

Socioeconomic Drivers of Household Financial Literacy: Evidence from Semera-Logia City Administration, Afar Region, Ethiopia

Seid Kassaw Yesuf, Dagnachew Tamene Ano, Ebrahim Misganaw Muhiye
Samara University

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I. INTRODUCTION

Financial literacy has emerged as a critical component of economic development, household welfare, and financial inclusion across the globe. It refers to the ability of individuals to understand, evaluate, and effectively use financial information to make informed decisions regarding saving, investing, borrowing, and risk management (Lusardi & Mitchell, 2014). In an increasingly complex financial landscape characterized by digital finance, credit expansion, and diversified financial products, financial literacy is no longer optional but essential for sustainable livelihoods (OECD, 2023).

Globally, financial literacy remains unevenly distributed, with significant disparities across income levels, gender, education, and geographic regions. Studies show that only about one-third of adults worldwide are financially literate, with lower rates in developing economies (Klapper et al., 2015). In advanced economies, financial literacy contributes positively to retirement planning, savings behavior, and investment decisions (Lusardi et al., 2017). Conversely, limited financial knowledge is associated with poor financial decision-making, excessive debt accumulation, and vulnerability to economic shocks (Fernandes et al., 2014).

In developing regions, particularly Sub-Saharan Africa (SSA), financial literacy is even more critical due to structural constraints such as limited access to formal financial institutions, low educational attainment, and high poverty levels. Financial inclusion initiatives have expanded rapidly across SSA, especially through mobile banking innovations; however, the effectiveness of these services depends heavily on users' financial knowledge and capabilities (Demirgüç-Kunt et al., 2022). Research indicates that low financial literacy hampers the ability of households to utilize financial services

efficiently, thereby limiting the developmental impact of financial inclusion policies (Xu & Zia, 2012).

Empirical evidence from SSA suggests that socioeconomic factors such as education, income, gender, employment status, and access to information significantly influence financial literacy levels (Bongomin et al., 2017). For instance, individuals with higher education levels tend to demonstrate better financial knowledge and behavior, while women and rural populations often face systemic disadvantages (Cupák et al., 2018). Furthermore, digital financial literacy is becoming increasingly relevant, as financial systems transition toward technology-based platforms (Morgan & Trinh, 2019).

In Ethiopia, financial literacy is gaining attention in policy discourse due to its role in enhancing financial inclusion and poverty reduction. The Ethiopian government, through the National Financial Inclusion Strategy, emphasizes the importance of improving financial capability among households (National Bank of Ethiopia, 2021). Despite these efforts, financial literacy levels remain relatively low, particularly in emerging urban centers and peripheral regions. Studies conducted in Ethiopia highlight that financial literacy is influenced by education, income, occupation, and access to financial services (Atkinson & Messy, 2012; Abebe & Gemechu, 2018).

The Afar Region, characterized by pastoral livelihoods, limited infrastructure, and unique socioeconomic dynamics, presents a distinctive context for studying financial literacy. Semera-Logia city administration, as an administrative and economic hub, is undergoing rapid urbanization and exposure to formal financial systems. However, the transition from traditional to modern financial

practices poses challenges for households lacking adequate financial knowledge. Limited empirical studies have examined financial literacy within this specific context, creating a gap in understanding the socioeconomic drivers affecting households in the region.

Moreover, the integration of financial services such as microfinance institutions, banks, and mobile money platforms in Semera-Logia necessitates a deeper understanding of how households interact with these systems. Without sufficient financial literacy, households may fail to benefit from these opportunities, leading to suboptimal financial outcomes and persistent economic vulnerability.

Therefore, this study aims to investigate the socioeconomic determinants of household financial literacy in Semera-Logia Town, Afar Region, Ethiopia. Specifically, it seeks to identify key factors influencing financial literacy levels and assess their implications for policy and practice. By providing localized empirical evidence, the study contributes to the broader literature on financial literacy in developing economies and supports targeted interventions to enhance financial capability in Ethiopia.

II. STATEMENT OF THE PROBLEM

Financial literacy has been widely recognized as a cornerstone of economic empowerment and sustainable development. Despite its importance, a substantial proportion of the global population lacks basic financial knowledge, limiting their ability to make sound financial decisions (Lusardi & Mitchell, 2014). This problem is particularly acute in developing countries, where structural inequalities and limited access to education exacerbate financial illiteracy (Xu & Zia, 2012).

