

EXPLORING E-BANKING SERVICES: A COMPREHENSIVE ANALYSIS

Ejona Duci ^{*}, Roven Vangjel ^{**}, Eda Tabaku ^{***}, Merjeme Zyko ^{**}

^{*} *Corresponding author*, Department of Finance and Accounting, Faculty of Business, Aleksandër Moisiu University of Durrës, Durrës, Albania
Contact details: Department of Finance and Accounting, Faculty of Business, Aleksandër Moisiu University of Durrës, Neighbourhood 1,
Curilave Street, Durrës, 2001, Albania

^{**} Department of Finance and Accounting, Faculty of Business, Aleksandër Moisiu University of Durrës, Durrës, Albania

^{***} Department of Computer Science, Faculty of Information Technology, Aleksandër Moisiu University of Durrës, Durrës, Albania



Abstract

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The increasing adoption of online banking has reshaped financial services, particularly in the wake of globalization and the COVID-19 pandemic. E-banking provides a cost-effective, secure, and convenient way to conduct financial transactions, yet challenges related to technology adaptation, digital literacy, and trust continue to hinder its widespread acceptance (Asongu & Odhiambo, 2019). This study examines the key determinants of online banking adoption in Albania, analyzing the impact of factors such as education, income, trust, and technological familiarity. Using an analytical approach, the study employs primary data collected through a structured survey of individuals aged 18 to 70. Through correlation and regression analysis, the findings reveal that the frequency of banking service usage is positively correlated with online banking activation, though security concerns and limited digital literacy remain barriers. The results emphasize the need for financial institutions to enhance trust, improve digital literacy initiatives, and strengthen security protocols to boost online banking adoption (Ridwan et al., 2025). This research contributes to the existing literature by providing empirical evidence on e-banking adoption patterns in developing economies and offers strategic recommendations for banks to improve service delivery. The study's findings have practical implications for policymakers, financial institutions, and technology developers aiming to expand digital financial inclusion.

Keywords: Albania, Customer Behavior, E-banking, E-commerce, Technological Services

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1. INTRODUCTION

Online banking means that you have access to your deposits around the clock via smart devices (Kitsios et al., 2021). This allows you to carry out a range of financial transactions quickly and conveniently, for

example, view your statements, pay bills, and much more, without sacrificing your convenience. Online banking, also known as Internet banking, e-banking, or virtual banking, is part of a bank's core banking system (Asongu & Odhiambo, 2019), allowing its customers to perform various financial transactions over the Internet. Today's technological changes and

situations due to the current COVID-19 pandemic have highlighted the impact of technology on people's daily lives. This has made online banking mandatory for older and younger people to familiarize themselves with the main services offered online despite the many challenges faced. Difficulties in understanding online service applications as a lack of personalized banking experience, combined with a low level of financial education, concerns over safety, and overall absence of trust in online services, have increased the problems that marketers face over the improvement of e-banking services strategies.

Following these obstacles, banks have changed and improved their online services over the years to be more competitive and meet the needs of their customers. E-banking has revolutionized the banking sector and is a product of innovation (Carranza et al., 2021). With the various choices in the banking sector, customers are paying more attention to detail, have raised their expectations, and are now more consciously choosing a bank that makes their lives easier. Online banking, also known as Internet banking, e-banking, or virtual banking, is part of a bank's core banking system (Al-Kubaisi & Khalaf, 2023; Asongu & Odhiambo, 2019; Le, 2022; Pasha & Elbages, 2022).

Despite these advancements, research gaps remain in understanding the factors influencing online banking adoption, particularly in developing economies like Albania. Moreover, even the existing literature has been concentrated on analyzing situations without having a view of the encounters that consumers have with the relevant online banking platforms. On the other hand, in a wider spectrum, prior studies have primarily focused on developed markets, overlooking key challenges such as digital literacy, trust issues, and financial inclusion (Hoxhaj & Muharremi, 2022).

