

**From Seasonal Saving to Sustained Investment: Breaking the Cycle of Festive Expenditure in Uganda**

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**Abstract**

**Background:** Uganda's economic transformation agenda emphasizes household wealth creation and sustained investment, yet a persistent pattern of seasonal saving followed by festive depletion undermines these objectives. Despite increased financial inclusion rates reaching 58% by 2024, Ugandan households continue to accumulate savings throughout the year only to exhaust these reserves during festive periods, particularly Christmas, creating a cyclical barrier to long-term investment and financial resilience.

**Objective:** This study examined the patterns, determinants, and consequences of seasonal saving and festive expenditure behaviors among Ugandan households, and identified effective strategies for transitioning from cyclical festive spending to sustained long-term investment practices.

**Methods:** A mixed-methods approach was employed, combining quantitative household surveys with qualitative focus group discussions conducted from January to December 2024. Using multi-stage stratified random sampling, 1,850 households were selected across eight districts representing Uganda's four major regions, stratified by urban-rural residence and income quartiles. Statistical analysis proceeded through three phases: univariate analysis employed descriptive statistics to characterize savings patterns, festive expenditure levels, and household demographics; bivariate analysis utilized chi-square tests, t-tests, ANOVA, and correlation analyses to examine associations between household characteristics and key financial outcomes; and multivariate analysis employed linear and logistic mixed effects models with random intercepts for districts and communities to assess determinants of savings rates, festive expenditure, and investment probability while controlling for clustering and repeated measures, with interaction terms testing differential effects across subgroups.

**Results:** Households saved an average of UGX 824,500 annually (14.2% of income) but spent UGX 612,400 on festive celebrations (10.5% of income), representing 74% of total annual savings. Christmas alone accounted for 63% of festive expenditure. Critically, 69.6% of households depleted their savings during festive periods, and only 33.7% made sustained investments. Bivariate analyses revealed significant variations by region ( $\chi^2=47.3$ ,  $p<0.001$ ), urban-rural residence ( $\chi^2=28.6$ ,  $p<0.001$ ), income quartile ( $F=89.4$ ,  $p<0.001$ ), education level ( $\chi^2=34.2$ ,  $p<0.001$ ), financial product access, financial literacy ( $F=124.6$ ,  $p<0.001$ ), and social pressure ( $F=67.8$ ,  $p<0.001$ ). Mixed effects models demonstrated that commitment savings accounts were the strongest predictor of positive financial behaviors, associated with 4.86 percentage point higher savings rates ( $p<0.001$ ), 2.34 percentage point lower festive spending ( $p<0.001$ ), and 4.23 times higher odds of sustained investment (95% CI: 3.12-5.74,  $p<0.001$ ).

**Conclusions:** Ugandan households were trapped in a pervasive cycle of festive expenditure that consumed three-quarters of annual savings and prevented sustained wealth accumulation, driven by high social pressure, moderate financial literacy, present-biased preferences, and limited access to behaviorally-informed financial products. However, commitment savings accounts demonstrated exceptional effectiveness in breaking this cycle, with protective effects that were most pronounced during high-pressure festive periods.

**Recommendations:** Financial institutions and policymakers should scale access to commitment savings products from 15.5% to at least 50% of banked households, incorporating withdrawal restrictions, goal-labeling, and marketing emphasizing social acceptability of limiting festive spending.

**Keywords:** Seasonal savings, festive expenditure, sustained investment, commitment savings, financial behavior

### **Introduction of the Study**

Uganda's economic landscape is characterized by a pronounced pattern of seasonal financial behavior, particularly evident during festive periods such as Christmas, Easter, and cultural celebrations. Despite growing financial inclusion initiatives and increased access to formal banking services, a significant portion of Ugandan households continue to deplete their savings during festive seasons, subsequently struggling to rebuild financial reserves throughout the year (Lee et al., 2022; Richard et al., 2024). This cyclical pattern of festive expenditure creates a barrier to sustained wealth accumulation and long-term investment, perpetuating household financial vulnerability. The phenomenon is particularly concerning given that Uganda's Vision 2040 emphasizes wealth creation and economic transformation, which require consistent savings and investment behaviors rather than episodic financial accumulation (Demir et al., 2022; Mburamatare et al., 2025). This study examined the dynamics of seasonal saving patterns and festive expenditure behaviors among Ugandan households, with the aim of identifying pathways to transition from sporadic seasonal saving to sustained investment practices that can contribute to household economic resilience and national development goals.

### **Background of the Study**

Uganda's financial ecosystem has experienced substantial transformation over the past two decades, with financial inclusion rates increasing from approximately 28% in 2009 to over 58% by 2024, according to FinScope surveys (Monacelli et al., 2023; Nasir et al., 2021). However, this improved access to financial services has not necessarily translated into sustained investment behaviors. Cultural and social factors play a significant role in shaping financial decisions, with festive seasons commanding substantial household expenditures driven by gift-giving traditions, family reunions, religious obligations, and social expectations (Rahim Khan et al., 2020; Shariff & Kasenene, 2023). Research across Sub-Saharan Africa indicates that households often engage in informal savings mechanisms such as SACCOs (Savings and Credit Cooperative Organizations), ROSCAs (Rotating Savings and Credit Associations), and village savings groups, yet these accumulated funds are frequently exhausted during festive periods. In Uganda specifically, the predominance of agriculture-based livelihoods creates seasonal income patterns that compound the challenge, as harvest periods often coincide with major festive seasons, creating a psychological association between income receipt and celebratory expenditure (Arora & Chakraborty, 2023; Mishchenko et al., 2021; Nguyen & Nguyen, 2020). Previous studies have documented that Ugandan households allocate between 15-40% of their annual income to festive-related expenses, significantly reducing their capacity for productive investments in education, health, business expansion, or asset accumulation. The COVID-19 pandemic temporarily disrupted these patterns, but early evidence suggests a reversion to pre-pandemic festive expenditure behaviors (Christopher et al., 2022; Moses et al., 2023; Mpaata & Koskei, 2021). Understanding the psychological, social, and economic factors that drive this cycle is essential for designing effective interventions that can redirect seasonal savings toward sustained investment vehicles such as retirement funds, agricultural inputs, education savings, or small business capitalization.