Recent empirical evidence consistently shows that financial literacy is influenced by a combination of socioeconomic and demographic factors across different contexts. At the global level, Rehman and Mia (2024) find that education, income, age, gender, and technological exposure are key determinants, with education and income being the most robust predictors. Similarly, a large cross-country study confirms that institutional quality, alongside education and income, significantly shapes financial literacy outcomes (Batsaikhan et al., 2025).

financial literacy is determined by different factors, including education, income, gender, age, employment status, and access to financial information (Bongomin et al., 2017; Morgan & Long, 2020). Globally, individuals with higher levels of education and income tend to exhibit better financial literacy, while marginalized groups often lag behind (Klapper et al., 2015). Furthermore, behavioral and psychological factors, such as risk preferences and financial attitudes, also play a significant role (Fernandes et al., 2014).

In the African context, Jallow and Tajmouati (2025) report that education level, income, gender, and place of residence strongly influence financial capability and literacy. In Sub-Saharan Africa, financial literacy remains low despite increased efforts to promote financial inclusion. The expansion of mobile banking and microfinance services has improved access to financial systems, but usage and effectiveness remain limited due to inadequate financial knowledge (Demirgüç-Kunt et al., 2022). Studies in SSA highlight that socioeconomic disparities significantly influence financial literacy, with rural populations and women being disproportionately affected (Cupák et al., 2018). Financial literacy is significantly influenced by key socioeconomic and demographic variables, particularly education level, income, age, gender, occupation, and access to financial information, with education and income emerging as the most consistent predictors across studies (Endris & Adem, 2023).

In Ethiopia, Tadase, Gurey, and Arefeayne (2025) highlight that income, education, and access to financial services are significant drivers of financial literacy and inclusion. These findings, together with Habib Endris and Mohammed Adem (2023), consistently indicate that financial literacy is primarily determined by education, income, demographic characteristics, and access to financial information and services.

Although financial inclusion has improved in recent years, financial literacy levels remain insufficient to support effective utilization of financial services (National Bank of Ethiopia, 2021). Empirical studies in Ethiopia have shown that education, income, and occupation are key determinants of financial literacy (Abebe & Gemechu, 2018). However, these studies are often concentrated in major urban centers, leaving peripheral regions underexplored.

The Afar Region, including Semera-Logia Town, presents unique socioeconomic conditions that may influence financial literacy differently from other parts of Ethiopia. Factors such as pastoral livelihoods, limited access to formal education, and cultural practices may affect financial behavior and knowledge. Despite these distinctive characteristics, there is a lack of empirical research examining financial literacy in this region.

Additionally, existing studies often focus on general financial inclusion without adequately addressing the underlying determinants of financial literacy. This creates a gap in understanding how socioeconomic factors shape financial capability at the household level. Without such insights, policy interventions may fail to address the root causes of financial illiteracy.

Therefore, this study addresses the following key gaps:

- Lack of localized empirical evidence on financial literacy in Afar Region.
- Limited understanding of socioeconomic drivers in emerging urban contexts like Semera-Logia.
- Insufficient integration of financial literacy with demographic and economic variables in Ethiopia.

Therefore, this study specifically focuses on examining the effect of these key variables (education level, income, age, gender, occupation, and access to financial service) on household financial literacy in Semera-Logia city administration, Afar Region, Ethiopia.

Research Questions

1. How does education level affect household financial literacy in Semera-Logia city administration?
2. What is the relationship between income level and financial literacy among households?
3. How does age influence financial literacy across households?
4. To what extent does access to financial services affect household financial literacy?

1.1. Research Objectives

General Objective

The general objective of the study is to examine the socio-economic determinants of household financial literacy in Semera-Logia Town, Afar Regional State, Ethiopia.

Specific Objectives

1. To analyze the effect of education level on household financial literacy.
2. To examine the relationship between income level and financial literacy.
3. To assess the influence of age on financial literacy.
4. To evaluate the effect of access to financial services on financial literacy.

III. METHODOLOGY

3.1. Description of the Study Area

The study was conducted in Semera-Logia city administration, located in the Afar Region in northeastern Ethiopia. Semera-Logia city serves as the administrative capital of the Afar Regional State and important commercial town situated along the main highway linking Addis Ababa to Djibouti.

Geographically, the study area lies within the Great Rift Valley and is characterized by a hot, arid climate and lowland topography. The city is located approximately 560 km from Addis Ababa, the capital of Ethiopia, along the Addis Ababa–Djibouti transport corridor by forming a closely linked urban cluster that supports trade, administration, and service delivery in the region.

The local economy is a mix of traditional pastoral livelihoods and emerging urban activities such as petty trade, small enterprises, and public sector employment. The presence of financial institutions and mobile money services has improved access to formal financial systems, although financial literacy remains a key challenge affecting effective utilization of these services. These socioeconomic characteristics make Semera-Logia an appropriate setting for examining the determinants of household financial literacy.