Addressing these gaps, this study aims to analyze the role of demographic, economic, and psychological factors in shaping online banking adoption. The primary objective of this research is to examine the determinants of online banking adoption and user preferences in Albania.

This study is grounded in the technology acceptance model (TAM) and the diffusion of innovation (DOI) Theory, which provide insights into how perceived ease of use, trust, and technological awareness affect e-banking adoption. These frameworks allow for a structured approach to analyzing the adoption patterns of digital banking services.

This paper employed a mixed-methods approach, incorporating both quantitative and qualitative data collection. A structured survey was distributed to a sample of 180 individuals, with 156 valid responses analyzed using correlation and regression models. The study seeks to answer the following research questions:

RQ1: What factors influence the frequency of online banking usage?

RQ2: Which online services are most frequently used by customers?

RQ3: What are the key drivers and barriers to online banking adoption?

RQ4: How do customer trust and technological awareness impact online banking usage?

Findings from the correlation matrix and regression analysis indicate that the frequency of banking relationships has a statistically significant

but moderate positive correlation with online banking activation ($r = 0.33$, $p < 0.001$). These results highlight the importance of understanding user behavior, financial literacy, and digital trust to improve e-banking adoption rates.

Findings from this study emphasize the impact of factors such as user habits, perceived complexity, security concerns, demographic conditions, and financial literacy on the relatively low frequency of online banking usage in the Albanian banking sector. Addressing these factors through targeted strategies could improve digital banking penetration and user engagement.

The rest of the paper is structured as follows. Section 2 reviews the relevant literature. Section 3 outlines the methodology employed to investigate e-banking adoption in Albania. Section 4 presents the empirical findings. Section 5 discusses the results. Section 6 concludes with key insights and recommendations for enhancing online banking adoption on a broader scale.

2. LITERATURE REVIEW

Recent studies have highlighted various factors influencing e-banking adoption, especially in developing economies. Financial institutions have increasingly focused on digitalization and consumer trust to improve e-banking penetration (Yahaya et al., 2023). Additionally, research by Pasha and Elbages (2022) indicates that Internet banking plays a crucial role in enhancing profitability for financial institutions. The impact of cybersecurity threats on customer confidence has also been extensively studied, with findings suggesting a direct relationship between security measures and user adoption (Le, 2022).

The banking sector is the most developed sector in the Albanian financial system and until a few years ago the services most used by consumers were the traditional ones such as deposits, current accounts and transfers (Hoti, 2015). According to the study by Hallunovi and Berdo (2018), it was concluded that electronic banking is helping to improve the financial operations of commercial banks by investing in research and technology. This service is offered by all the commercial banks in Albania with the main objective of an innovative channel for the distribution of banking products (Azumah et al., 2020). Many banking services can be performed through mobile banking and the physical presence of banking units is not necessary, as an effect of the digitalization process of banking services (Bezo & Bezo, 2023).

With government interventions through economic policies aimed at minimizing cash transactions, a shift towards recognizing the rapid development of online services has been observed. According to Çoçoli (2022), companies have increasingly been encouraged to accept alternative payment methods beyond cash, including electronic payments, to reduce informality and promote transparency. Initially skeptical, customers became more informed and discovered the benefits of using services such as credit/debit cards and online banking. Meanwhile, artificial intelligence (AI) has contributed to improved customer experiences through technological advancements (Kolleshi & Golemi, 2024). Furthermore, digital transformation

has had a significant positive impact on consumer behavior in the financial sector — enhancing user engagement, trust, and financial independence (Uribe-Linares et al., 2023). However, while e-banking usage increased during the COVID-19 pandemic, it did not significantly impact Albanian consumers' access to online loans (Neza & Llazo, 2023). Shyle and Rruplli (2023) emphasized that successful e-banking implementation requires well-informed staff with a thorough understanding of operational processes.

