INFLUENCE OF NON-FINANCIAL FACTORS ON FINANCIAL PERFORMANCE OF MONEY MARKET FUNDS IN KENYA

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Background of the Study

Global context

- Money market funds (MMFs) channel short-term funding to governments and corporations, offer deposit-competitive returns while preserving capital, and support liquidity management and monetary policy transmission (ICI, 2025).
- Fund performance is multidimensional: 7-day and 30-day yields, expense ratios, total returns, NAV stability and risk-adjusted measures (Karki et al., 2025; FSB, 2024).
- Performance is shaped by the regulatory environment (Jacewitz et al., 2025), fund size (Chen et al., 2004; ESMA, 2025) and investor behaviour (Nikolaou, 2025).
- The three factors interact: fixed compliance costs weigh more on small funds; regulation shapes redemptions; size signals credibility to investors.
- Developed-market evidence does not transfer directly: the size effect differs across markets (Ferreira et al., 2013).

MMFs across Africa

R3.87 trillion

South Africa CIS assets, end-2024; interest-bearing portfolios 30.5% (ASISA, 2025)

N4.75 trillion

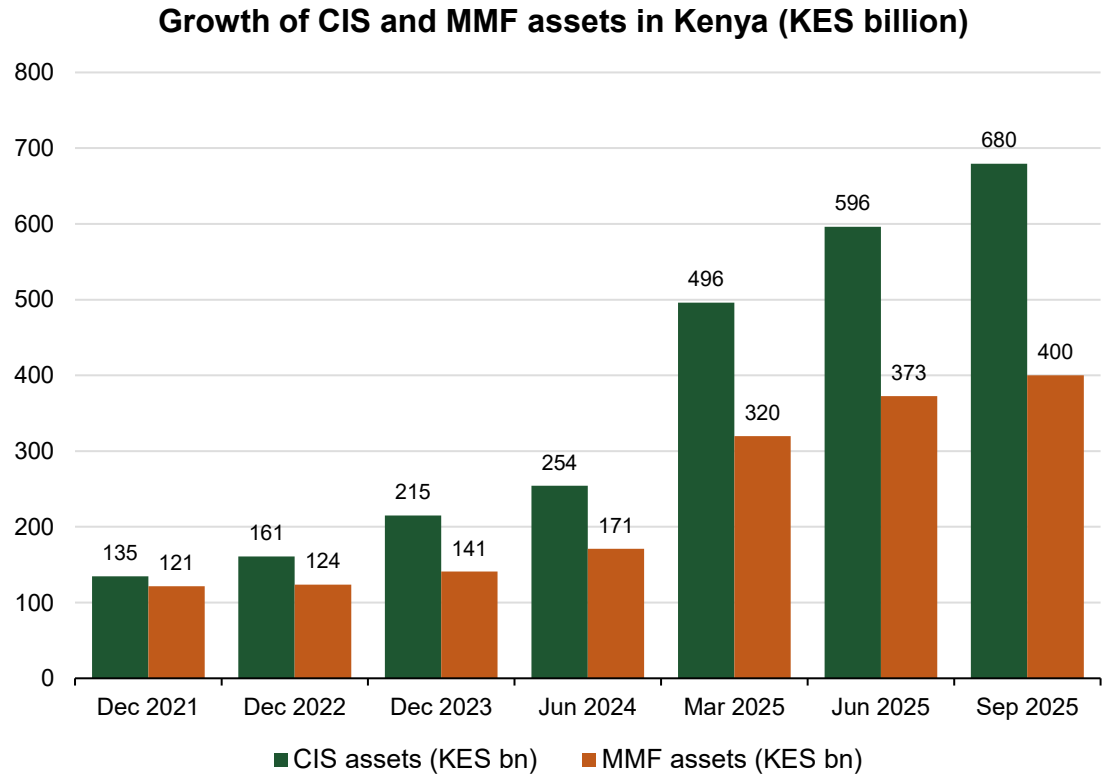
Nigeria MMF assets of N7.67 trillion mutual fund assets, Dec 2025 (Bello, 2026)

TZS 2.3 trillion

Tanzania CIS assets, Aug 2024, led by a liquid money market fund

Evidence on how these factors affect fund performance in Africa remains thin and is mostly industry data rather than empirical analysis.

Background of the Study: Kenya



MMFs dominate Kenya's collective investment schemes (CIS)

- CIS assets grew five-fold to KES 679.6 bn by Sep 2025; MMFs held KES 400.0 bn (59%).
- Yet the MMF share fell from 90.2% (2021) to 58.9% (2025).
- Average MMF yield fell from 12.6% (Q1 2025) to 10.1% (Q3 2025) as the CBR eased to 9.50%.
- Registered schemes rose from 38 to 55; 49 MMFs on the CMA register (Mar 2025), 52 by Sep 2025.
- MMF assets are 2.5% of GDP against an 8.8% global average.

