion	OJK and BPS	2024	National and sharia financial-inclusion indices
Institutional profile	Kopsyah BMI website	Current	Service focus, savings, financing, and social-finance orientation

Source: Author compilation from official Kopsyah BMI, BPS-Statistics Indonesia, and OJK releases.

As the reports were originally formulated as managerial disclosures rather than a harmonized research database, the construction of a comparable longitudinal series necessitated a rigorous standardization protocol. For each annual observation, the analysis utilizes the end-point values disclosed in the contemporaneous December report. This approach precludes the inadvertent conflation of subsequent restatements in prior-year comparison columns with the original figures. Observable inconsistencies are documented in the Data Standardization Notes appendix to ensure that analytical decisions remain transparent and auditable.

On this standardized foundation, the analysis integrates absolute values, annual percentage changes, four-year compound annual growth rates (CAGRs), and selected structural ratios. These ratios encompass savings-to-assets, third-party-borrowings-to-assets, capital-to-assets, receivables-to-assets, SHU-to-assets, members per employee, members per branch, and villages served per branch. These metrics serve as diagnostic signals; they do not constitute regulatory ratios and should not be construed as substitutes for formal prudential indicators, such as portfolio-at-risk, non-performing financing, provisioning coverage, maturity-based liquidity gaps, or capital adequacy within an applicable regulatory framework.

Within this framework, the empirical strategy adopts two complementary analytical levels. The primary level consists of the annual diagnostic model applied in the current study, which is appropriate for the five verified year-end observations. This model synthesizes trend analysis,

structural ratios, CAGR, phase-based interpretation, and a transparent composite index. The secondary level involves a proposed monthly time-series extension, feasible once the reports for the period from January 2021 to December 2025 have been standardized. A monthly series would permit the examination of volatility, turning points, lag structures, and dynamic associations with enhanced analytical precision.

At the annual level, the Grassroots Economic Resilience Index (GERI) provides a transparent diagnostic synthesis. Each indicator is normalized on a 0-100 scale using min-max normalization. Indicators that represent desirable conditions receive higher scores as their values rise, whereas pressure or risk indicators, such as excessive reliance on third-party borrowings or excessive members per employee, are scored in the opposite direction. Pillar scores are then averaged. Where standardized data are unavailable, the weights of the available pillars are renormalized rather than filled with unverified proxies. This approach keeps the composite score interpretable and consistent with established principles of transparent index construction.

The illustrative annual model is expressed as:

$$GERI_t = \frac{MFC_t + INT_t + OSC_t + FST_t}{4} \rightarrow (1)$$

In this expression, MFC represents member-based funding capacity, INT represents financing intermediation, OSC represents outreach and service capacity, and FST represents financial sustainability. The maqasid and social-finance pillar remains conceptually important, but it is excluded from the illustrative calculation until standardized, comparable, and audited annual indicators become available.

For the monthly extension, structural equation modelling would not be the most suitable approach because the unit of analysis is a single institution and the core indicators are accounting time series rather than latent survey constructs. A parsimonious time-series or autoregressive distributed lag model would be more appropriate after stationarity diagnostics. The general form can be written as:

$$FS_t = \alpha + \beta_1 MFC_t + \beta_2 INT_t + \beta_3 OSC_t + \beta_4 MAC_t + \varepsilon_t \rightarrow (2)$$

where FS(t) represents financial sustainability and MAC(t) captures the macroeconomic context. Lagged terms should be introduced only when supported by the properties of the data.

This analytical strategy preserves methodological discipline while leaving room for future development. It allows the present manuscript to explain the verified five-year trajectory without overstating causality, while also identifying a realistic pathway toward monthly testing, stress diagnostics, and member-level impact measurement.

RESULTS AND DISCUSSION

The results are best understood by returning first to the broader economic environment in which Kopsyah BMI operated. Indonesia's growth rebound in 2022 and its subsequent stabilization close to 5% created a generally resilient macroeconomic backdrop. Inflation, however, followed a less uniform path: it peaked in 2022, moderated in 2023-2024, and rose again in 2025. For a community-based financial institution, this combination matters because national stability can coexist with changing pressures on household purchasing power, business costs, financing demand,

and repayment capacity. Table 3 presents the annual values, while Figure 2 visualizes the different movements of growth and December inflation.

Table 3. GDP Growth and December Inflation in Indonesia, 2021-2025

Year	GDP growth (%)	December inflation, y-o-y (%)
2021	3.70	1.87
2022	5.31	5.51
2023	5.05	2.61
2024	5.03	1.57
2025	5.11	2.92

Source: BPS-Statistics Indonesia annual GDP and December inflation releases for 2021-2025.