Compared to industrialized nations, Albania is still at an early stage when it comes to online banking services. In the study of Hoxhaj and Muharremi (2022), they found that income, age and gender are the factors that most influence the use and penetration of online banking in Albania. Chawla and Joshi (2018) found no positive relationship between the use of Internet banking and age, which means that there is a negative relationship. However, married customers, women with a master's degree or higher, and high-income levels are more likely to use online banking frequently (Msweli & Mawela, 2021). According to

Tabaku et al. (2025), the lack of use of online banking is related to the difficulty of understanding and adapting to new technologies and the fear of technology, as customers would rather believe in humans rather than electronic devices. Duçi et al. (2018) in their study highlight that it is basic the improve customer security in order for the customer to be comfortable using online banking services.

Drawing from the reviewed literature, the following hypotheses were developed to examine the relationship between banking service frequency and e-banking adoption:

H1: There is no significant relationship between the frequency of banking service usage and online banking activation and usage.

H2: A positive relationship exists between the frequency of banking service usage and the activation and use of online banking.

Furthermore, this study identifies key independent variables influencing online banking adoption, summarizing their potential impact on the dependent variable — *online banking usage*.

Table 1. Summary of variables

| <i>Definition</i> | <i>Possible effect on online banking usage</i> |
|---|--|
| Frequency of banking relationships | Positive |
| Evaluation of services received from banks | Depends on the evaluation |
| Waiting in line in business intelligence (BI) | Positive |
| Reaction after delays in the BI | Depends on the reaction |

Source: Authors' elaboration.

3. RESEARCH METHODOLOGY

Selecting an appropriate research methodology for investigating online banking adoption is complex due to the multifaceted nature of consumer behavior and the diverse factors influencing decision-making (Shankar & Jebarajakirthy, 2019). Various research designs, including qualitative, quantitative, and mixed-method approaches, are commonly employed in studies of this nature. Given the study's objective of identifying the key determinants influencing *online banking usage*, a quantitative research design was adopted. This approach enables the systematic measurement and statistical analysis of relationships among relevant variables, providing empirical evidence on e-banking adoption trends.

This study utilized correlation and regression analyses to examine the determinants of *online banking usage*. Specifically, Pearson correlation analysis was conducted to assess the strength and direction of relationships between independent variables (such as *demographic characteristics*, *trust*, and *service quality*) and the dependent variable (*online banking adoption*). Additionally, a multiple linear regression model was employed to quantify the predictive power of these variables in influencing *online banking adoption*.

Previous research has demonstrated the efficacy of such methodologies in assessing online banking behavior. For example, Govender and Wu (2013) conducted a cross-sectional study of 400 consumers in South Africa to evaluate the factors influencing *online banking adoption*, utilizing a Likert-scale-based survey to measure user attitudes. Similarly, Firdous and Farooqi (2017) employed correlation analysis to examine the impact of *service quality* on customer satisfaction in the banking sector.

3.1. Data collection and sampling

Primary data were collected through a structured survey, designed to capture insights into:

- The most frequently used banking institutions,
- The most commonly used online banking services,
- Motivations for adopting or refraining from online banking,
- Perceptions of service quality in bank branches.

The survey was administered to a sample of 180 individuals in Albania, spanning an age range of 18 to 70, ensuring that both younger and older bank users were represented. A total of 156 valid responses were retained for analysis. The selection of this age range was deliberate, as individuals within this demographic bracket are considered financially active and more likely to engage with banking services.

The survey instrument was developed based on established literature, incorporating validated measurement scales for trust, ease of use, digital literacy, and customer satisfaction (Ghosh, 2022). To ensure the reliability of the instrument, Cronbach's alpha was calculated to assess the internal consistency of survey items.

3.2. Data analysis techniques

The collected data were analyzed using SPSS Statistics 26. The key statistical methods applied include:

- Descriptive statistics to summarize demographic and behavioral trends,
- Pearson correlation analysis to determine relationships between study variables,

- Multiple linear regression analysis to identify the most influential predictors of online banking adoption.

The results of the correlation matrix and regression analysis confirmed a statistically significant but moderate positive correlation between banking service frequency and online banking activation ($r = 0.33$, $p < 0.001$). These findings underscore the role of consumer habits and engagement levels in shaping online banking adoption patterns.

