

Financial Literacy and Personal Finance Behaviour Among Zambian Civil Servants: A Case Study from the Ministry of Finance and National Planning, Zambia

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Abstract: This study investigates the relationship between financial literacy and personal financial behavior among civil servants in Zambia, focusing on those at the Ministry of Finance and National Planning. Using a concurrent mixed-methods approach, data were collected via a structured electronic questionnaire distributed to a stratified random sample of thirty officials with over five years of service. Analysis included descriptive statistics, ordinal logistic regression, Chi-square tests, and thematic analysis of open-ended responses. Findings reveal a strong positive relationship between financial literacy and sound financial practices such as goal-setting, formal investment, and proactive financial planning. In contrast, informal saving methods and lack of investment were associated with lower literacy. Respondents expressed a strong desire for practical financial education, particularly in budgeting, debt, and investment management. The study underscores the need for targeted financial literacy interventions to enhance decision-making and economic resilience among public sector employees.

Keywords: Financial literacy, civil servants, debt management, investment behavior, Zambia

1. Introduction

Financial literacy is now at the forefront of policy and academic discourse due to the increasing complexity of global financial systems marked by an increasing number of complex financial products and the concurrent transfer of retirement and social security risk from institutions to individuals (Lusardi & Mitchell, 2014; Van Rooij, Lusardi, & Alessie, 2007). Financial literacy is widely recognized as a crucial factor in determining both individual financial stability and macroeconomic health. It is defined as the combination of knowledge, skills, attitudes, and behaviors necessary for making sound financial decisions (Organization for Economic Co-operation and Development, 2020). Broad lack of financial literacy often exacerbates existing problems in emerging economies like Zambia, such as poor savings rates, high debt loads, and broad financial exclusion (Bank of Zambia, 2018; World Bank, 2013). In this framework, civil servants hold a special status. They must have a solid understanding of economic principles in order to carry out their professional responsibility as designers and implementers of national fiscal policy. Ironically, anecdotal and new empirical data indicate that this group is not immune to personal financial mismanagement, which can show up as crippling financial stress, decreased productivity at work, and poor retirement planning (Kamakia, Mwangi, & Mwangi, 2017; Lestari et al., 2024; Zaimah et al., 2013). This conflict between personal financial practices and professional responsibilities raises serious concerns that could jeopardize both institutional efficacy and individual welfare. Through creating strategic tools, such as the National Strategy on Financial Education (NSFE II, 2019-2024) (Ministry of Finance and National Planning, 2019), the Zambian

government has shown awareness of the wider financial literacy gap. However, there is a clear gap in the empirical literature regarding the particular financial literacy levels and associated behaviors of civil personnel in Zambia. Therefore, using the Ministry of Finance and National Planning as a model case study, this study aims to close this gap by focusing on the impact of financial literacy on the individual financial behaviors of Zambian government officials. The findings of this study are expected to inform targeted financial education policies for civil servants in Zambia, contributing to improved personal financial management, enhanced workplace productivity, and stronger institutional capacity within the public sector.

2. Literature Review

2.1 Conceptual Foundations and Measurement of Financial Literacy

Financial literacy has undergone significant conceptualization, but a widely recognized definition is still elusive. Early definitions placed a strong focus on cognitive mastery, defining financial literacy as the comprehension of basic economic concepts including risk diversification, inflation, and interest rates (Chen & Volpe, 1998). Modern frameworks take a more comprehensive approach, most notably those put forth by the Organization for Economic Co-operation and Development (2020). This perspective sees financial literacy as multifaceted, encompassing knowledge, skills, confidence, motivation, and behaviors necessary for sound financial decisions. The development of advanced measurement techniques has become necessary as a result of this conceptual expansion. Three main modalities can be used

to classify prevalent techniques. Standardized exams of factual financial knowledge are used to quantify literacy in the objective approach, which is perhaps best illustrated by the groundbreaking "Big Three" questions created by Lusardi and Mitchell (2008). According to Perry and Morris (2005) and Mien and Thao (2015), the subjective approach is based on self-assessment, in which people judge their own comprehension and confidence in handling financial concerns. In order to capture the complex interactions between real knowledge, perceived competence, and behavioral outcomes, hybrid or composite models- which incorporate both objective and subjective measures are becoming more and more popular (Klapper, Lusardi, & Van Oudheusden, 2015). The choice of measurement tools strongly influences research findings and policy recommendations.