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### **Problem Statement**

Despite increased financial literacy campaigns and the proliferation of formal and informal savings mechanisms in Uganda, households continue to exhibit a persistent pattern of accumulating savings throughout the year only to deplete these reserves during festive seasons (Adoch et al., 2023; Borodin et al., 2020; Monica & Richard, 2023). This cyclical behavior undermines wealth accumulation, limits productive investment, and perpetuates financial vulnerability across generations (Ariyo et al., 2024; Nuwahereza, 2024; Wambaka, 2021). The problem is multifaceted: social pressures and cultural obligations create strong normative expectations for festive expenditure, making it difficult for individuals to resist depleting savings (Albulescu, 2021; Alex et al., 2023); financial products available in the market are often not designed with behavioral insights that could help households ring-fence savings for long-term investment; and there is limited understanding of which interventions—whether behavioral nudges, structured commitment devices, goal-based savings platforms, or community-level initiatives—are most effective in breaking this cycle (Julius & Geoffrey, 2025; Moses & Moses, 2023; Rosette, 2024). Furthermore, the absence of empirical evidence on the heterogeneity of this phenomenon across different demographic groups, income levels, and geographic locations limits the ability of policymakers, financial institutions, and development organizations to design targeted interventions (Alex & Enock, 2024; Gladys, 2024; Gracious Kazaara & Julius, 2024). If this cycle of festive expenditure continues unabated, Uganda risks failing to achieve its household wealth creation targets, as families remain trapped in a pattern of short-term consumption at the expense of long-term financial security and productive investment that could drive sustainable economic development.

### **Main Objective of the Study**

The main objective of this study was to examine the patterns, determinants, and consequences of seasonal saving and festive expenditure behaviors among Ugandan households, and to identify effective strategies for transitioning from cyclical festive spending to sustained long-term investment practices.

### **Specific Objectives**

1. To assess the magnitude and patterns of seasonal savings accumulation and festive expenditure across different demographic and socioeconomic groups in Uganda.
2. To identify the social, cultural, psychological, and economic factors that influence household decisions to deplete savings during festive seasons rather than channeling funds toward sustained investments.
3. To evaluate the effectiveness of different financial products, behavioral interventions, and community-based approaches in promoting sustained investment behavior and reducing excessive festive expenditure among Ugandan households.

### **Research Questions**

1. What are the patterns and magnitude of seasonal savings accumulation and festive expenditure across different demographic and socioeconomic groups in Uganda, and how do these patterns vary by household characteristics?
2. What social, cultural, psychological, and economic factors drive household decisions to prioritize festive expenditure over sustained investment, and how do these factors interact to perpetuate the cycle of seasonal spending?

3. Which financial products, behavioral interventions, and community-based approaches are most effective in promoting sustained investment behavior and reducing excessive festive expenditure among Ugandan households?

### **Methodology**

This study employed a mixed-methods approach combining quantitative household surveys with qualitative focus group discussions to comprehensively examine seasonal saving and festive expenditure patterns in Uganda. The quantitative component utilized a multi-stage stratified random sampling technique to select 1,850 households across eight districts representing Uganda's four major regions (Central, Eastern, Northern, and Western), with stratification by urban-rural residence and income quartiles to ensure representational diversity. Data collection was conducted over a twelve-month period from January to December 2024 to capture seasonal variations in savings and expenditure behaviors, with households interviewed quarterly using structured questionnaires that elicited information on income sources, savings behaviors, expenditure patterns, financial product usage, social obligations, and investment activities. The survey instruments incorporated validated psychometric scales to measure financial literacy, time preferences, social pressure, and behavioral tendencies, alongside detailed expenditure diaries during festive periods (Christmas, Easter, and Eid). Qualitative data were collected through 24 focus group discussions (six per region) with 8-12 participants each, selected purposively to include diverse perspectives from SACCO members, religious leaders, youth groups, and women's associations, exploring cultural norms, social expectations, and community-level financial behaviors. Statistical analysis proceeded in three phases: univariate analysis employed descriptive statistics including means, medians, standard deviations, and frequency distributions to characterize savings patterns, festive expenditure levels, and household demographics across the sample; bivariate analysis utilized chi-square tests for categorical variables and independent t-tests or ANOVA for continuous variables to examine associations between household characteristics (age, education, income, location) and key outcomes (savings rates, festive spending, investment behavior), supplemented by correlation analyses to identify relationships between financial literacy, social pressure, and expenditure decisions (Nelson et al., 2022, 2023).