4. RESULTS

The main data for our research was collected through surveys. There were two surveys with 16 and 14 questions each. One hundred eighty people from the probability sample of the study and a total of 156 responses were collected. The design of the surveys was done after reviewing the literature, identifying some key elements of online banking in terms of benefits, barriers, and consumer perceptions and obtaining general information about the situation of Internet banking in Albania. The descriptive data summary is shown in Table 2.

Table 2. Descriptive data estimation

| | | <i>Statistics</i> | | | |
|------------------------|----------------------|-------------------|---------------|------------------|----------------------|
| <i>N</i> | | <i>Age</i> | <i>Gender</i> | <i>Education</i> | <i>Clients in BI</i> |
| | <i>Valid Missing</i> | | | | |
| Mean | | 1.4805 | 1.1800 | 3.5260 | 0.9545 |
| Median | | 1.0000 | 1.0000 | 4.0000 | 1.0000 |
| Std. deviation | | 0.76884 | 0.38547 | 0.84944 | 0.20898 |
| Variance | | 0.591 | 0.149 | 0.722 | 0.044 |
| Skewness | | 2.164 | 1.683 | -0.860 | -4.407 |
| Std. error of skewness | | 0.195 | 0.198 | 0.195 | 0.195 |
| Kurtosis | | 5.947 | 0.843 | 0.772 | 17.654 |
| Std. error of kurtosis | | 0.389 | 0.394 | 0.389 | 0.389 |

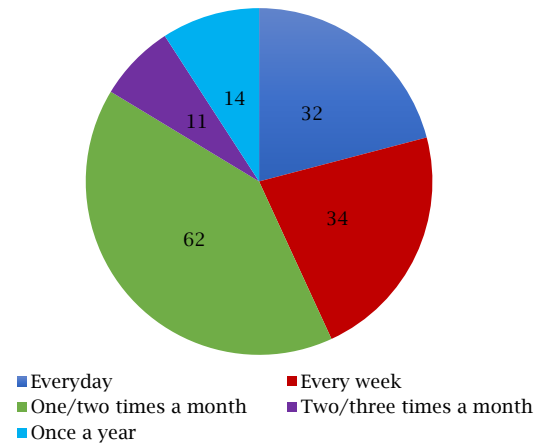
Source: Authors' calculation using SPSS Statistics 26.

4.1. The expected frequency of online banking usage

The frequency is analyzed in Figure 1. It shows that most respondents use online banking once or twice a month, which is related to the reason why they decided to use online banking. Most respondents use online banking because they have their salary, which is related to the frequency of use. The frequency is once or twice when the salary comes into the account. Some other respondents use it every week, for various reasons that we cannot analyze. Some of the respondents use it every day and two/three times a month or once a year are only a few of the respondents.

From Table 3, we should conclude that 32 out of 153 respondents use online banking daily, 34 out of 153 use online banking every week, 62 out of 153 use online banking once or twice a month and 11 out of 153 use it two or three times a month. And only 14 out of 153 use online banking once a year.

Figure 1. The frequency of banking relationships



Source: Authors' calculation.

Table 3. Frequency of banking relationships

| <i>Frequency of banking relationships</i> | | <i>Frequency</i> | <i>Percent</i> | <i>Valid percent</i> | <i>Cumulative percent</i> |
|---|-------------------------|------------------|----------------|----------------------|---------------------------|
| Valid | Everyday | 32 | 20.6 | 20.9 | 20.9 |
| | Every week | 34 | 21.9 | 22.2 | 43.1 |
| | One/two times a month | 62 | 40.0 | 40.5 | 83.7 |
| | Two/three times a month | 11 | 7.1 | 7.2 | 90.8 |
| | Once a year | 14 | 9.0 | 9.2 | 100.0 |
| | Total | 153 | 98.7 | 100.0 | |
| Missing | System | 2 | 1.3 | | |
| Total | | 155 | 100.0 | | |

Source: Authors' calculation using SPSS Statistics 26.