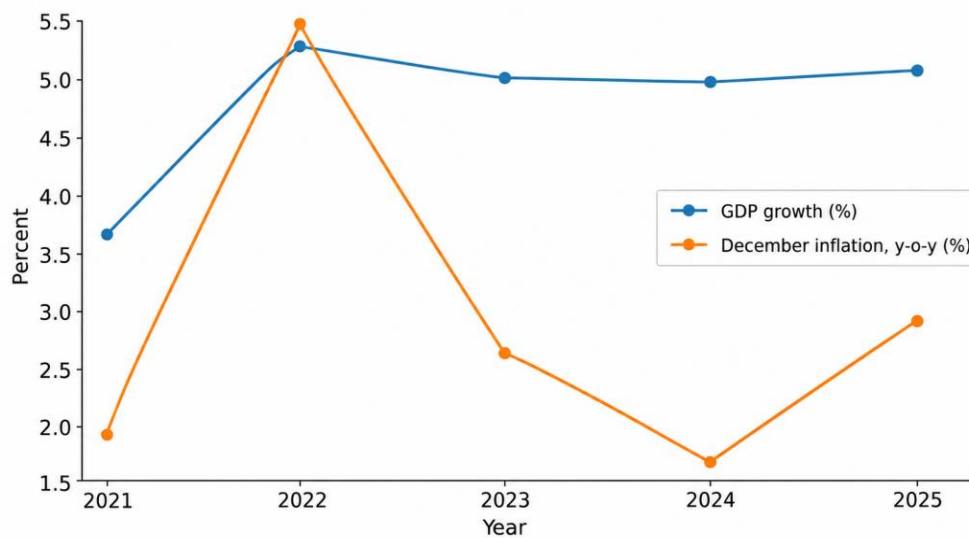


Figure 2. Indonesia: GDP Growth and December Inflation, 2021-2025
Source: Author visualization based on BPS-Statistics Indonesia releases.

Table 5. Longitudinal Change and CAGR of Selected Kopsyah BMI Indicators, 2021-2025

Indicator	Unit	2021	2025	Total change	CAGR
Assets	IDR tn	1.004	1.050	4.62%	1.14%
Capital	IDR tn	0.265	0.249	-6.12%	-1.57%
Member savings	IDR tn	0.301	0.476	58.01%	12.12%
Third-party borrowings	IDR tn	0.403	0.226	-44.07%	-13.52%
Effective financing	IDR tn	0.976	0.966	-1.10%	-0.28%
Receivables	IDR tn	0.570	0.631	10.57%	2.54%
Members	count	195,377	243,319	24.54%	5.64%
Villages served	count	850	1,343	58.00%	12.12%
SHU after tax	IDR bn	2.40	6.15	155.80%	26.47%

Source: Author calculations based on standardized contemporaneous Kopsyah BMI December end-point values.

The human dimension of this trajectory becomes more visible when the outreach indicators are considered. Between 2021 and 2025, the number of villages served increased from 850 to 1,343, while rembug pusat increased from 9,277 to 13,193 and membership grew from 195,377 to 243,319. Branches increased from 77 to 100 in 2022 and then remained stable. This means that the cooperative continued to reach more communities even after the physical branch network stopped expanding. The figures reflect more than scale: they suggest an increasingly wide set of relationships that the institution must sustain with consistency and care.

That wider reach also changes the operational burden. Employees increased from 1,007 in 2021 to 1,254 in 2023, but then declined to 1,049 in 2025. As a result, members per employee rose from 194.02 to 231.95, while villages served per branch increased from 11.04 to 13.43. These ratios may partly reflect improved productivity. They may also indicate a growing service-load pressure if digital workflows, assisted service mechanisms, monitoring quality, and staff capability do not keep pace with the expansion. Table 6 reports the outreach and workload indicators, and Figure 4 displays their indexed movement relative to the 2021 base year.

Table 6. Kopsyah BMI Outreach and Operating Capacity, 2021-2025

Year	Branches	Villages served	Rembug pusat	Members	Employees	Members per employee
2021	77	850	9,277	195,377	1,007	194.02
2022	100	984	11,208	221,317	1,226	180.52
2023	100	1,120	12,461	239,917	1,254	191.32
2024	100	1,236	12,895	238,619	1,178	202.56
2025	100	1,343	13,193	243,319	1,049	231.95

Source: Kopsyah BMI December performance reports, 2021-2025; author calculations.

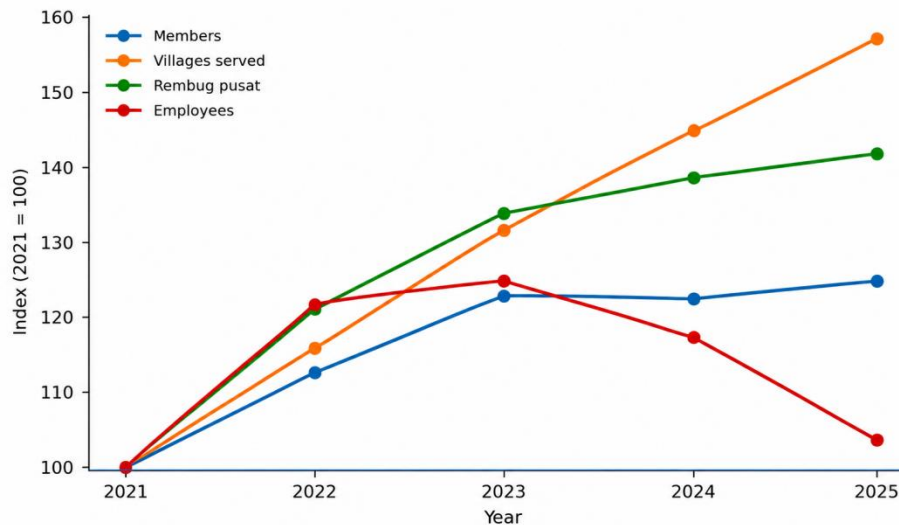


Figure 4. Kopsyah BMI Outreach and Operating-Capacity Index, 2021-2025

Source: Author visualization based on Kopsyah BMI December performance reports. Base year: 2021 = 100.