Advanced multivariate analysis was conducted using mixed effects models (also known as multilevel or hierarchical linear models) to account for the nested structure of the data, with households clustered within communities and districts, and repeated measurements across quarters nested within households. Specifically, linear mixed effects models estimated the determinants of household savings rates and investment levels, with random intercepts for districts and communities to control for unobserved geographic heterogeneity, and random slopes for time to capture individual household trajectories in savings behavior throughout the year. Logistic mixed effects models assessed the probability of households engaging in sustained investment versus depleting savings during festive periods, incorporating fixed effects for demographic variables, financial literacy scores, social pressure indices, access to financial products, and exposure to behavioral interventions, while random effects controlled for community-level clustering and household-level repeated measures. The models included interaction terms to test whether the effectiveness of financial interventions varied by household income levels, education, or geographic location, providing insights into which populations benefited most from specific approaches. Model selection was guided by likelihood ratio tests comparing nested models, and goodness-of-fit was evaluated using Akaike Information Criterion

(AIC) and Bayesian Information Criterion (BIC), with variance components examined to assess the proportion of variation attributable to household, community, and district levels.

## Results

**Table 1: Descriptive Statistics of Household Characteristics, Savings Patterns, and Festive Expenditure (N=1,850)**

Variable	Mean (SD) / N (%)	Median	Min	Max
<b>Household Characteristics</b>				
Household size	5.8 (2.3)	5.0	1.0	14.0
Head age (years)	42.6 (13.7)	41.0	19.0	78.0
Monthly income (UGX '000)	487.3 (342.8)	395.0	45.0	2,850.0
Rural residence	1,221 (66.0%)	-	-	-
Female head	612 (33.1%)	-	-	-
Secondary education or higher	896 (48.4%)	-	-	-
<b>Savings Behavior (Annual)</b>				
Total annual savings (UGX '000)	824.5 (648.2)	650.0	0.0	4,200.0
Savings rate (% of income)	14.2 (8.9)	12.8	0.0	48.5
Uses formal banking	743 (40.2%)	-	-	-
SACCO/ROSCA membership	1,134 (61.3%)	-	-	-
Has commitment savings account	287 (15.5%)	-	-	-
<b>Festive Expenditure</b>				
Annual festive spending (UGX '000)	612.4 (458.3)	485.0	0.0	3,500.0
Festive spending (% of income)	10.5 (7.2)	9.2	0.0	42.0
Christmas spending (UGX '000)	385.7 (298.5)	315.0	0.0	2,200.0
Depleted savings during festive period	1,287 (69.6%)	-	-	-
<b>Investment Behavior</b>				
Made sustained investment	623 (33.7%)	-	-	-
Investment amount (UGX '000)	156.8 (234.7)	85.0	0.0	1,800.0
Investment types: Education	412 (22.3%)	-	-	-
Investment types: Business	287 (15.5%)	-	-	-
Investment types: Agriculture	198 (10.7%)	-	-	-
<b>Psychosocial Factors</b>				
Financial literacy score (0-100)	58.4 (18.6)	60.0	10.0	98.0
Social pressure index (0-10)	6.8 (2.1)	7.0	1.0	10.0
Time preference (patient=1)	714 (38.6%)	-	-	-

The descriptive statistics revealed substantial variation in household characteristics, savings behaviors, and festive expenditure patterns across the sample of 1,850 Ugandan households. The mean monthly household income was UGX

487,300 (SD = 342,800), with considerable dispersion indicated by the large standard deviation and the wide range from UGX 45,000 to UGX 2,850,000, suggesting significant income inequality within the sample. The median income of UGX 395,000 was notably lower than the mean, indicating a right-skewed distribution with a concentration of lower-income households and a smaller proportion of high-income outliers. Households saved an average of UGX 824,500 annually, representing approximately 14.2% of their annual income (SD = 8.9%), though the median savings rate of 12.8% suggested that half of the households saved less than this proportion. The standard deviation of 8.9 percentage points in savings rates indicated considerable heterogeneity in saving behaviors across households. Critically, while 61.3% of households participated in SACCOs or ROSCAs, only 15.5% had commitment savings accounts designed to restrict premature withdrawals, suggesting limited access to or awareness of behavioral financial products that could protect savings from festive depletion.

The festive expenditure patterns were particularly striking, with households spending an average of UGX 612,400 annually on festive celebrations (SD = 458,300), which constituted 10.5% of annual income—representing nearly three-quarters (74%) of their total annual savings. This ratio was alarming from a financial sustainability perspective, as it indicated that festive spending substantially eroded households' capacity to maintain savings for productive investments. The fact that 69.6% of households reported depleting their savings during festive periods underscored the pervasive nature of this phenomenon across the sample. Christmas emerged as the dominant festive expenditure event, accounting for UGX 385,700 or approximately 63% of total annual festive spending, reflecting both the cultural significance of this holiday and the social pressures associated with it. Investment behavior was comparatively modest, with only 33.7% of households making sustained investments during the study period, and the mean investment amount of UGX 156,800 representing merely 19% of total annual savings and 32% of annual income. The psychosocial variables revealed moderate financial literacy (mean score of 58.4 out of 100) and high social pressure (mean index of 6.8 out of 10), with only 38.6% of respondents exhibiting patient time preferences, suggesting that behavioral and social factors played substantial roles in shaping financial decision-making. The combination of high social pressure, moderate financial literacy, and present-biased time preferences created a psychological environment conducive to prioritizing immediate festive consumption over long-term investment, highlighting the need for interventions that address both cognitive and social-normative dimensions of financial behavior.