We will now examine whether the frequency of banking relationships has an impact on online banking activation. The hypotheses established for this study case are:

H3: The frequency of using banking services is not related to online banking activation and usage.

H4: The frequency of using banking services is positively related to the activation and use of online banking.

The analysis is developed using a regression model in which we look at the relationship between

the independent variables and the dependent variable of *online banking usage*.

Based on the results of the correlation matrix, we find that the frequency of banking relationships and online banking activation have a statistically significant linear relationship ($r = 0.33$, $p < 0.001$). The direction of the relationship is positive, which means that the two variables move in the same direction. The strength of the relationship is approximately moderate.

Table 4. Frequency of banking relationship and online banking activation correlation matrix

| <i>Frequency of banking relationships</i> | <i>Frequency of banking relationships</i> | | <i>Online banking activation</i> | |
|---|---|---------|----------------------------------|---------|
| | Pearson correlation | 1 | Pearson correlation | 0.313** |
| | Sig. (2-tailed) | | Sig. (2-tailed) | 0.000 |
| <i>Online banking activation</i> | N | 153 | N | 153 |
| | Pearson correlation | 0.313** | Pearson correlation | 1 |
| | Sig. (2-tailed) | 0.000 | Sig. (2-tailed) | 0.000 |
| | N | 153 | N | 154 |

Note: ** significant linear relationship.

Source: Authors' calculation using SPSS Statistics 26.

The adjusted R-squared coefficient is 0.092, which means that linear regression explains only 9.2% of the variance of the dependent variable. We also check the value of the Durbin-Watson statistic to determine whether our data satisfies

the assumption of independence of observation. The value is 2.14 and thus between the values 1.5–2.5, which means that this assumption is considered to be fulfilled. Analysis of variables shows that overall, the model is significant ($p = 0.000$).

Table 5. Frequency of banking relationship and online banking activation^b model summary

| <i>Model</i> | <i>R</i> | <i>R-squared</i> | <i>Adjusted R-squared</i> | <i>Std. error of the estimate</i> | <i>Durbin-Watson</i> |
|--------------|--------------------|------------------|---------------------------|-----------------------------------|----------------------|
| 1 | 0.313 ^a | 0.098 | 0.092 | 0.33549 | 2.144 |

Note: ^a predictors: constant, frequency of banking relationships; ^b dependent variable: online banking activation.

Source: Authors' calculation using SPSS Statistics 26.

Table 6. ANOVA

| <i>Model</i> | <i>Sum of squares</i> | <i>df</i> | <i>Mean square</i> | <i>F</i> | <i>Sig.</i> |
|--------------|-----------------------|-----------|--------------------|----------|-------------|
| 1 | | | | | |
| Regression | 1.841 | 1 | 1.841 | 16.352 | 0.000 |
| Residual | 16.996 | 151 | 0.113 | | |
| Total | 18.837 | 152 | | | |

Source: Authors' calculation using SPSS Statistics 26.

Table 7. Regression coefficients

| <i>Model</i> | <i>Unstandardized coefficients</i> | | <i>Standardized coefficients</i> | <i>T</i> | <i>Sig.</i> |
|------------------------------------|------------------------------------|-------------------|----------------------------------|----------|-------------|
| | <i>B</i> | <i>Std. error</i> | <i>Beta</i> | | |
| Constant | 0.897 | 0.067 | | 13.420 | 0.000 |
| Frequency of banking relationships | 0.094 | 0.023 | 0.313 | 4.044 | 0.000 |

Source: Authors' calculation using SPSS Statistics 26.

Regression equation:

$$y = 0.897 + 0.094x$$

$$\text{Online banking activation} = 0.897 + 0.094 * \text{frequency of banking relationships} \quad (1)$$

Assuming that all independent variables have a value of 0, the effects of the non-investigated factors on *online banking activation* are calculated as 0.897. The analysis of the beta coefficient shows that *online banking activation* is influenced by +0.094 if the frequency of banking relationships changes by 1. Overall, we conclude that there is a positive relationship between the two variables under study and according to the above analysis, we confirm the *H4*. However, the relationship is very moderate.

