THE IMPACT OF FINANCIAL EXPOSURE ON STUDENTS' FINANCIAL LITERACY: EVIDENCE FROM THE UNIVERSITY OF GJIROKASTRA

Dorjana NANO
Ph.D. Doc. York University, School of Continuing Studies, Toronto, Canada
nano.dori0810@gmail.com

Antoneta POLO
Assoc.Prof.,"Eqrem Çabej" University, Gjirokastra, Albania
neta_polo@yahoo.com

Enkela CACA
Assoc. Prof.,"Eqrem Çabej" University, Gjirokastra, Albania
ebabaramo@yahoo.com

Ilirjana ZYBERI
Assoc. Prof.,"Eqrem Çabej" University, Gjirokastra, Albania
izyberi@yahoo.com

Christos AP. LADIAS
Professor, Regional Science Inquiry Journal, Greece
Ladias@rsijournal.eu

Abstract

Financial literacy shapes how individuals manage money and respond to economic challenges. Research has shown that students with greater financial exposure tend to make better financial decisions. This study examines the impact of financial exposure on financial literacy using survey data from 100 students at the University of Gjirokastra, Albania. A Financial Exposure Index (FEI) was constructed to measure engagement with financial environments, including income, work experience, and sources of financial learning. Linear and logistic regression analyses were conducted. Results show that financial exposure has a strong impact on financial literacy. The linear model explains nearly half of the variation in literacy scores, while logistic regression indicates that higher exposure significantly increases the likelihood of achieving adequate literacy (≥70%). Gender and regional background also influence outcomes, though age and marital status are less significant. These findings underscore the importance of practical financial experiences and local context in shaping financial literacy.

Keywords: Financial Literacy, Financial Exposure, University Students, Logistic Regression, Human Capital

JEL classification: A22, G53, D14, I22, C83

pp. 57-62

1. Introduction

Financial literacy is a critical skill that allows individuals to make informed financial decisions. University students face financial challenges such as managing limited resources, student loans, part-time income, and planning for their future careers.

Policymakers and researchers increasingly emphasize financial literacy as key to economic well-being. Higher financial literacy is associated with better savings, debt management, retirement planning, and resilience to financial shocks (Lusardi & Mitchell, 2014). However, many young adults, including Albanian students, still show low literacy levels.

Albania, as a transition economy, provides a unique setting where formal financial education is limited, and learning often occurs through experience. This study investigates the impact of financial exposure—students' interactions with financial activities and learning opportunities—on financial literacy outcomes.

2. Literature Review

Financial literacy is a multidimensional concept that encompasses not only financial knowledge but also skills, attitudes, and behaviors that enable individuals to make sound and informed financial decisions. Early research in this field primarily emphasized basic numerical abilities, budgeting skills, and understanding of interest rates and inflation. However, more recent literature conceptualizes financial literacy as a form of human capital that develops dynamically over time through formal education, work experience, and continuous engagement with financial markets and institutions (Lusardi & Mitchell, 2014).

A substantial body of empirical evidence demonstrates that higher levels of financial literacy are positively associated with improved financial outcomes. Individuals with greater financial knowledge are more likely to participate in stock and investment markets, accumulate wealth, and diversify their financial portfolios (Van Rooij et al., 2011; Behrman et al., 2012). Moreover, financial literacy has been shown to influence long-term economic behavior, including retirement planning, savings decisions, and risk management. These findings underscore the role of financial literacy as a key determinant of economic well-being across different demographic groups.

The literature also highlights several socio-demographic factors that influence financial literacy levels. Age, gender, income, marital status, educational background, and work experience are consistently identified as significant determinants. Numerous studies report that women tend to score lower on financial literacy measures than men, a gap often attributed to differences in financial socialization, labor market participation, and access to financial decision-making opportunities. Importantly, higher levels of financial exposure—such as employment experience, income generation, and frequent use of financial products—are strongly linked to improved financial literacy, emphasizing the importance of experiential learning alongside formal education.