3.2. Research Design

The study adopts a descriptive and explanatory research design to examine the determinants of financial literacy among households in Semera and Logia. The descriptive component of the design is used to summarize and present the level of financial literacy and the socioeconomic characteristics of respondents. This helps to provide a clear picture of the current situation in the study area.

The explanatory aspect of the design is employed to identify and analyze the relationship between

financial literacy and its key determinants, including education level, income, age, gender, occupation, and access to financial information. This allows the study to go beyond description and statistically explain how these variables influence household financial literacy. By combining both descriptive and explanatory approaches, the study is able to provide a comprehensive understanding of the phenomenon, capturing not only the status of financial literacy but also the factors that drive variations among households.

3.4. Research Approach

The study employs a quantitative research approach. This approach is appropriate because it relies on numerical data collected through structured questionnaires and analyzed using statistical techniques. It enables the measurement of relationships between financial literacy and key explanatory variables such as education level, income, age, gender, occupation, and access to financial information. The quantitative approach also supports the use of econometric models, particularly binary logistic regression, to determine the magnitude and significance of the effects of these variables on household financial literacy.

3.5. Sample Size and Sampling Technique

The study employed a two-stage sampling technique to select representative households from the Semera-Logia City Administration in the Afar Region, northeastern Ethiopia.

In the first stage, Semera-Logia City Administration was purposively selected due to its status as the regional administrative and commercial center, where diverse socioeconomic groups and increasing access to formal financial services make it highly relevant for studying financial literacy.

In the second stage, simple random sampling was used to select households, ensuring that each household had an equal chance of being included in the study. This approach helps reduce selection bias and improves the representativeness of the sample.

The sample size for this study was determined using the Cochran (1977) formula, which is widely applied in social science research when the population size is large or unknown. The study focuses on households in Semera-Logia city administration.

The Cochran formula is given as:

$$n_0 = \frac{Z^2 p(1-p)}{e^2}$$

Where:

- n_0 = required sample size
- Z = Z-value (1.96 for 95% confidence level)
- p = estimated proportion of the population (0.5 is used for maximum variability)
- e = margin of error (0.05)

Substituting the values:

$$n_0 = \frac{(1.96)^2(0.5)(1-0.5)}{(0.05)^2} = 384.56$$

The initial sample size is approximately 384 households.

3.6. Sources and Methods of Data Collection

The study utilized both primary and secondary data sources to examine the socioeconomic determinants of financial literacy in Semera-Logia City Administration.

The primary data were collected directly from selected households using a structured questionnaire. The questionnaire was designed to capture information on respondents' financial literacy status and key socioeconomic variables such as education level, income, age, gender, occupation, and access to financial information. Close-ended questions were mainly used to ensure uniformity and facilitate quantitative analysis.

The secondary data were obtained from published and unpublished sources like journal articles, official reports, policy documents, and relevant studies on financial literacy from national and international sources. These were used to support the literature review and strengthen the theoretical and empirical foundation of the study.

3.7. Model Specification

The study employed a Binary Logistic Regression model to identify the determinants of household financial literacy. The model is appropriate because the dependent variable (financial literacy status) is dichotomous, taking a value of 1 if the household is financially literate and 0 otherwise.

The logistic regression model is specified as follows:

$$P(Y_i = 1) = \frac{1}{1 + e^{-z_i}}$$

Where:

$$z_i = \beta_0 + \beta_1 EDU + \beta_2 INC + \beta_3 AGE + \beta_4 GEN + \beta_5 OCC + \beta_6 AFI + \varepsilon_i$$

Where:

- Y_i = Financial literacy status (1 = literate, 0 = not literate)
- EDU = Education level
- INC = Income level

- AGE = Age of respondent
- GEN = Gender
- OCC = Occupation
- AFI = Access to financial information
- β_0 = intercept
- $\beta_1 \dots \beta_6$ = coefficients of explanatory variables
- ε_i = error term

The model estimates the probability that a household is financially literate given its socioeconomic characteristics. The results are interpreted using odds ratios ($\text{Exp}(\beta)$), and statistical significance is tested at 1%, 5%, and 10% confidence levels.

IV. RESULTS AND DISCUSSION

4.1. Descriptive Statistics

V. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study examined the socioeconomic drivers of household financial literacy in Semera-Logia Town. The findings reveal that education, income, financial training, and access to financial services significantly influence financial literacy. However, rural constraints such as low education levels and limited financial infrastructure continue to hinder financial literacy development.

5.2 Recommendations

- Strengthen financial education programs targeting rural households
- Expand access to financial institutions in Afar Region
- Promote mobile-based financial literacy programs
- Integrate financial literacy into community development initiatives

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