4.2. The most frequently used online services

The case processing summary demonstrates that from 155 responders only 130 of them are valid, the other responses are not valid, so they are called missing values. In these responses, some questions were not responded correctly so they are not appropriate to be part of the analysis process. We are going to analyze only 130 of them.

From Table 8, we can conclude that 109 respondents have *online banking activation*, while 21 do not. On the other hand, we can see from the “Yes” answers for what reasons they have *online banking activation*; 26 out of 109 have *online banking activation* because they were advised to have this type of service; 9 out of 109 have *online banking activation* because their families are employees of this bank; 25 out of 109 have an *online banking activation* because they find better conditions, do not have to stand in line and do not have to spend a lot of time in the bank. And the last, but most frequently mentioned reason is that 49 out of 109 respondents receive their salary at this bank and for this reason, they have activated online banking at this bank and not at another bank. Because this way they should be able to see their salary when it goes through their account and carry out various transactions with it.

Table 8. Case processing summary

| <i>Case processing summary</i> | <i>Valid</i> | | <i>Cases Missing</i> | | <i>Total</i> | |
|---|--------------|----------------|----------------------|----------------|--------------|----------------|
| | <i>N</i> | <i>Percent</i> | <i>N</i> | <i>Percent</i> | <i>N</i> | <i>Percent</i> |
| | | | | | | |
| <i>Online banking activation</i> * reasons that drove the BI chosen | 130 | 83.9% | 25 | 16.1% | 155 | 100.0% |

Source: Authors' calculation using SPSS Statistics 26.

Table 9. *Online banking activation* * reasons that drove the business intelligence chosen crosstabulation

| | | Reasons that drove the BI chosen | | | | |
|---------------------------|-----|----------------------------------|-------------------------------------|-------------------|-------------|-------|
| | | Advised | Families are employees of this bank | Better conditions | Salary bank | Total |
| Online banking activation | Yes | 26 | 9 | 25 | 49 | 109 |
| | No | 4 | 2 | 3 | 12 | 21 |
| Total | | 30 | 11 | 28 | 61 | 130 |

Source: Authors' calculation using SPSS Statistics 26.

4.3. Reasons of online banking usage

In Table 10, we establish the relationship between the two variables and have formulated two hypotheses:

H5: There is no relationship between online banking activation and the reason for choosing this business intelligence.

H6: There is a relationship between online banking activation and the reason for choosing this business intelligence.

Table 10. Correlations

| | | Reasons that drove the BI chosen | Online banking activation |
|----------------------------------|---------------------|----------------------------------|---------------------------|
| Reasons that drove the BI chosen | Pearson correlation | 1 | 0.116 |
| | Sig. (2-tailed) | | 0.190 |
| | N | 130 | 130 |
| Online banking activation | Pearson correlation | 0.116 | 1 |
| | Sig. (2-tailed) | 0.190 | |
| | N | 130 | 154 |

Source: Authors' calculation using SPSS Statistics 26.

Table 10 shows that there is no statistically significant correlation between the two variables, as the reasons for choosing BI and *online banking activation* have no relationship, $r(130) = 0.116$, $p > 0.001$. This means that an increase or decrease in the reasons for choosing BI is not significantly associated with an increase or decrease in *online banking activation*. As you can see, Pearson's r is close to 0 which means that there is a weak or no relationship between two variables. This means that changes in reasons for choosing BI are not correlated with changes in *online banking activation*. Since our Pearson value is close to 0, we can assume that our variables are not correlated.

4.4. The appropriate online banking usage according to users

From the output, we conclude that the most used service through online banking is balance check, 106 out of 131 use online banking to check the balance of their accounts, 12 out of 131 use this to control completed transactions that they have made through online banking, 3 out of 131 use online banking to transfer funds to other persons or they even do not use online banking. About 4 out of 131 use online banking to make different transactions like payment of bills water, electricity, telephone etc. Then six out of 131 use online banking to open a deposit or a new account. And from the total we conclude that 21 out of 152 do not use online banking for balance sheets, for opening a deposit or even for making different payment transactions.