Source: Capital Markets Authority (2021–2025c); Cytonn Investments (2025a, 2025b).

Statement of the Problem

The ideal

- MMF performance determines investor welfare and financial system development in Kenya.
- Optimal performance maximises risk-adjusted returns, supports government financing, deepens financial inclusion and strengthens monetary policy transmission.

The reality

- Higher compliance burdens after the CIS Regulations, 2023.
- Interest rate swings: CBR cut to 11.25% (Dec 2024), 9.50% by Sep 2025.
- Competition: schemes rose from 38 to 55.
- MMF share fell 90.2% to 58.9%; yields fell 12.6% to 10.1%.
- Penetration of 2.5% of GDP vs 8.8% globally.

The gap

- Prior studies examined the factors in isolation, in developed markets, using archival data.
- Performance effects of the 2023 Regulations remain underexplored.
- This study estimates the joint effects of regulatory environment, fund size and investor behaviour in a single model for Kenya.

Objectives of the Study

General objective

To examine the influence of non-financial factors on the financial performance of money market funds in Kenya.

Specific objective	Null hypothesis
1. To examine the effect of the regulatory environment on the financial performance of money market funds in Kenya.	H01: There is no statistically significant effect of the regulatory environment on the financial performance of money market funds in Kenya.
2. To examine the effect of fund size on the financial performance of money market funds in Kenya.	H02: There is no statistically significant effect of fund size on the financial performance of money market funds in Kenya.
3. To examine the effect of investor behaviour on the financial performance of money market funds in Kenya.	H03: There is no statistically significant effect of investor behaviour on the financial performance of money market funds in Kenya.

Theories Underpinning the Study

Regulatory Dialectic Theory

Kane (1977, 1981)

Core proposition

A cycle of regulatory thesis, regulatee antithesis (circumvention) and regulatory synthesis (re-regulation).

Relevance

Objective 1: performance depends on how effectively funds navigate the CMA framework; compliance costs and rule changes shape returns.

Economies of Scale Theory

Chen, Hong, Huang & Kubik (2004)

Core proposition

Fixed-cost amortisation and trading economies support performance; organisational diseconomies drag on it.

Relevance

Objective 2: larger funds spread costs and negotiate better prices, but coordination costs may offset the gains.

Behavioural Finance Theory

Kahneman & Tversky (1979)

Core proposition

Cognitive biases, emotional biases (loss aversion, overconfidence) and social influences (herding) drive decisions.

Relevance

Objective 3: yield chasing, quick redemptions and herding create flow volatility that affects portfolio positioning.

Conceptual Framework

Independent Variables

Regulatory Environment
- CMA compliance costs
- Clarity of reporting and disclosure
- Stability of CMA regulations
- Capital adequacy requirements
- Protection of investor interests

Fund Size
- Spreading of operating costs
- Negotiating power with counterparties
- Diversification across instruments
- Expense ratio charged to investors
- Coordination costs at large scale

Investor Behaviour
- Redemption response to negative news
- Short-term yield comparison
- Herding in inflows and outflows
- Understanding of fund risk
- Sensitivity to interest rate expectations

H01

H02

H03

Dependent Variable

Financial Performance
- Returns relative to benchmark
- Stability of NAV growth
- Competitive expense ratio
- Yield stability
- Meeting investor expectations

Source: Researcher (2026)

Research Methodology

Research design

- Descriptive correlational design: variables observed as they naturally occur, without manipulation (Grønmo, 2023).
- Descriptive: means and SDs profile how fund personnel perceive each construct.
- Correlational: Pearson correlation and multiple regression test the three hypotheses (Saunders et al., 2019; Hair et al., 2023).

Location and scope

- MMFs registered with the Capital Markets Authority (CMA), Kenya.
- Reference period: January 2023 to September 2025, from the 2023 CIS Regulations across a full interest rate cycle.

Population of the study

- **Unit of analysis:** 49 MMFs on the CMA register as at 31 March 2025
- **Unit of observation:** 485 professional staff in four cadres

Category	Population
Fund Managers	147
Investment Analysts	122
Operations Managers	118
Risk and Compliance Officers	98
Total	485

Source: Capital Markets Authority (2025a) register of money market funds (Appendix II).