In the Albanian context, research on financial literacy remains relatively limited but has produced consistent findings. Studies indicate that university students enrolled in economics and business-related programs demonstrate higher financial literacy levels compared to their peers in other academic disciplines (Nano & Cani, 2013; Nano & Polo, 2016). Nevertheless, overall financial literacy among young adults in Albania remains modest. Despite increased access to financial information through digital platforms and financial institutions, significant literacy gaps persist, largely due to the absence of structured financial education in school curricula and a strong reliance on informal learning channels such as family and peer networks (Nano, 2013; Agalliu, 2014).

Beyond the student population, broader empirical studies in Albania further confirm the importance of financial literacy for economic decision-making across various sectors. Research focusing on agriculture, small enterprises, and rural households demonstrates that financially literate individuals are better equipped to manage income volatility, access credit, and adopt sustainable economic practices (Mullaymeri & Gjoni, 2025; Shehi et al., 2025). These findings reinforce the argument that financial literacy is not only an individual asset but also a critical factor for broader economic development in transition economies.

More recent contributions to the literature emphasize the importance of *financial exposure* as a composite construct capturing individuals' cumulative financial experiences. Rather than relying solely on single indicators such as income or employment status, composite measures incorporating work experience, income sources, and learning opportunities provide greater explanatory power and help reduce measurement bias, particularly in studies with relatively small samples. Building on this emerging approach, the present study constructs a Financial Exposure Index (FEI) to quantify students' overall exposure to financial activities and learning environments. By doing so, the study aims to provide a more comprehensive understanding of how experiential factors shape financial literacy outcomes among university students in Albania.

3. Methodology

3.1 Data and Sample

Primary survey data were collected during the 2025–2026 academic year from 100 undergraduate and postgraduate students at the University of Gjirokastra. The similar environment of the university makes it easier to observe the impact of financial exposure on students. The sample includes students from various fields, ages, and genders.

3.2 Measurement of Financial Literacy

Financial literacy (FL) is measured as a standardized percentage score, combining three components: financial knowledge, financial behavior, and financial attitude. In our sample, the average score is 67.8%, with a standard deviation of 11.2%, ranging from a minimum of 44% to a maximum of 90%. These figures indicate moderate overall literacy while also showing considerable variation across students, highlighting the need to examine both continuous scores and competency thresholds.

A binary variable HighFL indicates whether a student achieves adequate literacy:

$$HighFL_i = \begin{cases} 1 & \text{if } FL_i \geq 70\% \\ 0 & \text{otherwise} \end{cases} \quad (1)$$

This allows analysis both as a continuous score (linear regression) and as a probability of competency (logistic regression).

3.3 Financial Exposure Index (FEI)

The Financial Exposure Index (FEI) measures cumulative interaction with financial environments:

$$FEI_i = z(\text{Income}_i) + z(\text{Work Experience}_i) + z(\text{Sources of Financial Learning}_i) \quad (2)$$

Standardization reduces multicollinearity and provides a single metric summarizing multiple exposure channels. Higher FEI indicates greater engagement with financial activities, which prior studies link to higher literacy (Van Rooij et al., 2011; Behrman et al., 2012).

3.4 Analytical Strategy

Two complementary models are used:

1. Linear regression **for continuous literacy scores:**

$$FL_i = \beta_0 + \beta_1 FEI_i + \beta_2 Gender_i + \beta_3 Municipality_i + Z_i'\gamma + \varepsilon_i \quad (3)$$

2. Logistic regression **for the probability of achieving adequate literacy:**

$$P(HighFL_i = 1) = \Lambda(\beta_0 + \beta_1 FEI_i + \beta_2 Gender_i + \beta_3 Municipality_i) \quad (4)$$

Robust standard errors are applied in both models to account for heteroskedasticity. This approach captures both effect size and practical likelihood of achieving competency.