2.2 Global and Regional Landscapes of Financial Literacy

An alarming global picture is shown by empirical evaluations of financial literacy. According to the Standard & Poor's Global FinLit Survey, which covers more than 140 countries, only one in three persons have basic financial literacy (Klapper et al., 2015). Geographically and demographically, there are still notable differences. While Sub-Saharan Africa and portions of Asia show severe literacy deficits, advanced economies in Northern Europe and North America generally record better rates (Klapper et al., 2015; OECD, 2020). Financial literacy is very poor and uneven in the African environment. National rates show significant variation, ranging from roughly 15% in Somalia to 52% in Botswana (Sophia, Judith, & Jaeyong, 2021). Estimates for Zambia have varied. Klapper et al. (2015) Klapper et al., 2015) revealed a rate of 40 percent, but the more recent FinScope Zambia Survey (2020) indicates a ratio of 23.6 percent, which could be a sign of measuring errors or a concerning stagnation. A dangerous gap between product availability and consumer competence results from this lack of financial literacy in the face of a financial sector that is quickly formalizing (World Bank, 2017). Concerning figures show the effects: barely 25% of Zambian people actively try to save money, while over 80% are involved in informal debt (FinScope Survey, 2020). A number of factors, such as relatively low school enrollment ratios, highly informal labor markets, high rates of poverty, and the delayed introduction of financial education in school curricula often after many students have left the formal system are blamed by academics for Africa's low financial literacy (Messy & Monticone, 2012; Piprek, Dlamini, & Coetzee, 2004). Additionally, poverty is both a cause and an effect, preventing many people from receiving high-quality financial education, and financial service providers frequently ignore low-income groups because of their perceived high costs and low returns, which exacerbates financial exclusion (Refera, Dhaliwal, & Kaur, 2016; World Bank, 2014).

2.3 The Nexus Between Financial Literacy and Financial Behaviour

A substantial body of worldwide research confirms that responsible financial behavior and financial literacy are positively correlated. Better financial literacy is statistically

associated with a better likelihood of discretionary saving, long-term goal planning, portfolio diversification, and responsible debt management (Lusardi & Tufano, 2015; Agarwalla, Barua, & Varma, 2012). On the other hand, a number of negative consequences, such as excessive and expensive debt accumulation, insufficient precautionary savings, vulnerability to predatory financial practices, and inadequate retirement readiness, are consistently linked to financial illiteracy (Attridge, 2009; Lusardi & Mitchell, 2014). Studies that concentrate on workers in the public sector produce consistent results. Effective financial management behavior and financial knowledge were found to be positively correlated in a research of Sri Lankan government employees (Abeyrathna, 2020). While a study in the Philippines found that teachers with little grasp of fundamental concepts displayed poor financial behavior, partly due to a lack of time for financial seminars, research on teachers in India confirmed that high financial literacy reflected prudent financial lives (Surendar & Sarma, 2018; Imelda et al., 2017). Higher financial literacy was linked to a better quality of life, according to another study conducted in Ankara, Turkey (Çopur, 2016). This emphasizes the need for context-sensitive interventions while underscoring the universality of the relationship between financial literacy and behavior.

2.4 Theoretical Framework

Three interconnected theoretical stances serve as the foundation for this study and together provide insight into the proposed connection between financial literacy and individual financial behavior. A fundamental economic model is provided by Modigliani and Brumberg's (1954) Life Cycle Theory. According to this theory, sensible people try to balance their consumption over the course of their lives by saving at times of high income in order to pay for consumption during times of lower or nonexistent income, such retirement. However, a certain level of financial acumen is required for this intertemporal optimization issue to be executed successfully. According to this theory, financial literacy is the essential human resource that allows people to successfully carry out life-cycle saving and consumption plans, converting theoretical models into realistic financial stability (Lusardi & Mitchell, 2014). Hung, Parker, and Yoong's (2009) Conceptual Model of Financial Literacy provides a more detailed framework for comprehending the relationship between literacy and behavior. According to this concept, perceived financial knowledge (subjective confidence) and actual financial knowledge (objective comprehension) both influence financial literacy as an antecedent condition. These mental elements have a direct impact on financial abilities and, eventually, financial behavior. The paradigm, which views financial literacy as a dynamic, iterative learning process rather than a static asset, is significant because it includes a feedback loop in which experiences obtained through financial behaviors subsequently enhance both perceived and actual knowledge. The Theory of the Accumulation of Financial Knowledge (Delavande, Susann, & Robert, 2008) complements these perspectives by rethinking financial literacy from an investing perspective. It argues that financial knowledge is an asset in which people must invest time and money rather than a free good, drawing upon portfolio choice theory as outlined by

Merton (1969) and conventional consumption models. This hypothesis is especially relevant in settings where professional financial guidance is scarce. According to Campbell, Calvet, and Sodini (2007), it contends that people who underinvest in financial knowledge are likely to make less-than-ideal financial decisions, leading to welfare losses in comparison to their more knowledgeable counterparts. This viewpoint transforms financial literacy from a passive characteristic into an active, strategic skill that is essential for negotiating intricate financial markets.