The outreach pattern needs to be interpreted together with the changing funding structure. One of the strongest developments during the period was the rise in the savings-to-assets ratio from 29.98%

in 2021 to 45.28% in 2025. During the same period, third-party borrowings-to-assets declined from 40.17% to 21.47%. The sharp reduction in external borrowing in 2025 points to a deliberate deleveraging process or a broader balance-sheet adjustment. This shift is strategically important because a larger contribution from member savings can reinforce the cooperative character of the funding base. At the same time, it makes disciplined liquidity management and the preservation of member confidence even more important.

Capital provides a necessary counterpoint to this positive funding shift. The capital-to-assets ratio increased to 27.46% in 2022, declined to 23.11% in 2024, and recovered marginally to 23.68% in 2025 because assets contracted more rapidly than capital. This ratio is a structural diagnostic rather than a formal regulatory capital-adequacy measure. Even so, the decline in absolute capital after 2023 should not be overlooked. A cooperative that serves a growing number of communities needs sufficient loss-absorbing capacity to manage portfolio stress, sustain service quality, and finance improvements in governance and digital capability. Table 7 presents the structural ratios that support this reading.

Table 7. Kopsyah BMI Funding Structure and Balance-Sheet Diagnostics, 2021-2025

Year	Savings / assets (%)	Third-party borrowings / assets (%)	Capital / assets (%)	Receivables / assets (%)	SHU / assets (%)
2021	29.98	40.17	26.39	56.83	0.24
2022	30.70	35.72	27.46	58.03	0.54
2023	32.32	35.66	25.52	55.85	0.54
2024	35.06	34.52	23.11	50.37	0.70
2025	45.28	21.47	23.68	60.06	0.59

Source: Author calculations based on standardized Kopsyah BMI year-end values. These are descriptive diagnostics, not regulatory ratios.

The changing funding structure was accompanied by a more cautious financing trajectory. Effective financing increased from IDR 0.976 trillion in 2021 to IDR 1.160 trillion in 2022 and then gradually declined to IDR 0.966 trillion in 2025. Receivables increased from IDR 0.570 trillion to IDR 0.631 trillion across the full period, although they peaked in 2023. At the same time, cumulative financing distribution continued to grow and reached IDR 9.523 trillion in 2025. These movements suggest that Kopsyah BMI retained a substantial historical intermediation reach while becoming more restrained in its current financing position. Table 8 presents the financing series, and Figure 5 compares effective financing with receivables.

The public reports, however, do not provide a consistently harmonized five-year series for non-performing financing, arrears aging, write-offs, rescheduling, provisioning coverage, or sectoral concentration. This gap matters because numbers can only support sound decisions when they help distinguish a controlled adjustment from a deterioration in portfolio quality. For an institution with a broad grassroots footprint, a portfolio-quality dashboard should therefore become a core governance instrument rather than an optional reporting addition.

Table 8. Kopsyah BMI Financing Trajectory, 2021-2025

Year	Current financing distribution (IDR tn)	Cumulative financing distribution (IDR tn)	Effective financing (IDR tn)	Receivables (IDR tn)
2021	0.954	5.709	0.976	0.570
2022	1.210	6.919	1.160	0.668
2023	1.054	7.973	1.131	0.696
2024	0.846	8.819	1.096	0.632
2025	0.703	9.523	0.966	0.631

Source: Kopsyah BMI December performance reports, 2021-2025.

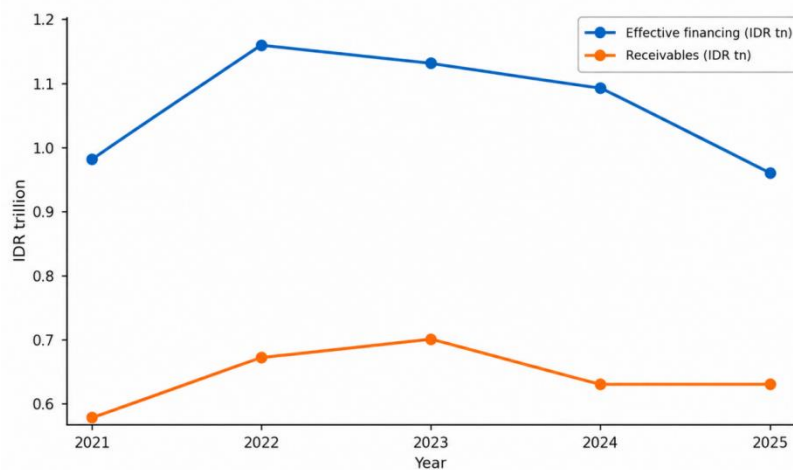


Figure 5. Kopsyah BMI Effective Financing and Receivables, 2021-2025

Source: Author visualization based on Kopsyah BMI December performance reports.