Table 11. *Online banking activation*, the most used online service according to the respondents

| | | Balance check | Control of completed transactions | Payment of bills (water, electricity, telephone) | Opening a deposit | Total |
|---------------------------|-----|---------------|-----------------------------------|--|-------------------|-------|
| Online banking activation | Yes | 106 | 12 | 4 | 6 | 131 |
| | No | 3 | 0 | 1 | 17 | 21 |
| Total | | 109 | 12 | 5 | 23 | 152 |

Source: Authors' calculation using SPSS Statistics 26.

5. DISCUSSION

The findings of this study highlight several key insights into online banking adoption trends in Albania.

First, while a considerable number of respondents have activated online banking, the frequency of use remains relatively low, suggesting that many users still rely on traditional banking channels for their financial transactions. This behavior is likely influenced by habit, perceived complexity, and security concerns, which require targeted interventions by financial institutions. The study of Govender and Wu (2013) supports the first discussion, analyzing the complexity of online banking and its effects on the users.

Second, the study confirms that demographics play a crucial role in online banking adoption. Younger and more educated individuals exhibit

a higher likelihood of using digital banking services, while older populations demonstrate more hesitancy due to digital illiteracy and trust issues. Financial institutions should implement educational programs and user-friendly interfaces to bridge this gap. The study by Asif (2021), bolsters the importance of demographic factors such as age, where it is concluded that online banking is more used among youth, but however it is strongly suggested that participation in the involvement also of elderly to spread the usage among them.

Third, security concerns are a major barrier to the full-scale adoption of online banking. Many respondents expressed skepticism regarding data privacy, transaction security, and the risk of online fraud. Banks must address these concerns by strengthening cybersecurity measures, implementing two-factor authentication, and providing fraud awareness training to customers. Security problems raised among online banking actual or possible

users are studied in several papers (Nel & Boshoff, 2014; Lee, 2009) and have found a strong negative relationship between security concerns and online banking usage.

Finally, the findings suggest that digital literacy and customer awareness campaigns could significantly increase adoption rates. Banks that offer clear, easy-to-navigate digital platforms and invest in trust-building initiatives, such as transparent transaction processes and 24/7 customer support, are more likely to see increased engagement with online banking services.

6. CONCLUSION

E-banking has revolutionized the banking sector and is a product of innovation. With the various choices in the banking sector, customers are paying more attention to detail, have raised their expectations and are now more consciously choosing a bank that makes their lives easier.

From Table 3, we should conclude that 32 out of 153 respondents use online banking daily, 34 out of 153 use online banking every week, 62 out of 153 use online banking once or twice a month and 11 out of 153 use it two or three times a month. And only 14 out of 153 use online banking once a year.

The most frequently mentioned reason is that 49 out of 109 respondents receive their salary at this bank and for this reason, they have activated online banking at this bank and not at another bank, while 9 out of 109 have online banking activation because their families are employees of this bank. The study shows that the reason for choosing BI and online banking activation have no relationship, therefore is not statistically significant correlation between the two variables, $r(130) = 0.116$, $p > 0.001$. This means that an increase or decrease in the reasons for choosing BI is not significantly associated with an increase or decrease in online banking activation. From the total it is concluded that 21 out of 152 do not use online banking for balance sheet, for opening a deposit or even for making different payment transactions. Based on the results of the correlation matrix, we find that the frequency of banking relationships and online banking implementation have a statistically significant linear relationship ($r = 0.33$, $p < 0.001$). The two variables move in the same direction because there is a positive relationship. The strength of the relationship is approximately moderate.

Overall, we conclude that there is a positive relationship between the two variables under study and according to the above analysis, we confirm the H4. However, the relationship is only very moderate.