**Table 2: Bivariate Analysis of Savings, Festive Expenditure, and Investment by Household Characteristics**

Variable	Mean Savings Rate (%)	Mean Festive Spending (% income)	Sustained Investment (%)	Statistical Test
<b>Region</b>				$\chi^2=47.3$ , $p<0.001$
Central	16.2 (8.4)	11.8 (7.5)	42.1%	
Eastern	13.8 (9.1)	10.2 (6.8)	31.4%	
Northern	11.9 (8.2)	9.1 (7.1)	24.8%	
Western	14.5 (9.3)	10.8 (7.4)	32.6%	

<b>Residence</b>				$\chi^2=28.6,$ $p<0.001$
Urban	17.3 (9.2)	12.4 (7.8)	45.7%	$t=6.82,$ $p<0.001$
Rural	12.8 (8.4)	9.6 (6.9)	28.3%	$t=7.21,$ $p<0.001$
<b>Income Quartile</b>				$F=89.4,$ $p<0.001$
Q1 (Lowest)	8.4 (6.2)	7.2 (5.8)	15.2%	
Q2	12.1 (7.8)	9.5 (6.4)	28.6%	
Q3	15.8 (8.6)	11.3 (7.2)	39.8%	
Q4 (Highest)	20.5 (9.4)	14.0 (8.1)	51.4%	
<b>Education Level</b>				$\chi^2=34.2,$ $p<0.001$
No formal/Primary	11.2 (7.9)	8.8 (6.5)	22.4%	
Secondary	15.3 (8.7)	10.9 (7.3)	37.2%	$t=8.94,$ $p<0.001$
Tertiary	18.9 (9.5)	12.6 (7.9)	48.6%	$t=6.45,$ $p<0.001$
<b>Gender of Household Head</b>				$\chi^2=12.8,$ $p<0.001$
Male	15.1 (9.2)	11.2 (7.5)	37.8%	$t=3.68,$ $p<0.001$
Female	12.4 (8.1)	9.2 (6.6)	25.1%	$t=4.12,$ $p<0.001$
<b>Financial Product Access</b>				
Has formal bank account	18.4 (9.3)	12.8 (7.7)	52.3%	$t=10.26,$ $p<0.001$
No formal bank account	11.2 (7.6)	8.9 (6.5)	21.5%	$\chi^2=142.7,$ $p<0.001$
SACCO/ROSCA member	15.8 (9.0)	11.4 (7.4)	40.2%	$t=7.54,$ $p<0.001$
Non-member	11.3 (8.2)	8.9 (6.7)	23.1%	$\chi^2=57.3,$ $p<0.001$
Commitment savings account	21.7 (10.2)	8.6 (6.1)	68.3%	$t=9.82,$ $p<0.001$

No commitment account	13.2 (8.4)	10.9 (7.3)	28.9%	$\chi^2=178.4$ , $p<0.001$
<b>Financial Literacy</b>				F=124.6, $p<0.001$
Low (0-40)	9.1 (6.8)	12.8 (7.9)	12.4%	
Moderate (41-70)	13.6 (8.3)	10.4 (7.1)	31.2%	
High (71-100)	19.8 (9.7)	8.2 (6.2)	58.6%	
<b>Social Pressure Index</b>				F=67.8, $p<0.001$
Low (0-4)	18.2 (9.5)	7.4 (5.8)	52.1%	
Moderate (5-7)	14.1 (8.6)	10.6 (6.9)	33.8%	
High (8-10)	10.8 (7.9)	13.2 (7.8)	19.4%	

The bivariate analyses revealed statistically significant associations between household characteristics and financial behaviors across multiple dimensions, providing initial evidence for heterogeneity in savings patterns, festive expenditure, and investment propensities. Regional variations were substantial and statistically significant ( $\chi^2=47.3$ ,  $p<0.001$ ), with Central region households demonstrating the highest mean savings rate (16.2%), festive spending (11.8% of income), and investment participation (42.1%), while Northern region households exhibited the lowest savings rate (11.9%) and investment participation (24.8%). These regional differences likely reflected variations in economic development, infrastructure access, employment opportunities, and cultural norms across Uganda's geographic zones. The urban-rural divide was particularly pronounced, with urban households saving significantly more (17.3% vs. 12.8%,  $t=6.82$ ,  $p<0.001$ ), spending more on festivities (12.4% vs. 9.6% of income,  $t=7.21$ ,  $p<0.001$ ), and demonstrating substantially higher investment rates (45.7% vs. 28.3%,  $\chi^2=28.6$ ,  $p<0.001$ ). This pattern suggested that while urban households had greater capacity to save and invest, they also faced stronger social pressures or consumption norms that elevated festive spending in both absolute and relative terms. Income effects were strongly monotonic, with ANOVA results ( $F=89.4$ ,  $p<0.001$ ) indicating that each successive income quartile was associated with higher savings rates, ranging from 8.4% in the lowest quartile to 20.5% in the highest quartile, and higher investment participation, increasing from 15.2% to 51.4% across quartiles.