Profitability adds another layer to the interpretation. SHU after tax increased from IDR 2.40 billion in 2021 to IDR 8.76 billion in 2024, before declining to IDR 6.15 billion in 2025. The SHU-to-assets diagnostic followed a similar direction, rising from 0.24% to 0.70% between 2021 and 2024 and then declining to 0.59% in 2025. The decline in the final year should be read together with asset contraction, deleveraging, reduced staffing, and continuing savings growth. It does not support a simplistic conclusion of either success or failure. Instead, it points to the need for a disciplined review of how the cooperative can preserve financial sustainability while maintaining service quality.

The 2025 report also identifies a substantial increase in qardul hasan receivables, from IDR 21.64 billion to IDR 88.50 billion. The available summary report does not establish whether this movement reflects an expanded social-finance function, a reporting reclassification, or another institutional development. The change nevertheless deserves explicit managerial clarification. Qardul hasan can embody a meaningful maqasid-oriented commitment when it responds to genuine member needs, but its social value should be supported by ring-fenced accounting, transparent eligibility criteria, clear funding-source disclosure, recovery policies, and welfare-impact

indicators. Figure 6 presents the SHU after-tax trajectory and the SHU-to-assets diagnostic.

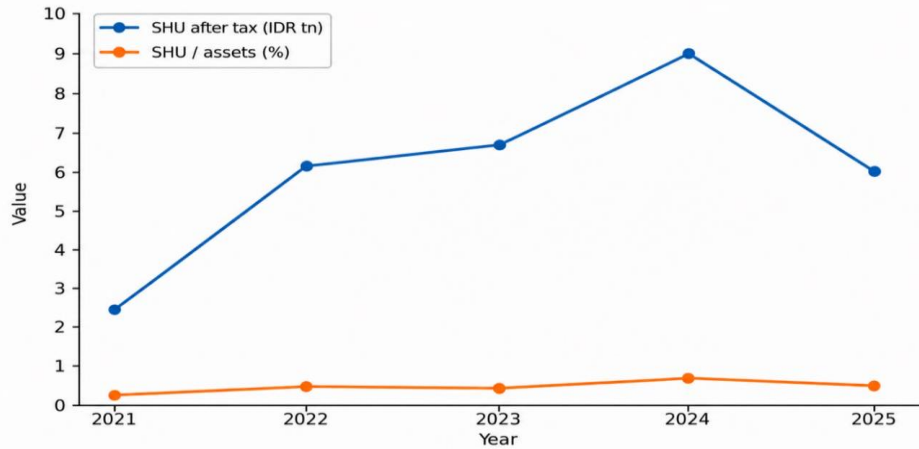


Figure 6. Kopsyah BMI SHU After Tax and SHU-to-Asset Ratio, 2021-2025

Source: Author visualization based on Kopsyah BMI December performance reports and author calculations.

When these annual movements are read as a sequence, a more coherent picture emerges. Kopsyah BMI moved through post-pandemic expansion, scaled outreach, consolidation, capital pressure, and subsequent deleveraging. Each phase carried both strengths and vulnerabilities, and the meaning of one year becomes clearer when viewed in relation to the years before and after it. Table 9 organizes this phase-based interpretation so that the trajectory can be understood as an evolving institutional adjustment process rather than as a collection of disconnected annual figures.

Table 9. Phase-Based Interpretation of Kopsyah BMI Institutional Development, 2021-2025

Year	Institutional phase	Verified signals	Interpretation
2021	Post-pandemic expansion	Assets +43.84%; villages +10.39%; members +10.16%; third-party borrowings +132.61%; SHU -28.60%	Rapid expansion supported by external funding; resilience required stronger funding discipline.
2022	Scaled outreach and profitability recovery	Assets +14.56%; branches +29.87%; villages +15.76%; SHU +158.59%	Scale-up phase with stronger institutional footprint and profitability rebound.
2023	Consolidation with broader reach	Assets +8.39%; villages +13.82%; members +8.40%; effective financing -2.50%	Outreach expansion continued while current financing began to normalize.
2024	Outreach growth with capital pressure	Assets +0.62%; villages +10.36%; savings +9.23%; capital -8.81%; employees -6.06%	Funding mix improved, but absolute capital and staffing capacity required attention.
2025	Contraction and deleveraging	Assets -16.33%; borrowings -47.95%; savings +8.06%; villages +8.66%; SHU -29.85%	Balance-sheet adjustment reduced leverage while preserving outreach; capital, portfolio quality, and service capacity became priority risks.

Source: Author interpretation based on Kopsyah BMI December performance reports, 2021-2025.

The M-GERM synthesis reinforces this interpretation. Kopsyah BMI's resilience cannot be judged solely by asset growth because resilience is also reflected in the ability to preserve trust, adjust funding sources, and sustain services. The most encouraging signal across 2021-2025 is the stronger role of member-based funding, shown by the growth of savings and the marked reduction in third-party borrowings. This improves the funding-trust dimension of resilience. At the same

time, the decline in assets and absolute capital in 2025 highlights the need to strengthen loss-absorbing capacity.

The model also draws attention to the relationship between outreach and operational capacity. Villages served, rembug pusat, and members continued to increase, while the number of employees declined after 2023. The resulting rise in members per employee may indicate efficiency gains, but it may also create pressure on the quality and responsiveness of service. This is why digital tools, internal control, workload management, and service standards should be treated as parts of one institutional strategy. The aim is not to replace human relationships with technology, but to use technology to protect the quality of those relationships as the cooperative grows.