4. Results

4.1 Descriptive Statistics

Table 1 below presents the key variables. The average FL score is 67.8%, with 48% of students below the 70% threshold for adequate literacy. The FEI ranges from −2.1 to 3.5, reflecting differences in income, work experience, and learning opportunities. Higher FEI is clearly associated with higher literacy, highlighting the importance of cumulative financial exposure.

Table 1. Descriptive Statistics of Key Variables (N = 100)

Variable	Mean	Std. Dev.	Min	Max	Description
Financial Literacy Score (%)	67.8	11.2	44	90	Standardized Score Combining Knowledge, Behavior, Attitude
High Financial Literacy (≥70%)	0.52	0.50	0	1	Binary Indicator of Adequate Literacy
Financial Exposure Index (FEI)	0.00	1.00	-2.1	3.5	Composite Index (Income, Work Experience, Learning)

Source: Author's calculations

4.2 Linear Regression Results

FEI is the strongest predictor of FL. A one-standard-deviation increase in FEI raises literacy scores by 6.74 points ($p < 0.001$). Gender and municipality are significant: males score 3.29 points lower, while students from certain municipalities score 2.61 points higher. Age is positive but not statistically significant.

Table 2. **Linear** Regression Results

Variable	Coefficient	Robust Se	T	P-Value
Constant	61.38	4.92	12.48	0.000
FEI	6.74	0.88	7.66	0.000
Gender (Male = 1)	−3.29	1.46	−2.25	0.027
Municipality	2.61	0.84	3.11	0.002
Age	0.94	0.72	1.31	0.194

Source: Author's calculations

Model fit: Observations = 100, $R^2 = 0.49$, Adjusted $R^2 = 0.46$, $F = 18.9$ ($p < 0.001$), Mean VIF = 1.38

Including FEI improves explanatory power by over 20 percentage points compared to demographic variables alone.

4.3 Logistic Regression Results

FEI nearly triples the odds of achieving adequate literacy (OR = 2.91, $p < 0.001$). Male students have 1.74 times higher odds, and municipality remains significant, emphasizing local context.

Table 3. Logistic Regression Results

Variable	Odds Ratio	Robust Se	P-Value
FEI	2.91	0.63	0.000
Gender (Male)	1.74	0.41	0.032
Municipality	1.46	0.21	0.004

Source: Author's calculations

Model fit: Pseudo $R^2 = 0.38$, Wald $\chi^2 = 41.6$ ($p < 0.001$)

5. Discussion and Conclusion

The findings of this study demonstrate that financial exposure has a great impact on financial literacy among university students. Students with higher Financial Exposure Index (FEI) scores not only achieve higher financial literacy scores but are also significantly more likely to meet the competency threshold of 70%. While gender and regional background influence outcomes—male students tend to score slightly lower, and students from certain municipalities perform better—other factors such as age and marital status appear to have a smaller impact within this sample.

These results underscore the importance of practical engagement with financial environments, suggesting that exposure through income-generating activities, work experience,

and diverse sources of financial learning has a tangible effect on students' ability to manage their finances effectively.

The strong effect of FEI also highlights that cumulative exposure matters more than isolated demographic or educational factors**.** Students who regularly interact with financial systems and learning opportunities develop a better understanding of financial concepts, which may not be acquired through formal classroom instruction alone. In the context of Albania, where formal financial education is limited, providing students with hands-on experiences and real-life financial engagement can bridge gaps in knowledge and foster competence in financial decision-making.

Overall, these findings indicate that policies and educational programs should prioritize opportunities for students to gain practical financial exposure, as this approach can significantly improve both individual literacy levels and broader economic resilience.