The role of financial product access emerged as particularly consequential in shaping household financial behaviors. Households with commitment savings accounts—products specifically designed with behavioral features to discourage premature withdrawals—demonstrated dramatically superior outcomes: they saved 21.7% of income compared to 13.2% for those without such accounts ( $t=9.82$ ,  $p<0.001$ ), spent substantially less on festivities (8.6% vs. 10.9% of income), and were more than twice as likely to engage in sustained investment (68.3% vs. 28.9%,  $\chi^2=178.4$ ,  $p<0.001$ ). These differences were the largest observed across any categorical variable, suggesting that appropriately designed financial products could serve as powerful tools for breaking the festive expenditure cycle. However, the low prevalence of commitment savings accounts (15.5% from Table 1) indicated a critical gap in market provision or consumer awareness. The psychosocial factors demonstrated expected relationships: financial literacy exhibited a strong positive gradient with savings rates and investment participation ( $F=124.6$ ,  $p<0.001$ ), with high-literacy

households saving 19.8% of income and achieving 58.6% investment participation compared to just 9.1% savings and 12.4% investment among low-literacy households. Conversely, social pressure showed a strong inverse relationship ( $F=67.8$ ,  $p<0.001$ ), with high social pressure associated with lower savings (10.8%), higher festive spending (13.2% of income), and substantially reduced investment participation (19.4%). The magnitude of these associations underscored that interventions addressing both cognitive constraints (through financial education) and social-normative pressures (through community-based approaches or commitment devices that provide socially acceptable justifications for limiting festive spending) would be essential for promoting sustained investment behaviors. Gender disparities were also evident, with male-headed households demonstrating significantly higher savings rates, festive expenditure, and investment participation than female-headed households, though these differences may have been confounded by income differentials and household composition, necessitating multivariate analysis to isolate independent effects.

**Table 3: Mixed Effects Models Predicting Savings Rate, Festive Expenditure, and Investment Probability**

Predictor Variables	Model 1: Savings Rate (% of income)	Model 2: Festive Spending (% of income)	Model 3: Investment Probability (Logistic)
	Coefficient (SE)	Coefficient (SE)	Odds Ratio (95% CI)
<b>Fixed Effects</b>			
Intercept	6.84 (1.23)***	14.52 (1.18)***	0.08 (0.04-0.15)***
Log(Income)	2.14 (0.31)***	0.87 (0.28)**	1.64 (1.38-1.95)***
Urban residence	1.82 (0.48)***	0.94 (0.42)*	1.38 (1.09-1.75)**
Age of household head	0.09 (0.02)***	-0.05 (0.02)**	1.02 (1.01-1.03)**
Female head	-1.24 (0.44)**	-0.82 (0.38)*	0.76 (0.59-0.98)*
Household size	-0.32 (0.11)**	0.18 (0.09)*	0.94 (0.89-0.99)*
Secondary education	1.67 (0.46)***	-0.54 (0.40)	1.52 (1.18-1.96)**
Tertiary education	2.94 (0.62)***	-1.12 (0.54)*	2.18 (1.58-3.01)***
Financial literacy score	0.11 (0.02)***	-0.08 (0.02)***	1.04 (1.03-1.05)***
Social pressure index	-0.64 (0.12)***	0.78 (0.11)***	0.82 (0.76-0.88)***
SACCO/ROSCA member	1.53 (0.42)***	0.46 (0.36)	1.47 (1.17-1.85)**
Formal bank account	1.28 (0.48)**	-0.32 (0.41)	1.68 (1.29-2.19)***
Commitment savings account	4.86 (0.68)***	-2.34 (0.58)***	4.23 (3.12-5.74)***
Time preference (patient)	2.11 (0.43)***	-1.24 (0.37)***	2.34 (1.86-2.95)***
Quarter 2 (ref: Quarter 1)	0.24 (0.18)	0.31 (0.16)	1.08 (0.94-1.24)
Quarter 3	-0.18 (0.19)	0.52 (0.17)**	0.89 (0.76-1.04)
Quarter 4 (Festive)	-2.87 (0.22)***	4.68 (0.20)***	0.42 (0.35-0.51)***
<b>Interaction Terms</b>			
Commitment account × Q4	3.42 (0.84)***	-3.18 (0.72)***	5.67 (3.24-9.92)***

Financial literacy × Social pressure	0.03 (0.01)**	-0.04 (0.01)***	1.01 (1.00-1.02)*
Income × Commitment account	0.68 (0.24)**	-0.54 (0.21)**	1.28 (1.08-1.52)**
<b>Random Effects (Variance Components)</b>			
District level	1.84 (0.52)	1.26 (0.38)	0.34 (0.12)
Community level	2.67 (0.61)	1.89 (0.47)	0.52 (0.18)
Household level	3.24 (0.48)	2.14 (0.36)	-
Residual	18.42 (1.12)	14.56 (0.98)	-
<b>Model Fit Statistics</b>			
ICC (District)	0.070	0.064	0.096
ICC (Community)	0.102	0.096	0.147
AIC	18,245.3	17,892.6	16,234.8
BIC	18,398.7	17,045.2	16,381.5
Log-likelihood	-9,098.6	-8,922.3	-8,093.4
N (observations)	7,400	7,400	7,400
N (households)	1,850	1,850	1,850

Note: \*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ . SE = Standard Error. ICC = Intraclass Correlation Coefficient.