The illustrative GERI score captures this non-linear experience. The score increased from 33.26 in 2021 to 66.13 in 2022, declined to 55.51 in 2023 and 44.01 in 2024, and recovered to 58.20 in 2025. The pattern is consistent with an institution that expanded rapidly, consolidated its reach, faced balance-sheet pressure, and then improved funding independence through deleveraging. The score should therefore be interpreted as a diagnostic aid, not as a definitive ranking or a substitute for managerial judgment. Table 10 reports the pillar scores, while Figure 7 visualizes the resulting GERI trajectory.

Table 10. Illustrative M-GERM Diagnostic Scores, 2021-2025

Year	Member funding capacity	Financing intermediation	Outreach-service capacity	Financial sustainability	GERI score
2021	25.07	70.74	18.44	18.80	33.26
2022	42.77	93.12	57.65	71.00	66.13
2023	31.31	42.27	76.99	71.46	55.51
2024	21.12	0.40	79.51	75.00	44.01
2025	71.29	44.83	75.00	41.68	58.20

Source: Author calculations based on normalized annual diagnostic indicators from Kopsyah BMI December reports, 2021-2025.

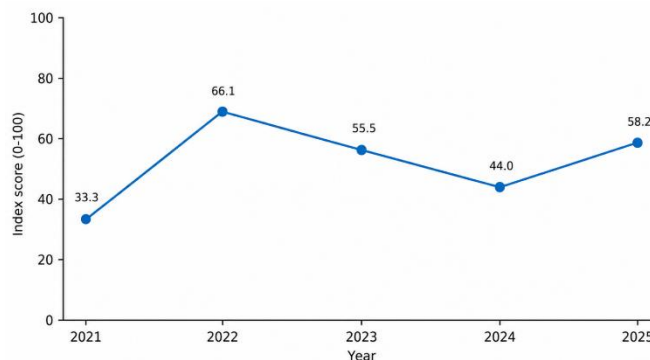


Figure 7. Diagnostic Grassroots Economic Resilience Index (GERI), 2021-2025

Source: Author visualization based on M-GERM diagnostic score calculation.

The longitudinal evidence points toward a strategic agenda that is both disciplined and member-centered. Kopsyah BMI has demonstrated an ability to reach more communities and mobilize a growing volume of member savings. Those achievements are significant because they reflect trust

and continued relevance at the grassroots level. The 2025 contraction, however, shows that future growth should not be pursued through expansion alone. It should be paced by capital resilience, portfolio-quality transparency, liquidity discipline, service capacity, and a digital operating model that strengthens rather than weakens the cooperative's human relationships. Table 11 brings these priorities together and identifies the indicators required for consistent monitoring.

Table 11. Strategic Priorities for Kopsyah BMI Resilience

Priority	Evidence base	Recommended action	Monitoring indicators
Rebuild loss-absorbing capacity	Capital declined from IDR 318.18 bn in 2023 to IDR 248.68 bn in 2025	Adopt a multi-year capital-rebuilding plan; review SHU retention, reserve policy, member-capital instruments, and risk-adjusted growth limits	Capital growth, reserve accumulation, capital-to-assets diagnostic
Protect liquidity and member confidence	Savings rose to IDR 475.55 bn while third-party borrowing fell to IDR 225.52 bn	Strengthen asset-liability management, maturity-gap reporting, liquidity stress testing, and savings-retention analytics	Savings retention, maturity mismatch, stress-test survival horizon
Institutionalize portfolio-quality disclosure	Effective financing declined; summary reports do not provide a harmonized five-year NPF series	Create a board-level dashboard for PAR30, NPF, aging, write-offs, recoveries, provisioning, restructuring, and concentration	PAR30, NPF, coverage ratio, vintage performance
Safeguard service capacity	Villages served increased while employees decreased after 2023	Combine workload analytics, service standards, staff capability development, and assisted digital workflows	Members per officer, villages per branch, turnaround time, service complaints
Implement human-centered digitalization	Broader footprint increases operating complexity	Prioritize assisted onboarding, interoperable member records, data protection, cyber controls, and digital-literacy support	Active digital users, assisted adoption, error rate, security incidents
Ring-fence Islamic social finance	Qardul hasan receivables increased sharply in 2025	Separate commercial and social funds; clarify eligibility, funding sources, recovery policy, governance, and welfare outcomes	Beneficiary profile, recovery status, outcome indicators, audited fund reconciliation
Measure member-level resilience	Outreach counts are strong but outcome measurement remains limited	Add longitudinal member-impact metrics linked to enterprise continuity, savings buffers, education, sanitation, and housing capability	Income stability, enterprise survival, savings adequacy, welfare outcomes

Source: Author synthesis informed by the verified longitudinal evidence and recent literature.

CONCLUSION AND SUGGESTION

Conclusion

The experience of Kopsyah BMI between 2021 and 2025 demonstrates that grassroots economic resilience ought to be conceptualized as a continuous institutional process rather than a static financial result. Throughout this period, the cooperative expanded its geographical reach, organized a greater number of member groups, increased its membership base, grew its cumulative financing

distribution, and mobilized an increasing volume of member savings. Notably, it significantly reduced its reliance on third-party borrowings by 2025. These developments suggest a capacity to broaden financial inclusion while simultaneously reinforcing the role of community-based funding.