6. Recommendations and Limitations

To improve financial literacy among university students, educational institutions and policymakers should focus on strategies that increase practical exposure to financial activities**.** Universities can integrate financial simulations, internships, and real-life money management exercises into the curriculum to allow students to apply theoretical knowledge in realistic contexts. Programs targeting gender gaps and regional disparities are also essential, providing additional guidance and support for students who may have fewer opportunities for financial engagement. Beyond formal instruction, informal learning through peer mentoring, family discussions, or student-led financial clubs can reinforce knowledge and foster practical skills. Collaborations with local banks, NGOs, or community organizations to provide workshops on budgeting, investing, and decision-making can further enhance students' exposure. Additionally, leveraging digital tools, including financial apps and online simulations, can expand opportunities for engagement beyond the classroom.

Despite these insights, several limitations should be acknowledged. The study is based on a sample of 100 students, which may limit the generalizability of results to other universities or the broader population of Albanian students. The cross-sectional design captures only a single point in time, making it difficult to establish definitive causal relationships between financial exposure and literacy. Financial knowledge, behavior, and attitudes were self-reported, which may introduce bias or overestimation of competencies. While the FEI captures key aspects of financial exposure, it may omit other influential factors such as digital financial literacy, peer influence, or participation in informal economic activities. Lastly, the results may reflect context-specific characteristics of the University of Gjirokastra, including local economic conditions and institutional support, which could differ in other settings.

7. References

Agalliu, E. (2014). Financial Knowledge among Albanian Youth. *Journal of Financial Studies*, 8(2), 45–60.

Alexiadis, S., Kokkinou, A., & Ladias, C. (2018). Technological Innovation and Adoptive Ability: A General

Framework. In Technology Adoption and Social Issues: Concepts, Methodologies, Tools, and Applications

(pp. 1317-1330). IGI Global.

Alexiadis, S., Hasanagas, N., & Ladias, Christos, (2011, June). Endogenous knowledge and innovation. In

Proceedings of the Management, Knowledge and Learning International Conference (pp. 22-24).

Alexiadis, S., Ladias, Christos, 2011. Optimal allocation of investment and regional disparities. *Regional Science*

Inquiry Journal, 3(2): 45-59.

Behrman, J., Mitchell, O., Soo, C., & Bravo, D. (2012). How Financial Literacy Affects Wealth

Accumulation. *American Economic Review*, 102(3), 300–304.

Lusardi, A., & Mitchell, O. (2008). Planning and Financial Literacy Among Women. *Journal of Pension Economics*

& Finance, 7(1), 1–26.

Lusardi, A., & Mitchell, O. (2014). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal*
of Economic Literature, 52(1), 5–44.
Mullaymeri, Xh., & Gjoni, A. (2025). Role of Financial Knowledge in Making Investment and Financial Decisions
by Farmers in Albania. *Acta Scientiarum Polonorum. Oeconomia, 24*(2), 5–12.
Nano, A., & Cani, A. (2013). Financial Literacy of Albanian University Students. *Economics and Finance Journal*,
5(2), 15–32.
Nano, Dorjana & Polo, Antoneta (2016). Academic Status Differences in Financial Literacy Among Albanian
University Students. *EuroEconomica*, Vol. 35, No. 1, pages ~75–82.
Nano, D. (2013). Major Differences in Financial Literacy Among Albanian University Students. *International*
Journal of Interdisciplinary Research, 1(3), 1–18.
Shehi, E., Radonshiqi, R., Ribaj, A., Cinaj, V., & Pano, D. (2025). Empowering Financial Futures: A
Comprehensive Study on the Need for Financial Education and Literacy. *WSEAS Transactions on Business*
And Economics, 22, 1327–1338.
Stilianos, A. S., Gioti-Papadaki, O., & Ladias, C. A. Technological Abilities and Regional Growth: Evidence from
the EU. Socio-Economic Sustainability, Regional Development and Spatial Planning: European and
International Dimensions & Perspectives ISBN: 978-960-93-6040-1 Edited by, 176.
Stilianos, A., & Christos, L. (2011). Optimal allocation of investment and regional disparities. *Regional Science*
Inquiry Journal, 3(2), 45-59.
Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of*
Financial Economics, 101(2), 449–472.