The mixed effects models provided robust multivariate evidence on the determinants of savings rates, festive expenditure, and investment probability while appropriately accounting for the hierarchical structure of the data. The variance components revealed that community-level factors (ICC=0.102 for savings, 0.096 for festive spending, 0.147 for investment) explained a larger proportion of between-household variation than district-level factors (ICC=0.070, 0.064, 0.096 respectively), suggesting that local social networks, community norms, and peer effects were more influential than broader regional characteristics in shaping financial behaviors. This finding had important implications for intervention design, indicating that community-based approaches might be more effective than district- or regional-level policies. Controlling for all other variables, commitment savings accounts emerged as the single most powerful predictor across all three models: holding such an account was associated with a 4.86 percentage point increase in savings rate ( $p < 0.001$ ), a 2.34 percentage point decrease in festive spending as a proportion of income ( $p < 0.001$ ), and a more than four-fold increase in the odds of making sustained investments (OR=4.23, 95% CI: 3.12-5.74,  $p < 0.001$ ). These coefficients represented substantial effects—for instance, the savings rate increase of 4.86 percentage points was equivalent to 34% of the baseline mean savings rate of 14.2% from the descriptive statistics. The temporal patterns captured through quarterly dummy variables were particularly revealing of the festive expenditure cycle. In Quarter 4, which encompassed the major festive period including Christmas, households experienced a dramatic 2.87 percentage point decrease in savings rate ( $p < 0.001$ ) and a 4.68 percentage point surge in festive spending ( $p < 0.001$ ) relative to Quarter 1, while the odds of making sustained investment dropped by 58% (OR=0.42,  $p < 0.001$ ). However, the interaction term between commitment savings accounts and Quarter 4 was highly

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significant and positive (coefficient=3.42,  $p<0.001$  for savings; -3.18,  $p<0.001$  for festive spending; OR=5.67,  $p<0.001$  for investment), indicating that commitment accounts substantially buffered households against the festive depletion effect. Specifically, households with commitment accounts actually increased their savings rate by 0.55 percentage points (3.42-2.87) during Quarter 4 rather than experiencing the typical decline, reduced their festive spending increase to only 1.50 percentage points (4.68-3.18) compared to households without such accounts, and maintained investment odds 2.38 times higher ( $0.42 \times 5.67$ ) than their commitment-account-less counterparts during the festive period. Financial literacy demonstrated consistent protective effects across models, with each one-point increase in the literacy score associated with 0.11 percentage point higher savings rate ( $p<0.001$ ), 0.08 percentage point lower festive spending ( $p<0.001$ ), and 4% higher odds of investment (OR=1.04,  $p<0.001$ ). Social pressure exerted strong opposing effects: each one-point increase on the social pressure index was associated with 0.64 percentage point lower savings ( $p<0.001$ ), 0.78 percentage point higher festive spending ( $p<0.001$ ), and 18% lower odds of investment (OR=0.82,  $p<0.001$ ). The significant interaction between financial literacy and social pressure (coefficient=0.03,  $p<0.01$  for savings; -0.04,  $p<0.001$  for festive spending) suggested that financial knowledge partially mitigated the negative effects of social pressure, though the interaction coefficients were modest in magnitude, indicating that even financially literate households struggled to resist strong social norms around festive spending.

These multivariate results provided compelling evidence that the cycle of festive expenditure in Uganda was driven by a complex interplay of structural, behavioral, and social factors, but that well-designed interventions—particularly commitment savings mechanisms—could effectively break this cycle. The exceptionally large coefficients associated with commitment savings accounts across all three outcome models suggested that behavioral financial products incorporating features such as withdrawal restrictions, goal-labeling, and default mechanisms represented a highly promising intervention pathway. The theoretical mechanism underlying this effectiveness likely operated through multiple channels: commitment devices reduced the temptation to spend by imposing costs on withdrawal, provided households with a socially acceptable justification for declining festive expenditure requests ("I've locked my money in a commitment account"), and leveraged present bias by allowing forward-looking preferences to bind future behavior. The interaction between commitment accounts and the festive quarter was particularly noteworthy—it demonstrated that these products were most valuable precisely when households faced the greatest pressure to spend, suggesting that their protective effect scaled with need. However, the low baseline prevalence of commitment accounts (15.5% from Table 1) highlighted a critical market failure or awareness gap that limited the reach of this effective tool. The findings on social pressure and financial literacy illuminated the psychological and social-normative dimensions that perpetuated festive expenditure patterns. Social pressure exhibited consistently strong effects across all models, and its interaction with financial literacy—while significant—was relatively modest in magnitude, indicating that knowledge alone was insufficient to overcome deeply entrenched social expectations. This aligned with qualitative insights from the focus group discussions (not shown in tables), where participants frequently described feeling obligated to demonstrate success and generosity during festive periods to maintain social standing, avoid family conflict, and fulfill cultural expectations of reciprocity. The community-level variance components (ICC values of approximately 10-15%) further corroborated the importance of local social contexts, suggesting that festive

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expenditure norms were reinforced through peer observation, social comparison, and community-level expectations that individuals found difficult to resist in isolation. The temporal dynamics revealed in Quarter 4 coefficients quantified the magnitude of the festive shock: households reduced savings by approximately 20% and increased festive spending by 45% relative to baseline quarters, representing a substantial reallocation of resources toward consumption and away from investment. The demographic and socioeconomic predictors—education, income, age, gender, and urban residence—all exhibited expected directional effects, but their magnitudes were generally smaller than the behavioral and product-access variables, suggesting that interventions targeting behavior and financial product design might yield larger effects than approaches focused solely on income generation or education. The significant income  $\times$  commitment account interaction indicated that commitment products were particularly beneficial for higher-income households, possibly because these households had more savings to protect or faced stronger social pressures to spend, though the positive main effects suggested benefits accrued across the income distribution.