However, this trajectory also exposes critical vulnerabilities. Total assets underwent a material contraction in 2025, absolute capital declined following 2023, effective financing decreased, staffing capacity became constrained, and the surplus (SHU) after tax fell from its 2024 peak. Consequently, the optimal strategic response is not undifferentiated expansion, but rather a more balanced approach to resilience-building. This entails reconstituting capital, strengthening liquidity governance, enhancing portfolio-quality disclosure, safeguarding service capacity, implementing human-centered digitalization, and managing maqasid-oriented social finance with increased transparency.

The broader policy implications are similarly substantive. Community-based Islamic microfinance institutions should not be framed as substitutes for macroeconomic policy, nor should their contributions be exaggerated through unsubstantiated causal assertions. Their strategic significance resides in their capacity to translate national stability into accessible and credible financial capabilities for populations often marginalized by standardized financial services. When this transmission mechanism is managed with precision, resilience transcends being a mere balance-sheet metric and evolves into a functional capacity experienced by members in their daily economic activities.

Suggestion

The interpretation presented in this study is deliberately conservative, acknowledging that the publicly available reports, while substantial, were not originally structured as a fully harmonized research database. Given that subsequent reports occasionally revise prior-year comparative data, this manuscript adopts a transparent standardization protocol and explicitly discloses observable discrepancies. Although this methodological approach does not eliminate the inherent limitations of the source material, it enhances the accountability of the analytical process. This study remains descriptive in nature and does not attempt to estimate causal relationships between macroeconomic conditions and cooperative performance. A more robust future analysis could reconstruct a monthly panel dataset spanning January 2021 to December 2025, contingent upon data harmonization, and employ time-series diagnostics to examine volatility, turning points, seasonality, and lagged associations. Even with access to more comprehensive data, causal assertions should remain circumspect unless supported by a credible identification strategy.

Future research should further align with member-level outcomes. Incorporating portfolio-quality measures, maturity structures, product-level profitability, member demographics, service-channel utilization, regional variations, and welfare indicators would enable a more direct linkage between institutional resilience, enterprise continuity, and household capability. Such evidence would deepen the evaluation of the outreach-sustainability trade-off and elucidate the contribution of Islamic social-finance integration.

REFERENCES

- Abu Wadi, R., Bashayreh, A., Khalaf, L., & Abdelhadi, S. (2022). Financial sustainability and outreach in microfinance institutions: Evidence from MENA countries. *Journal of Sustainable Finance & Investment*, 12(1), 238-250. <https://doi.org/10.1080/20430795.2021.1964814>
- Ali, M. M., Devi, A., Furqani, H., & Hamzah, H. (2020). Islamic financial inclusion determinants in Indonesia: An ANP approach. *International Journal of Islamic and Middle Eastern Finance and Management*, 13(4), 727-747. <https://doi.org/10.1108/IMEFM-01-2019-0007>
- Ascarya. (2022). The role of Islamic social finance during COVID-19 pandemic in Indonesia's economic recovery. *International Journal of Islamic and Middle Eastern Finance and Management*, 15(2), 386-405. <https://doi.org/10.1108/IMEFM-07-2020-0351>
- Ascarya, & Masrifah, A. R. (2023). Strategies implementing cash waqf system for Baitul Maal wat Tamwil to improve its commercial and social activities. *International Journal of Islamic and Middle Eastern Finance and Management*, 16(1), 130-153. <https://doi.org/10.1108/IMEFM-10-2020-0504>
- Ascarya, & Sakti, A. (2022). Designing micro-FinTech models for Islamic micro financial institutions in Indonesia. *International Journal of Islamic and Middle Eastern Finance and Management*, 15(2), 236-254. <https://doi.org/10.1108/IMEFM-05-2020-0233>
- Ascarya, Sukmana, R., Rahmawati, S., & Masrifah, A. R. (2023). Developing cash waqf models for Baitul Maal wat Tamwil as integrated Islamic social and commercial microfinance. *Journal of Islamic Accounting and Business Research*, 14(5), 699-717. <https://doi.org/10.1108/JIABR-09-2020-0267>
- BPS-Statistics Indonesia. (2022a, February 7). Indonesia GDP annual growth rate 5.02 percent (y-on-y) in the fourth quarter of 2021. <https://www.bps.go.id/en/pressrelease/2022/02/07/1911/>
- BPS-Statistics Indonesia. (2022b, January 3). The inflation rate in December 2021 was 0.57 percent. <https://www.bps.go.id/en/pressrelease/2022/01/03/1856/>
- BPS-Statistics Indonesia. (2023a, February 6). Indonesia GDP growth rate 5.31 percent (2022). <https://www.bps.go.id/en/pressrelease/2023/02/06/1997/>
- BPS-Statistics Indonesia. (2023b, January 2). The year-on-year inflation in December 2022 was 5.51 percent. <https://www.bps.go.id/en/pressrelease/2023/01/02/1949/>
- BPS-Statistics Indonesia. (2024a, February 5). Indonesia's GDP growth rate in Q4-2023 was 5.04 percent (y-on-y). <https://www.bps.go.id/en/pressrelease/2024/02/05/2379/>
- BPS-Statistics Indonesia. (2024b, January 2). The year-on-year inflation in December 2023 was 2.61 percent. <https://www.bps.go.id/>
- BPS-Statistics Indonesia. (2025a, February 5). Indonesia's economic growth 2024 was 5.03 percent (c-to-c). <https://www.bps.go.id/en/pressrelease/2025/02/05/2408/>
- BPS-Statistics Indonesia. (2025b, January 2). The year-on-year headline inflation in December 2024 was 1.57 percent. <https://www.bps.go.id/en/pressrelease/2025/01/02/2397/>
- BPS-Statistics Indonesia. (2026a, February 5). Indonesia's economic growth in 2025 was 5.11 percent. <https://www.bps.go.id/en/pressrelease/2026/02/05/2546/>