3. Methodology

3.1 Research Design and Philosophical Approach

A descriptive, cross-sectional survey design within a pragmatic research paradigm was used in this study. In order to provide a thorough, triangulated knowledge of the study problem, a contemporaneous mixed-methods approach was used, in which quantitative and qualitative data were gathered and analyzed concurrently (Saunders, Lewis, & Thornhill, 2016). While the qualitative component provided depth, context, and insight into participants' viewpoints and lived experiences, the quantitative component made it easier to find patterns, linkages, and statistical significance within the data.

3.2 Population, Sampling Strategy, and Data Collection

Permanent staff members with at least five years of service at the Ministry of Finance and National Planning headquarters in Lusaka, Zambia, made up the study's target population. Thirty-two eligible people were found to be an accessible demographic. A minimum sample size of thirty respondents was determined using Yamane's (1967) calculation for finite populations with a five percent margin of error. A stratified random sample technique was used to guarantee representative inclusion across organizational hierarchy (Bryman & Bell, 2011). Three management levels; lower, middle, and senior management were used to stratify the population. Participants were chosen at random from a sample drawn from each stratum using proportional allocation. A standardized electronic questionnaire that was disseminated by email and online forms was used to collect primary data. The tool was divided into five sections: ideas for improving financial literacy, debt management and retirement planning, personal financial behaviors, general financial literacy assessment, and demographic data. It combined open-ended questions to extract qualitative insights with closed-ended Likert-scale and multiple-choice questions for quantitative analysis.

3.3 Data Analysis Techniques

The Statistical Package for the Social Sciences (SPSS) program was used to process and analyze quantitative data. Three consecutive steps were taken in the analytical process. To summarize the sample's overall financial characteristics and demographic profile, descriptive statistics such as frequencies and percentages were first calculated. Second, bivariate correlations between important variables, particularly financial literacy level and different financial behaviors, were examined using cross-tabulation analyses and the Pearson Chi-Square test of independence. Third, after

adjusting for other variables, an ordinal logistic regression model was fitted to determine and measure the determinants of the dependent variable, self-rated financial literacy. Thematic analysis was used to examine qualitative data obtained from open-ended questionnaire replies. Thematic analysis followed a structured process involving familiarization, coding, theme identification, and interpretation. The participants' complex views, interests, and unfulfilled requirements about financial education were revealed by this procedure.

3.4 Ethical Considerations

The University of Zambia Research Ethics Committee's ethical guidelines were strictly followed in this study. Each responder received a comprehensive information sheet outlining the goals, methods, risks, and advantages of the study prior to their participation. Electronically, written informed consent was acquired. Strict adherence was maintained to the concepts of voluntary engagement and the freedom to withdraw without consequence. All gathered data was anonymized to preserve participant privacy; no personally identifiable information was kept for reporting or analysis.

4. Results

4.1 Demographic and Professional Characteristics of Respondents

Thirty surveys were appropriate for analysis, and the study attained a full response rate. Table 1 displays the sample's demographic composition.

Table 1: Demographic Profile of Survey Respondents (N=30)

| Characteristic | Category | Frequency | Percentage |
|---------------------------|--------------------|-----------|------------|
| Sex | Male | 18 | 60.0% |
| | Female | 12 | 40.0% |
| Highest Educational Level | Bachelor's Degree | 14 | 46.7% |
| | Master's Degree | 15 | 50.0% |
| | Other | 1 | 3.3% |
| Monthly Income (ZMW) | 6,000 - 10,000 | 16 | 53.3% |
| | Above 10,000 | 12 | 40.0% |
| | Below 6,000 | 2 | 6.7% |
| Position Level | Entry-Level | 14 | 46.7% |
| | Mid-Level | 10 | 33.3% |
| | Senior-Level | 6 | 20.0% |
| Years of Service | 1 - 9 years | 22 | 73.3% |
| | 10 - 19 years | 3 | 10.0% |
| | 20 years and above | 5 | 16.7% |

The bulk of the sample were middle-aged, male, highly educated, and employed in the medium to upper echelons of the public service. When asked to grade their own financial literacy, half of the respondents (50.0%) said it was "Good," followed by "Average" (23.3%), "Excellent" (20.0%), and "Poor" (6.7%).

4.2 Descriptive Analysis of Financial Behaviours

Savings and Investment Practices: Half of the participants (50.0%) reported saving a percentage of their income each month, indicating that regular saving was a widespread habit.