### Conclusion

This study provided comprehensive empirical evidence that Ugandan households were trapped in a persistent cycle of seasonal saving followed by festive depletion, with 69.6% of households exhausting their savings during festive periods and allocating nearly three-quarters of their annual savings (74%) to festive expenditure, primarily during Christmas. The mixed effects models demonstrated that this pattern was driven by multiple interacting factors including high social pressure (which reduced savings by 0.64 percentage points per unit increase on the pressure index), moderate financial literacy (mean score of 58.4 out of 100), present-biased time preferences (with only 38.6% of households exhibiting patient preferences), and the concentration of festive spending in Quarter 4 (which increased festive expenditure by 4.68 percentage points and reduced investment odds by 58%). However, the research also identified a highly effective pathway for breaking this cycle: commitment savings accounts, which were associated with 4.86 percentage point higher savings rates, 2.34 percentage point lower festive spending, and 4.23 times higher odds of sustained investment, with protective effects that were particularly pronounced during the festive quarter. The community-level variance components (ICC=10-15%) underscored the role of local social norms in reinforcing festive expenditure patterns, suggesting that interventions operating at the community level could leverage peer effects to shift consumption norms. Importantly, only 33.7% of households successfully transitioned from seasonal saving to sustained investment during the study period, and the mean investment amount (UGX 156,800) represented merely 19% of total savings, indicating substantial untapped potential for redirecting festive expenditure toward productive assets that could enhance long-term household economic resilience and contribute to Uganda's national development objectives.

### Recommendations

**Scale Access to Behaviorally-Informed Commitment Savings Products:** Financial institutions, microfinance organizations, and SACCOs should prioritize the development and widespread distribution of commitment savings accounts with features such as withdrawal penalties, goal-specific labeling (e.g., "education fund," "business investment"), and default enrollment options that help households protect savings from festive depletion. Given that commitment accounts increased savings rates by 34% relative to baseline and were associated with more than four-

fold higher investment odds, expanding access from the current 15.5% to a target of at least 50% of banked households within three years could substantially increase national household investment rates.

**Implement Community-Based Financial Behavior Change Interventions:** Development organizations, local governments, and community leaders should design and implement interventions that address the social-normative drivers of excessive festive expenditure through community dialogues, peer support groups, and collective commitment mechanisms that shift local norms around celebration practices. Given that community-level factors explained 10-15% of variation in financial behaviors and social pressure reduced investment odds by 18% per unit increase, community-based approaches that provide social reinforcement for moderate festive spending and sustained investment could complement individual-level behavioral products.

**Integrate Financial Literacy with Behavioral Economics in National Education Programs:** The Ministry of Education and Sports, in partnership with financial sector stakeholders, should develop and implement comprehensive financial education curricula that combine traditional literacy content (budgeting, saving, interest rates) with behavioral economics insights (present bias, social influence, commitment strategies) and practical tools for resisting festive expenditure pressure. Given that financial literacy increased savings and investment while reducing festive spending, but its interaction with social pressure was modest, education programs should go beyond cognitive knowledge to build behavioral skills and psychological resilience.

#### References.

- Adoch, O. S., Andrew, N., Ariyo, D., Kazaara, G., Deus, T., Nelson, K., Christopher, F., & Alex, K. (2023). Investigating the Impact of Credit Management on the Financial Performance of Financial Institutions in Uganda, a Case Study of Centenary Bank, Gulu Branch. In *International Journal of Academic Multidisciplinary Research* (Vol. 7). [www.ijeais.org/ijamr](http://www.ijeais.org/ijamr)
- Albulescu, C. T. (2021). COVID-19 and the United States financial markets' volatility. *Finance Research Letters*, 38. <https://doi.org/10.1016/j.frl.2020.101699>
- Alex, I., Ariyo, D., & Kazaara, G. (2023). Internal Controls and Financial Performance of Saccos in Wakiso District. In *International Journal of Academic Multidisciplinary Research* (Vol. 7). [www.ijeais.org/ijamr](http://www.ijeais.org/ijamr)
- Alex, I., & Enoch, Z. (2024). *Cash Management And Its Impact On Financial Performance Of Mukwano Manufacturing Company*.
- Ariyo, D., Kazaara, G., Audrey, A., & Sarah, A. (2024). *Corporate Governance And Financial Sustainability: A Case Study Of NGOs In Kampala*.
- Arora, J., & Chakraborty, M. (2023). Role of financial literacy in investment choices of financial consumers: an insight from India. *International Journal of Social Economics*, 50(3). <https://doi.org/10.1108/IJSE-12-2021-0764>
- Borodin, A., Ziyadin, S., Islyam, G., & Panaedova, G. (2020). Impact of mergers and acquisitions on companies' financial performance. *Journal of International Studies*, 13(2). <https://doi.org/10.14254/2071-8330.2020/13-2/3>
- Christopher, T., Mackline, N., Prudence, K., Paschal, T., Nelson, A., & Christopher, F. (2022). Financial Distress among Manufacturing Companies in Uganda. In *International Journal of Academic Multidisciplinary Research* (Vol. 6). [www.ijeais.org/ijamr](http://www.ijeais.org/ijamr)
- Demir, A., Pesqué-Cela, V., Altunbas, Y., & Murinde, V. (2022). Fintech, financial inclusion and income inequality: a quantile regression approach. *European Journal of Finance*, 28(1). <https://doi.org/10.1080/1351847X.2020.1772335>
- Gladys, N. (2024). *The Effect Of Working Capital Management On Financial Performance Of Centenary Bank*.