- BPS-Statistics Indonesia. (2026b, January 5). The year-on-year headline inflation in December 2025 was recorded at 2.92 percent. <https://www.bps.go.id/en/pressrelease/2026/01/05/2527/>
- Cull, R., Demirguc-Kunt, A., & Morduch, J. (2009). Microfinance meets the market. *Journal of Economic Perspectives*, 23(1), 167-192. <https://doi.org/10.1257/jep.23.1.167>
- Datta, S., & Sahu, T. N. (2022). How far is microfinance relevant for empowering rural women? An empirical investigation. *Journal of Economic Issues*, 56(1), 97-112. <https://doi.org/10.1080/00213624.2022.2019552>
- Demir, A., Pesque-Cela, V., Altunbas, Y., & Murinde, V. (2022). FinTech, financial inclusion and income inequality: A quantile regression approach. *The European Journal of Finance*, 28(1), 86-107. <https://doi.org/10.1080/1351847X.2020.1772335>
- Diamond, D. W. (1984). Financial intermediation and delegated monitoring. *The Review of Economic Studies*, 51(3), 393-414. <https://doi.org/10.2307/2297430>
- Dorfleitner, G., Forcella, D., & Nguyen, Q. A. (2022). The digital transformation of microfinance institutions: An empirical analysis. *Journal of Applied Accounting Research*, 23(2), 454-479. <https://doi.org/10.1108/JAAR-02-2021-0041>
- Hermes, N., & Lensink, R. (2011). Microfinance: Its impact, outreach, and sustainability. *World Development*, 39(6), 875-881. <https://doi.org/10.1016/j.worlddev.2009.10.021>
- International Monetary Fund. (2026). Indonesia: 2025 Article IV consultation - Press release; staff report; and statement by the Executive Director for Indonesia. IMF Staff Country Report No. 2026/010. <https://www.imf.org/en/publications/cr/issues/2026/01/21/indonesia-2025-article-iv-consultation-press-release-staff-report-and-statement-by-the-573330>
- Koperasi Syariah Benteng Mikro Indonesia. (n.d.-a). Institutional website. <https://kopsyahbmi.co.id/>
- Koperasi Syariah Benteng Mikro Indonesia. (2021). Laporan bulan Desember 2021: Perkembangan kinerja dan neraca 31/12/2021. https://kopsyahbmi.co.id/images/laporanpdf/2021/laporan_des2021.pdf
- Koperasi Syariah Benteng Mikro Indonesia. (2022). Laporan bulan Desember 2022: Perkembangan kinerja dan neraca 31-12-2022. https://kopsyahbmi.co.id/images/laporanpdf/2022/laporan_des2022%20rev.pdf
- Koperasi Syariah Benteng Mikro Indonesia. (2023). Laporan bulan Desember 2023: Perkembangan kinerja dan neraca 31-12-2023. https://kopsyahbmi.co.id/images/laporanpdf/2023/laporan_des2023.pdf
- Koperasi Syariah Benteng Mikro Indonesia. (2024). Laporan bulan Desember 2024: Perkembangan kinerja dan neraca 31-12-2024. https://kopsyahbmi.co.id/images/laporanpdf/2024/laporan_des2024.pdf
- Koperasi Syariah Benteng Mikro Indonesia. (2025). Laporan keuangan Desember 2025: Perkembangan kinerja dan neraca 31-12-2025. https://kopsyahbmi.co.id/images/laporanpdf/2025/laporan_des2025.pdf