Research Methodology: Sample and Sampling

Sample size (Yamane, 1967)

$$n = N / (1 + Ne^2)$$

$n = 485 / (1 + 485 \times 0.05^2) = 485 / 2.2125 = 219.2 \approx 219$

Sampling technique

- Proportionate stratified random sampling across the four cadres.
- Each stratum's share = 219 × (stratum population ÷ 485), e.g. fund managers 147 ÷ 485 = 30.3% → 66.
- Guarantees representation of every cadre while keeping random selection within strata (Hair et al., 2023).

Category	Population	Sample
Fund Managers	147	66
Investment Analysts	122	55
Operations Managers	118	53
Risk and Compliance Officers	98	45
Total	485	219

Table 3.2: Proportionate sample size calculation

Research Methodology: Data and Data Analysis

Data collection

- Primary data via a structured questionnaire: Section A demographics; B–E five items each on a five-point Likert scale.
- Pilot with 22 non-sampled personnel in Nairobi (about 10% of the sample).
- Drop-off and pick-up later method, after university, NACOSTI and fund approvals.

Data analysis (α = 0.05)

- Descriptive: means and standard deviations.
- Inferential: Pearson correlation and multiple linear regression, $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$.
- Diagnostics: skewness and kurtosis (±2), VIF < 10 and tolerance > 0.10, Levene's test ($p > .05$).

Data presentation

- Frequency tables with percentages, means and SDs; correlation, model summary, ANOVA and coefficient tables.

Validity and reliability of the instrument

Construct	S-CVI	Cronbach's α
Regulatory Environment	.96	.812
Fund Size	.92	.784
Investor Behaviour	.96	.836
Financial Performance	1.00	.827

- Five experts rated item relevance: all S-CVI ≥ 0.90 and no I-CVI below 0.78 (Polit & Beck, 2006).
- All α values between 0.70 and 0.90, so the scales were reliable and retained (Hair et al., 2023).

Ethical Considerations

Approvals

- Introduction letter from Kabarak University
- Ethical clearance, Kabarak University Research Ethics Committee
- Research permit from NACOSTI
- Permission from participating MMFs

Informed consent

- Information sheet on purpose of the study
- Participation voluntary
- Right to withdraw at any time without penalty
- Consent indicated by completing the questionnaire

Anonymity

- No names or employee numbers collected
- Coded identifiers link instruments to organisations only
- Findings reported in aggregate form

Confidentiality

- Password-protected and encrypted digital files
- Locked cabinets for physical questionnaires
- Access limited to researcher and supervisors
- No personal identifiers retained after coding

Results: Response Rate and Demographics

Response rate

82.6%

181 of 219 questionnaires returned

Exceeds the 80% benchmark for analysis and reporting (Mugenda & Mugenda, 2019).

Fund managers returned 30 of 66 planned, so their views are under-represented.

Characteristic	Distribution of respondents (n = 181)
Gender	Male 57.5%; Female 42.5%
Age	25–34 yrs 33.7%; 35–44 yrs 43.1%; 45–54 yrs 17.7%; 55+ yrs 5.5%
Education	Diploma 5.0%; Bachelor's 50.8%; Master's 40.9%; PhD 3.3%
Experience	Below 5 yrs 21.0%; 5–10 yrs 43.6%; 11–15 yrs 24.3%; above 15 yrs 11.0%
Job category	Fund managers 16.6%; Investment analysts 34.3%; Operations managers 26.5%; Risk and compliance 22.7%

95.0% held a bachelor's degree or higher, so respondents were well placed to judge the technical constructs.

Results: Descriptive Statistics per Objective

Construct	Mean	SD	Verdict	Highest-rated item (M)	Lowest-rated item (M)
Regulatory Environment (Obj. 1)	3.42	0.81	Neutral, leaning agree	CMA framework increased compliance costs (3.71)	Capital adequacy shaped investment strategy (3.19)
Fund Size (Obj. 2)	3.58	0.73	Agree	Asset base spreads operating costs efficiently (3.89)	Coordination challenges beyond a certain size (3.26)
Investor Behaviour (Obj. 3)	3.71	0.68	Agree	Quick redemptions after negative news (3.87)	Confidence tied to interest rate expectations (3.55)
Financial Performance (DV)	3.63	0.70	Agree	Competitive returns relative to benchmark (3.85)	Performance met investor expectations (3.41)

- Investor behaviour drew the strongest agreement and the lowest dispersion; the regulatory environment drew the most cautious rating and the widest spread of views.

Interpretation: 2.51–3.50 Neutral, 3.51–4.50 Agree (Heumann et al., 2023); SD ≤ 0.75 high agreement, 0.76–1.25 moderate (Brown, 2011).