Formal bank accounts were the most common way to save money (56.7%). However, a sizable percentage (26.7%) made use of unofficial savings clubs. With 70.0% of respondents having made an investment in the previous 12 months, investment activity was comparatively high. Debt management: Of the participants, 80.0% said that their present debt status was "manageable," whilst 6.7% said that it was "unmanageable." Personal expenses (30.0%) and business investments (36.7%) were the main reasons for borrowing. 56.7% of respondents expressed extreme confidence in their ability to manage debt. Retirement Planning: In addition to statutory pension plans, a sizable majority (63.3%) acknowledged having a specific retirement savings plan. Government bonds (23.3%) and investment funds (40.0%) were the preferred retirement vehicles. 83.3 percent of respondents expressed a strong desire to retire before turning sixty.

4.3 Analysis of Bivariates: Key Behaviors and Financial Literacy Several statistically significant relationships between self-rated financial literacy and financial habits were found by cross-tabulation analysis, which was evaluated using Pearson Chi-Square tests.

The degree of financial literacy and the variety of financial concepts understood were found to be significantly correlated. The "Good" and "Excellent" literacy groups had a disproportionate number of respondents who were familiar with a wide range of concepts (budgeting, saving, credit management, investing) (χ^2 p-value = 0.001). Confidence in handling personal debt was substantially connected with financial knowledge. Higher self-rated literacy was associated with significantly higher confidence in one's ability to handle debt (χ^2 p-value = 0.006). In addition, a strong correlation was found between the degree of financial literacy and the present debt status. While those with unmanageable debt were more concentrated in the lower literacy categories, those who reported manageable debt were more likely to have better financial literacy (χ^2 p-value = 0.024).

4.4 Multivariate Analysis: Predictors of Financial Literacy

An ordinal logistic regression was used to identify the variables that predicted the degree of financial literacy. A satisfactory fit was shown by the model fitting data. Table 2 summarizes key parameter estimates and highlights important predictors.

Table 2: Significant Predictors from Ordinal Logistic Regression Model

| Predictor Variable | Coefficient Estimate | p-value | Interpretation |
|---|----------------------|---------|---|
| Regular review of financial goals | +20.113 | 0.024 | Associated with a higher level of financial literacy. |
| Holds no investments | +86.633 | <0.001 | Strongly associated with a lower level of financial literacy. |
| Uses informal 'Personal Katumba' savings | -51.332 | 0.001 | Associated with a lower level of financial literacy. |
| Holds investment in government securities | +110.229 | <0.001 | Associated with a higher level of financial literacy. |
| Holds investment in real estate | +158.078 | <0.001 | Strongly associated with a higher level of financial literacy. |
| Male (compared to female) | -47.250 | <0.001 | Associated with a lower level of financial literacy. |
| Holds a Bachelor's Degree | -22.754 | 0.002 | Associated with a lower level of financial literacy (vs. other education levels). |

According to the model, proactive financial management practices including maintaining formal investments and routinely evaluating goals are favorable indicators of financial literacy. On the other hand, reliance on specific unofficial savings methods and lack of investing activity are negative predictors. The noteworthy negative coefficients for male gender and having a bachelor's degree point to more nuanced associations than are frequently assumed in the literature.

4.5 Qualitative Findings: Demand for Financial Education

A clear and distinct need for improved financial understanding was identified through thematic analysis of open-ended replies. Participants expressed keen interest in learning more about sophisticated investment options, such as stock market trading, real estate investing, and digital assets like cryptocurrency. In addition, there was an obvious need for hands-on, skill-based instruction in the fundamentals of personal financial management, particularly in the areas of strategic debt management, retirement planning, and efficient budgeting. Future interventions should be workshop-based, participatory, and given through accessible venues, including digital channels, according to respondents who emphasized a

preference for practical, applied knowledge over theoretical principles.

5. Discussion

The results of this study provide strong evidence that financial literacy significantly and favorably affects the personal financial behaviors of Zambian civil servants, supporting the main ideas of the Theory of Accumulated Financial Knowledge (Delavande et al., 2008), the Conceptual Model of Financial Literacy (Hung et al., 2009), and the Life Cycle Theory (Modigliani, 2005). Financial literacy is a crucial enabler of sound financial agency, as evidenced by connections found between greater literacy scores and desired behaviors including consistent saving, diversified investment, confident debt management, and proactive retirement planning. This demonstrates that the link holds within the particular setting of the Zambian public sector and is consistent with a large body of worldwide research (Lusardi & Mitchell, 2014; Van Rooij et al., 2011). However the data also reveals subtleties that improve the theoretical knowledge of financial literacy in underdeveloped nations and cast doubt on oversimplified assumptions. Particularly fascinating is the ordinal regression finding showing that financial literacy was negatively correlated with having a bachelor's degree. According to Ananda and Mikhratunnisa (2020), formal