- Lusardi, A., & Messy, F.-A. (2023). The importance of financial literacy and its impact on financial wellbeing. *Journal of Financial Literacy and Wellbeing*, 1(1), 1-11. <https://doi.org/10.1017/flw.2023.8>
- Lwesya, F., & Mwakalobo, A. B. S. (2023). Frontiers in microfinance research for small and medium enterprises (SMEs) and microfinance institutions (MFIs): A bibliometric analysis. *Future Business Journal*, 9, Article 17. <https://doi.org/10.1186/s43093-023-00195-3>
- Mohamed, H. A., & Otake, T. (2025). The role of Islamic FinTech in digital financial inclusion and sustainable development post COVID-19: Cross-country analysis. *International Journal of Islamic and Middle Eastern Finance and Management*, 18(3), 649-671. <https://doi.org/10.1108/IMEFM-02-2024-0100>
- Mubarok, F. K., & Kurnia, A. S. (2025). The relevance of the implementation of Maqashid Shariah and sustainable development goals in Islamic microfinance institutions. *Qualitative Research in Financial Markets*, advance online publication. <https://doi.org/10.1108/QRFM-01-2024-0008>
- Mujiatun, S., Trianto, B., Cahyono, E. F., & Rahmayati. (2023). The impact of marketing communication and Islamic financial literacy on Islamic financial inclusion and MSMEs performance: Evidence from halal tourism in Indonesia. *Sustainability*, 15(13), Article 9868. <https://doi.org/10.3390/su15139868>
- Nurohman, Y. A., Kusuma, M., & Narulitasari, D. (2021). Fin-Tech, financial inclusion, and sustainability: A quantitative approach of Muslims SMEs. *International Journal of Islamic Business Ethics*, 6(1), 54-67. <https://doi.org/10.30659/ijibe.6.1.54-67>
- Offiong, U. P., Szopik-Depczynska, K., Cheba, K., & Ioppolo, G. (2024). FinTech as a digital innovation in microfinance companies - Systematic literature review. *European Journal of Innovation Management*, 27(9), 562-581. <https://doi.org/10.1108/EJIM-04-2024-0462>
- OJK & BPS-Statistics Indonesia. (2024, August 2). OJK and Statistics Indonesia present National Survey on Financial Literacy and Inclusion 2024 findings. <https://ojk.go.id/en/berita-dan-kegiatan/siaran-pers/Pages/OJK-And-Statistics-Indonesia-Present-National-Survey-On-Financial-Literacy-And-Inclusion-2024-Findings.aspx>
- Otoritas Jasa Keuangan. (2021). National strategy on Indonesian financial literacy 2021-2025. <https://ojk.go.id/en/berita-dan-kegiatan/publikasi/Pages/National-Strategy-on-Indonesian-Financial-Literacy-%28SNLKI%29-2021---2025.aspx>
- Ozili, P. K. (2020). Contesting digital finance for the poor. *Digital Policy, Regulation and Governance*, 22(2), 135-151. <https://doi.org/10.1108/DPRG-12-2019-0104>
- Pandey, A., Kiran, R., & Sharma, R. K. (2022). Investigating the impact of financial inclusion drivers, financial literacy and financial initiatives in fostering sustainable growth in North India. *Sustainability*, 14(17), Article 11061. <https://doi.org/10.3390/su141711061>
- Saifurrahman, A., & Kassim, S. H. (2021). Islamic financial literacy for Indonesian MSMEs during COVID-19 pandemic: Issues and importance. *Journal of Islamic Finance*, 10, 45-60. <https://journals.iium.edu.my/iiibf-journal/index.php/jif/article/view/526>
- Saifurrahman, A., & Kassim, S. H. (2023). Enhancing the MSME Islamic financial inclusion in

- Indonesia: An institutional theory perspective. *Journal of Accounting and Finance*, 23(2), 6-25. <https://doi.org/10.33423/jaf.v23i2.6042>
- Saifurrahman, A., & Kassim, S. H. (2024). Regulatory issues inhibiting financial inclusion: A case study among Islamic banks and MSMEs in Indonesia. *Qualitative Research in Financial Markets*, 16(4), 589-617. <https://doi.org/10.1108/QRFM-05-2022-0086>
- Shaikh, S. A. (2021). Using FinTech in scaling up Islamic microfinance. *Journal of Islamic Accounting and Business Research*, 12(2), 186-203. <https://doi.org/10.1108/JIABR-10-2019-0198>
- Sharma, S. K., Ilavarasan, P. V., & Karanasios, S. (2024). Small businesses and FinTech: A systematic review and future directions. *Electronic Commerce Research*, 24(1), 535-575. <https://doi.org/10.1007/s10660-023-09705-5>
- Tay, L.-Y., Tai, H.-T., & Tan, G.-S. (2022). Digital financial inclusion: A gateway to sustainable development. *Heliyon*, 8(6), Article e09766. <https://doi.org/10.1016/j.heliyon.2022.e09766>
- Thakor, A. V. (2020). FinTech and banking: What do we know? *Journal of Financial Intermediation*, 41, Article 100833. <https://doi.org/10.1016/j.jfi.2019.100833>
- Widiastuti, T., Cahyono, E. F., Zulaikha, S., Mawardi, I., & Al Mustofa, M. U. (2021). Optimizing zakat governance in East Java using analytical network process (ANP): The role of zakat technology (ZakaTech). *Journal of Islamic Accounting and Business Research*, 12(3), 301-319. <https://doi.org/10.1108/JIABR-09-2020-0307>
- World Bank. (2022). Indonesia Economic Prospects, June 2022: Financial deepening for stronger growth and sustainable recovery. <https://www.worldbank.org/en/country/indonesia/publication/indonesia-economic-prospects-iep-june-2022-financial-deepening-for-stronger-growth-and-sustainable-recovery>
- World Bank. (2025). Indonesia Economic Prospects, December 2025: Digital foundations for growth. <https://documents1.worldbank.org/curated/en/099121525010013017/pdf/P513006-5a39c38f-b7cb-425f-966b-655852db27e7.pdf>
- Wulandari, P., & Kassim, S. H. (2026). Digital Islamic microfinance: Tailoring services for ultra-micro borrowers. *Qualitative Research in Financial Markets*, advance online publication. <https://doi.org/10.1108/QRFM-04-2025-0097>