Results: Diagnostic Tests and Correlation

Diagnostic tests of regression assumptions

Construct	Skewness	Kurtosis	Tolerance	VIF	Levene (Sig.)	Remark
Regulatory Environment	-0.412	0.318	0.681	1.469	1.421 (.214)	Assumptions met
Fund Size	-0.287	-0.451	0.742	1.348	0.968 (.317)	Assumptions met
Investor Behaviour	-0.534	0.276	0.628	1.592	1.683 (.188)	Assumptions met
Financial Performance	-0.361	-0.208	–	–	–	Normal

Normal (skewness and kurtosis within ±2), no multicollinearity (VIF < 10), homoscedastic (p > .05).

Pearson correlation matrix

Variable	(1)	(2)	(3)	(4)
(1) Regulatory Environment	1.000			
(2) Fund Size	.402	1.000		
(3) Investor Behaviour	.455	.388	1.000	
(4) Financial Performance	.548	.421	.617	1.000

With financial performance (p < .001)

- **Investor behaviour r = .617** strong
- **Regulatory environment r = .548** strong
- **Fund size r = .421** moderate

Predictors inter-correlate moderately (.388–.455), well below .80.

Results: Regression and Hypothesis Tests

Model summary

R	R^2	Adj. R^2	SE of estimate
.702	.493	.484	.504

The three factors jointly explain 48.4% of the variance in financial performance; the model is significant, $F(3, 177) = 57.34$, $p < .001$.

ANOVA

Model	SS	df	MS	F	Sig.
Regression	43.68	3	14.56	57.34	<.001
Residual	44.94	177	.254		
Total	88.62	180			

Regression coefficients and hypothesis tests

Predictor	B	Std. Error	Beta	t	Sig.	Decision
(Constant)	.412	.281	–	1.466	.144	–
Regulatory Environment	.298	.061	.312	4.885	<.001	H01 rejected
Fund Size	.191	.058	.203	3.293	.001	H02 rejected
Investor Behaviour	.354	.059	.396	6.000	<.001	H03 rejected

$$FP = 0.412 + 0.298RE + 0.191FS + 0.354IB$$

FP = financial performance; RE = regulatory environment; FS = fund size; IB = investor behaviour

Summary of Findings

Objective	Descriptive	Correlation	Regression	Rank	Hypothesis
1. Regulatory environment	M = 3.42, SD = 0.81 (neutral, leaning agree)	r = .548, strong	B = .298, β = .312, t = 4.885, p < .001	2nd	H01 rejected
2. Fund size	M = 3.58, SD = 0.73 (agree)	r = .421, moderate	B = .191, β = .203, t = 3.293, p = .001	3rd	H02 rejected
3. Investor behaviour	M = 3.71, SD = 0.68 (agree)	r = .617, strong	B = .354, β = .396, t = 6.000, p < .001	1st	H03 rejected

Overall model

- R = .702; R^2 = .493; adjusted R^2 = .484: the three non-financial factors jointly explain 48.4% of the variance in financial performance, F(3, 177) = 57.34, p < .001.
- Findings drawn from 181 returned questionnaires (82.6% response rate).

Conclusions

Objective 1: Regulatory environment

Exerts a significant positive effect on financial performance. Regulatory clarity, compliance costs and supervisory oversight are a genuine performance driver, not a peripheral consideration.

Objective 2: Fund size

Has a significant positive but comparatively modest effect. Size is a genuine but secondary lever that complements, and cannot substitute for, sound compliance and attention to investor behaviour.

Objective 3: Investor behaviour

Exerts the strongest effect of the three factors. Performance is shaped as much by how investors act and react as by the structural and regulatory conditions funds operate in.

Overall

Non-financial factors play a substantial, demonstrable role, explaining close to half of the variation in performance. Improvement efforts yield most when they prioritise behavioural and regulatory considerations over scale alone.

Recommendations

For policy (CMA)

- Adopt a proportionate, risk-based compliance regime that scales reporting and capital requirements to fund size and risk profile.
- Formalise consultation with fund managers before issuing new regulatory circulars.

For practice and management

- Build dedicated compliance capacity and embed regulatory monitoring in strategy.
- Grow assets under management through wider distribution and marketing, while monitoring efficiency as funds expand.
- Run investor education and give transparent, timely, jargon-free communication through digital channels.
- Investors: build financial literacy, diversify and use disclosures before redeeming.

For further studies

- Test the relationships with objective fund data: audited NAVs, published yields, expense ratios and AUM.
- Use a panel design across the interest rate cycle as the 2023 Regulations mature.
- Add a squared fund-size term to test whether the size effect tapers or reverses.

Thank You

Thank you for your time and attention.

Questions, comments and suggestions are welcome.

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