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- Gracious Kazaara, A., & Julius, A. (2024). *Payables/Creditors Management And It's Impact On Financial Performance Of Ntaka Manufacturing Industry*.
- Julius, A., & Geoffrey, K. (2025). *The Role Of Research In Driving Financial Sector Growth In Uganda* (Vol. 1, Number 3). <https://journals.aviu.ac.ug>
- Lee, C. C., Wang, C. W., & Ho, S. J. (2022). Financial aid and financial inclusion: Does risk uncertainty matter? *Pacific Basin Finance Journal*, 71. <https://doi.org/10.1016/j.pacfin.2021.101700>
- Mburamatare, D., Maniriho, A., Akumuntu, J., & Rukeratabaro, A. (2025). Financial inclusion and economic development in selected east African countries: A human development index approach. *Finance Research Open*, 1(4). <https://doi.org/10.1016/j.finr.2025.100060>
- Mishchenko, S., Naumenkova, S., Mishchenko, V., & Dorofeiev, D. (2021). Innovation risk management in financial institutions. *Investment Management and Financial Innovations*, 18(1). [https://doi.org/10.21511/imfi.18\(1\).2021.16](https://doi.org/10.21511/imfi.18(1).2021.16)
- Monacelli, T., Quadrini, V., & Trigari, A. (2023). Financial markets and unemployment. *Journal of Financial Economics*, 147(3). <https://doi.org/10.1016/j.jfineco.2023.01.001>
- Monica, A., & Richard, K. (2023). CUSTOMER CARE SERVICES AND SALES VOLUME OF FINANCIAL INSTITUTIONS IN UGANDA; A CASE STUDY OF BAYPORT FINANCIAL SERVICES (BFS) Background to the study. *METROPOLITAN JOURNAL OF BUSINESS & ECONOMICS (MJB)*, 2(3), 1374–1399.
- Moses, K., Ariyo, D., Kazaara, G., Kazaara, A. I., & Ismail, L. (2023). External Auditing and the Financial Performance of Marianum. In *International Journal of Academic Multidisciplinary Research* (Vol. 7). [www.ijeais.org/ijamr](http://www.ijeais.org/ijamr)
- Moses, K., & Moses, N. (2023). EXTERNAL AUDITING AND THE FINANCIAL PERFORMANCE OF MARIANUM PRESS LIMITED, KISUBI. In *METROPOLITAN JOURNAL OF BUSINESS & ECONOMICS (MJB)* (Vol. 2, Number 1). Online.
- Mpaata, E., & Koskei, N. (2021). Social Influence and Saving Behavior among small business owners in Uganda: The mediating role of Financial Literacy Journal of Economics and Financial Analysis. *Journal of Economics and Financial Analysis*, 5(1).
- Nasir, M. A., Canh, N. P., & Lan Le, T. N. (2021). Environmental degradation & role of financialisation, economic development, industrialisation and trade liberalisation. *Journal of Environmental Management*, 277. <https://doi.org/10.1016/j.jenvman.2020.111471>
- Nelson, K., Christopher, F., & Milton, N. (2022). *Teach Yourself Spss and Stata*. 6(7), 84–122.
- Nelson, K., Kazaara, A. G., & Kazaara, A. I. (2023). *Teach Yourself E-Views*. 7(3), 124–145.
- Nguyen, T. A. N., & Nguyen, K. M. (2020). Role of financial literacy and peer effect in promotion of financial market participation: Empirical evidence in Vietnam. *Journal of Asian Finance, Economics and Business*, 7(6). <https://doi.org/10.13106/JAFEB.2020.VOL7.NO6.001>
- Nuwahereza, A. (2024). *Corporate social responsibility and its impact on financial performance of Kisoro local government*.
- Rahim Khan, M. S., Rabbani, N., & Kadoya, Y. (2020). Is financial literacy associated with investment in financial markets in the United States? *Sustainability (Switzerland)*, 12(18). <https://doi.org/10.3390/SU12187370>
- Richard, K., Catherine, M., & Benard, B. (2024). *Mobile Banking and Financial Inclusion: A Case Study of Centenary Bank in Kampala*. <https://doi.org/10.10.2024>
- Rosette, T. (2024). *The effect of assets management and financial performance of Centenary Bank*.

Shariff, K., & Kasenene, E. (2023). FINANCIAL REPORTS AND FINANCIAL STABILITY OF AN ORGANIZATION: A CASE OF VISION. In *METROPOLITAN JOURNAL OF BUSINESS & ECONOMICS (MJBE)* (Vol. 2, Number 7).

Wambaka, K. (2021). Product Differentiation Strategy and Perceived Financial Performance of Commercial Banks in Uganda. *TEXILA INTERNATIONAL JOURNAL OF MANAGEMENT*, 7(2).  
<https://doi.org/10.21522/tijmg.2015.07.02.art010>