This research provides empirical evidence on online banking adoption in Albania, contributing to the growing body of literature on financial technology and consumer behavior in developing economies. Unlike prior studies that primarily focused on banking adoption in highly digitalized markets, this study offers localized insights into the factors affecting e-banking penetration in an emerging economy. For future research, the study opens several potential directions. Future research could examine how online banking adoption evolves over time, especially as financial institutions introduce new security features and digital literacy initiatives. In the direction of providing a more comprehensive understanding of regional and cultural differences, it is important to expand the research to compare Albania's online banking trends with those of other developing or developed countries.

Conducting in-depth interviews or case studies could provide rich insights into customer perceptions, barriers, and motivations, complementing the quantitative findings of this study. Future studies could assess the impact of AI-driven banking solutions, blockchain technology, and biometric authentication on consumer trust and adoption rates. In order to help shape effective digital finance policies in developing economies, it is suggested to investigate how government policies and financial regulations influence e-banking adoption.

While this research offers valuable insights, it has some limitations that should be addressed in future studies. The data were collected through self-reported surveys, which may be subject to response bias or inaccuracies in recalling banking habits.

While the study examined key demographic and behavioral factors, other psychological and socio-economic influences, such as financial literacy, income stability, and customer satisfaction, was not extensively analyzed.

This study provides a snapshot of online banking adoption at a single point in time. A longitudinal approach would better capture trends and behavioral changes over time.

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APPENDIX. QUESTIONNAIRE

- 1) **Age**
 - 18–30 years old
 - 31–40 years old
 - 41–54 years old
 - 55–65 years old
 - Over 65 years old
- 2) **Gender**
 - Female
 - Male
- 3) **Education**
 - 9 years
 - High school
 - Bachelor
 - Professional/scientific master's
 - PhD
- 4) **Are you a client of any of the commercial banks?**
 - Yes
 - No
- 5) **Which bank/banks are you a customer of?**
 - Intesa San Paolo
 - BKT
 - Credit Bank
 - Union Bank
 - OPT Bank
 - Other
- 6) **What is your relationship with this bank?**
 - I have a current account
 - I have a savings account
 - I have a salary account
 - I am a borrower
 - Other
- 7) **Why did you choose to cooperate with this bank?**
 - They advised me as a reliable bank
 - Family/social acquaintances are employees of this bank
 - They offered me better conditions for the banking relationship I was looking for
 - I was obliged because of the institution where I work (the bank where I receive my salary)
- 8) **How often do you have banking relationships, whether online or physically in banking institutions?**
 - Every day
 - Every week
 - Once/twice a month
 - Every two/three month
 - Once a year
- 9) **How would you rate the services received from your bank physically in the institution?**
 - Fast services and without problems/errors in performing actions
 - Long waiting lines for each service
 - Uncommunicative staff
 - Long time to receive the service
- 10) **On average, how long have you had to wait in line at a banking institution to receive a service?**
 - Less than 10 min
 - Less than 30 min
 - Less than 1 hour
 - Less than 2 hours
 - More than 2 hours
- 11) **In case of prolonged delays at the banking institution, have you chosen to leave or wait:**
 - I chose to wait until I received the service
 - I left without receiving the service
 - I left by going to another branch
 - I left to return at another time

12)Based on the quality of the services you received from this bank, would you choose to continue to stay at this bank or change to another bank?

- I would continue to stay at this bank
- I would change, choosing another bank

13)Do you have online banking activated on your mobile device?

- Yes
- No

14)If you have chosen not to use mobile banking, what is the reason?

- I do not have a stable internet connection
- I do not have a smartphone
- I do not need it
- I find it very difficult to learn
- I don't trust storing bank details on my mobile phone
- Other

15)Which service do you use the most out of all the services offered in online banking?

- Checking your balance
- Checking your completed transactions
- Transferring funds to other people
- Paying bills (water/electricity/telephone)
- Finding the nearest ATM
- Opening a deposit
- Applying for a loan
- I don't use online banking