academic education may be associated with higher income, but it does not necessarily translate into practical, applied financial capability. It suggests a clear discrepancy between functional financial literacy and general educational attainment, emphasizing a crucial area where focused, non-academic financial education is crucial. This is consistent with the Theory of Accumulated Financial Knowledge, which holds that financial literacy is a particular type of human capital that needs to be consciously developed, frequently outside of official educational systems.

It's also useful to see the strong negative correlation between financial knowledge and dependence on unofficial savings methods (like "Personal Katumba"). Although these mechanisms provide accessibility and social value, their prominence among public servants a group with bank access and a paid income may suggest a lack of knowledge about or confidence in formal financial instruments that could provide better security and returns (World Bank, 2014). This indicates that facilitating the shift to more secure and effective financial systems, financial education initiatives need to expressly address a behavioral inertia or information gap.

Although it is not unique in regional studies, the finding that male respondents reported lower levels of financial literacy than their female counterparts contradicts with other global surveys (Klapper et al., 2015). Within the particular sociocultural context, it could represent varying patterns of financial responsibility, risk perception, or self-assessment bias. Highlights the significance of overcoming general demographic preconceptions and creating financial education that is considerate of regional gendered financial experiences. In providing voice to the unique demands of the workforce, the qualitative data significantly enhances the quantitative findings. According to Mbekomize and Mapharing (2015), the content areas where existing knowledge is thought to be deficient are immediately identified by the indicated demand for knowledge on complex financial instruments and practical debt management. The ineffectiveness of treating financially illiterate populations as homogeneous was previously brought up by Atkinson and Messy (2012). Participant-led guidance is crucial for creating demand-driven, successful interventions that go beyond general literacy campaigns to address specific, felt needs.

6. Conclusion and Recommendations

The Zambian Ministry of Finance and National Planning's government officials' personal financial behavior is significantly influenced by their level of financial literacy, according to the study's findings. Despite the cohort's baseline level of financial competency, there are still significant gaps, especially when it comes to advanced investment planning and using financial principles to maximize long-term stability. These disparities have a noticeable impact on financial behaviors concerning the distribution of savings, the effectiveness of debt management, and retirement readiness.

The study makes the following suggestions in light of these findings: A comprehensive, required workplace financial literacy program for civil servants should be developed and institutionalized by the Ministry of Finance and National Planning in cooperation with the Bank of Zambia and the

Public Service Management Division for policymakers and public sector leadership. To accommodate varying levels of financial competency and career stages, this program needs to be practical, continuous, and tiered. The National management on Financial Education emphasizes that curricula should specifically address investment vehicles, retirement planning, debt management, and the relative advantages of formal vs informal financial services (Ministry of Finance and National Planning, 2019). Institutions like the Securities and Exchange Commission and the Pensions and Insurance Authority should collaborate with the government to develop customized, affordable investment solutions that are appropriate for workers in the public sector. Additionally, banks and non-bank financial organizations can contribute to the development of a better informed clientele by offering objective financial education seminars that foster trust and financial competency. Business schools and professional training organizations should incorporate comprehensive, useful financial literacy modules into their leadership and management development programs for public employees. In order to determine causal linkages, research should keep tracking and assessing the effects of financial literacy initiatives using longitudinal methods. Overall, enhancing financial literacy within the Zambian public sector is not just a developmental imperative but a strategic pathway toward institutional efficiency and individual financial wellbeing.

7. Limitations and Suggestions for Future Research

There are several restrictions on this study. Although sufficient for the methods used, the sample size is limited and comes from a single ministry, which may limit the findings' applicability to the whole Zambian public service. Because the cross-sectional design only records a single point in time, it is impossible to draw conclusions regarding the long-term effects of literacy changes on behavior. Social desirability or self-assessment bias could be introduced by using self-reported measurements for behavior and literacy. To improve representativeness, future studies should try to duplicate this one using a bigger, randomized sample from several government ministries. To evaluate the long-term effects of certain financial education programs on behavioral change and financial wellbeing outcomes, longitudinal studies are vital. Furthermore, qualitative research using focus groups or in-depth interviews may offer a deeper comprehension of the psychological and contextual elements impacting civil officials' financial decision-making.

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Conflicts of Interest

Regarding the research, writing, and publication of this paper, the authors declare that they have no conflicts of interest.

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